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Determination of Duty Cycle for Energy Storage Systems Integrated with Microgrids

DR Conover
VV Viswanathan
AJ Crawford

Microgrids Sub Group of the ESS Protocol Working Group

June 2014



Pacific Northwest
NATIONAL LABORATORY

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Pacific Northwest National Laboratory
Richland, Washington 99352

Purpose

This report supplements the report, “Protocol for Uniformly Measuring and Expressing the Performance of Energy Storage Systems,” PNNL-22010, Rev. 1, June 2014. It provides the background and documentation associated with the determination of a duty cycle to be applied to an energy storage system (ESS) in a microgrid operated in an islanded mode, for the purpose of measuring and expressing ESS performance in accordance with the June 2014 protocol for measuring and expressing ESS performance.

Acronyms and Abbreviations

ESS	energy storage system(s)
kVA	kilovolt-ampere
kVAR	kilovolt-amperes reactive
MVAR	megavolt-amperes reactive
MW	megawatt
PV	photovoltaic
RTE	round-trip efficiency
SOC	state of charge
VAR	volt-ampere reactive

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1.0 Background

When the initial effort was undertaken to develop a protocol for measuring and expressing the performance of energy storage systems (ESS) in early 2012, it was recognized that, due to the range of ESS applications, not all ESS applications could be addressed at the same time. As a result, it was determined to focus on those applications considered to have the highest priority (i.e., peak shaving and frequency regulation), and after completion of an initial protocol the application of the protocol to additional ESS applications would be pursued. After the initial protocol was published in November 2012, the protocol working group¹ was polled to determine which applications they felt should be addressed by the next edition of the protocol. The application of ESS for microgrids and photovoltaic (PV) smoothing received the highest level of support. The working group was polled to identify members who were interested in participating in subgroups to develop criteria for each of these new applications. Those serving on the microgrid subgroup are listed below.

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Yu Zhang	Pacific Northwest National Laboratory
Matthias Engels	Pacific Northwest National Laboratory

¹ See Foreword to the 2012 Protocol; all stakeholders interested in this activity were invited to join a working group responsible for providing direction and input on the effort.

² Now with ERCOT

From the formation of the microgrid subgroup (July 17, 2013) until the completion of their work (May 12, 2014) there were approximately 10 web meetings and a number of drafts and redrafts of criteria leading up to proposed enhancements to the 2012 Protocol to cover microgrid applications. These enhancements focused on needed terms and definitions, metrics applicable to ESS performance in an islanded microgrid application, the duty cycle to be applied to the ESS, and the manner in which operational data would be captured; from those data, performance of the ESS would be reported.

In defining a microgrid, the definition from the Microgrid Exchange Group¹ was adopted and included in the criteria developed, with the caveat that the microgrid as addressed in the protocol would be operated in an islanded mode. Specifically, the subgroup considered a microgrid to be a group of interconnected loads and distributed energy resources within clearly defined electrical boundaries that act as a single controllable entity with respect to the main grid and can connect to and disconnect from the grid to enable it to operate in either grid-connected or island mode. They further felt that the definition of a microgrid should not be limited by size, but rather by functionality. Any ESS capable of performing the duty cycle developed for use in assessing an ESS in an islanded microgrid should be able to use the protocol to determine ESS performance.

A typical microgrid is connected to the main grid, and should have the flexibility to operate in an islanded mode. The applications associated with a microgrid while connected to the grid are quite large in number, and in actuality would be assessed pursuant to the protocol as would any other ESS based on the application(s) they are intended to address (peak shaving, frequency regulation, etc.). For this reason the microgrids subgroup focused on operation of an ESS in an islanded mode. The following use cases for this application of an ESS were considered for inclusion in the protocol:

- microgrid with renewables (where renewables consisted of a mix of solar and wind generation)
- microgrid with renewables but no frequency regulation
- microgrid with no renewables and no frequency regulation

Each use case above involves storing some energy in excess of what is being used and providing it when needed, which is addressed in the peak-shaving application criteria in the protocol. All of the above three use cases include volt-ampere reactive (VAR) support, power quality, frequency response and black start.

The subgroup discussed addressing other use cases such as serving critical loads, baseload, modeling, life and safety, but did not pursue those in developing enhancements to the protocol to address an islanded microgrid application. The critical load was assumed to be 25% of peak load, and was assumed to be serviced by the gensets² available. Modeling, while considered important, was not considered a use case, and hence was considered to be outside the scope of the work associated with the protocol enhancements. It was also agreed that the effort would not include determining failure mechanisms for the ESS because those were not considered to be within the scope of the protocol. Periodic capacity tests were considered to be a good proxy for the state of health of the ESS. In addition, safety related issues were not considered, as they are also outside the scope of the protocol.

¹ experts and implementers of microgrid technologies

² genset refers to the generator set that provides power to the loads associated with the microgrid

The microgrids subgroup spent considerable time discussing and developing an appropriate duty cycle for assessing the performance of an ESS in an islanded microgrid application.

After finalizing the duty cycle, the microgrids subgroup discussed what metrics should initially be applied to measuring and expressing the performance of an ESS in an islanded microgrid application. It was determined that all of the metrics applicable to frequency regulation as listed below, and included in the 2012 Protocol as updated in the June 2014 Protocol, were relevant to an ESS in an islanded microgrid application:

- round-trip efficiency (RTE) for the entire duty cycle
- energy capacity stability
- response time
- ramp rate
- reference signal tracking
- maximum excursion of state of charge (SOC)

2.0 Approach to Development of the Duty Cycle

Development of the duty cycle for an ESS in an islanded application was pursued through a number of discussions and review of available information as well as consideration of how the duty cycles already in the protocol had been developed. The load and generation mix as shown in Table 2.1 and Table 2.2 was assumed to be present. The peak load supplied by the ESS in an islanded mode was assumed to be 100 kW.

Note that while these assumptions and the resultant duty cycles may not fully align with what every user of the protocol would agree constitutes a microgrid, they represent what was considered appropriate within the context of the protocol. Specifically, the value of the protocol or any standards based on the protocol is standardization and the ability to compare different systems on the same basis of performance. Allowing each user to make up their own duty cycle would mean that, while the data for each different system maybe “better” from the eyes of those providing the data, the data from system to system are not comparable. As such, one uniform duty cycle must be applied to each ESS application. Note that the 2014 Protocol does allow users to apply additional duty cycles if they so choose, but the duty cycle presented in the 2014 Protocol must still be used. Any performance information measured and expressed based on the application of any additional duty cycles must be noted as such along with a description of those duty cycles.

Assumptions:

1. Critical load is 25% of peak load and 42% of average load.
2. Maximum wind and solar generation is 35% (each) of maximum peak load.
3. Wind provides 41% of total load on average, and solar provides 16%.
4. Gas turbines and/or diesel generators provide 43% of average load.
5. Assuming an ESS RTE of 0.8, additional generation with 4% of average load capacity is needed to charge the ESS. Hence the amount of on-line generation capacity supports 47% of average load (critical load is only 42% of average load). Hence, no additional generator capacity is needed to support critical load when renewable generation stops.
6. For the case in which 25% of generators are out of commission, the extra generation capacity to maintain critical loads is calculated to be 9% of average load. The ESS energy capacity required to provide this power for 20 minutes while backup generators come on line is calculated to be 1.7 kWh.
7. With this amount of generation capacity, the ESS can sustain failure of up to 25% of on-line generators, with 1.24 kWh (maximum depth of discharge [DOD] of 99.5%) of energy storage needed to allow 3.7 kW of backup generator capacity to come on line to support critical loads. In order to have the same amount of on-line generator capacity as before, failure of 25% of on-line generators (28.4 kW or 47% of average load), 7.1 kW of backup generation needs to come on line, with 2.4 kWh of ESS energy capacity (99% maximum DOD).

Table 2.1. Peak and Average Load and Generation in the Microgrid when Renewables Present

	Peak (kW)	Average (kW)	Percent of Average Load (%)
Load	100	59.9	
Critical load		25	42.0
Wind	35	24.6	41.1
Solar	35	9.3	15.5
Gas turbine / diesel ^(a)	26.3	26.3	43.4
Backup generation needed if 25% of generators disabled	5.2	5.2	
Energy storage sizing (w/o regulation)	246.5 kWh, 53.5 kW discharge, 30 kW charge		
Energy storage sizing (with regulation)	246.5 kWh, 90 kW discharge, 75 kW charge		

(a) The gas turbine or diesel generator is assumed to operate at constant power. The RTE of the ESS has been taken into account to calculate the additional genset capacity needed to charge the ESS. It is also assumed the total gas turbine or diesel generator capacity is sufficient to support critical loads in case wind/solar output is insufficient.

Table 2.2. Peak and Average Load and Generation in the Microgrid for No Renewables

	Peak (kW)	Average (kW)	Percent of Average Load (%)
Load	100	59.9	
Critical load		25	42.0
Wind			
Solar			
Gas turbine / diesel ^(a)	62.3	62.3	62.3
Backup generation needed if 25% of generators disabled	0	0	
Energy storage sizing (w/o regulation)	233 kWh, 39.5 kW discharge, 28 kW charge		
Energy storage sizing (with regulation)	Did not analyze		

(a) The gas turbine or diesel generator is assumed to operate at constant power. The RTE of the ESS has been taken into account to calculate additional genset capacity needed to charge the ESS. It is also assumed the total gas turbine or diesel generator capacity is sufficient to support critical loads in case wind/solar output is insufficient.

The average load, wind generation and solar generation were calculated, and from that information the average power from gensets was determined. Additional genset capacity to account for ESS RTE was also determined. The ESS SOC was calculated by multiplying the charge energy by the RTE. The initial SOC was set such that the SOC never goes negative during the 24-hour duty cycle, and also never exceeds 100% SOC. This analysis for ESS SOC took into account only the energy discharged and charged by the ESS to balance generation and load, without taking into account the ESS duty cycles corresponding to frequency regulation, VAR support, power quality, frequency response or black start . The ESS power capacity rating included the maximum power the ESS is subjected to when frequency

regulation service is included. It was assumed that the other services (VAR support, power quality, frequency response and black start), would not affect the ESS power rating due to their short duration and infrequent occurrence.

This work is not specific to any particular location. Rather than spend a significant amount of time gathering wind generation, solar generation and load data across various regions and then creating a representative dataset for each, data from the literature as shown below was used.

Load and solar generation information was obtained from Sowder (2013). This load was at the Rankin Avenue substation in Mount Holly, NC, with a 1.2 MW solar PV facility located 3 miles from the substation on a 12.47 kW distribution circuit.

The solar output is given below in Figure 2.1:

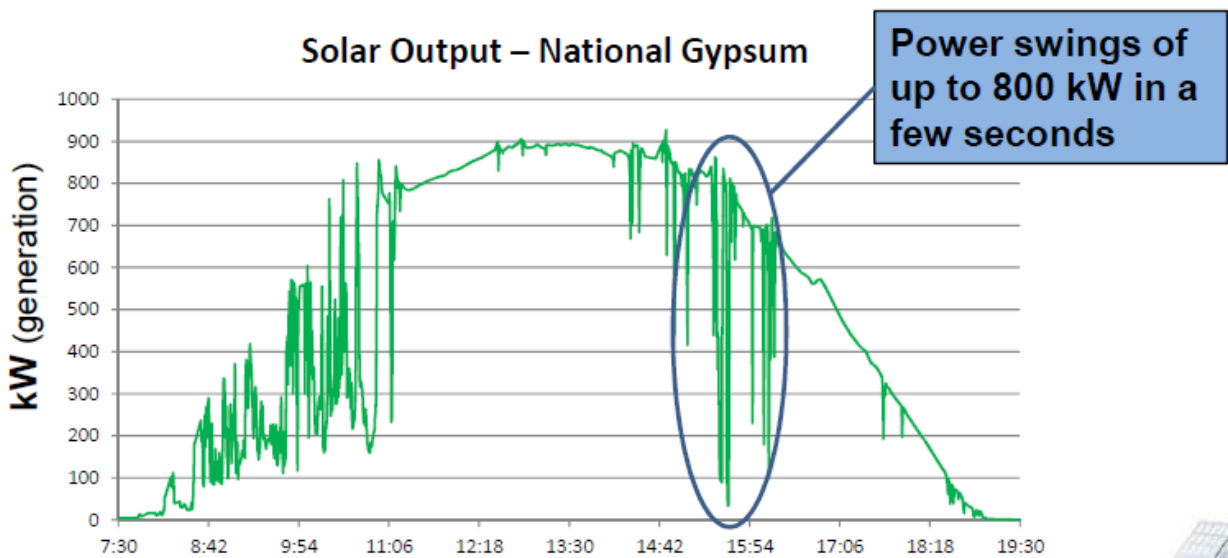


Figure 2.1. Solar Output at the Rankin Avenue Substation in Mount Holly, NC (Sowder 2013)

The output between 7:30 AM and 7:30 PM was digitized at Pacific Northwest National Laboratory (PNNL). The digitization was done with varying time steps, with the smallest time step being 0.01 min.

The wind generation data was provided by a south-central Washington State commercial wind generation facility. The data has been scaled such that peak output is 35 kW and is shown in Figure 2.2.

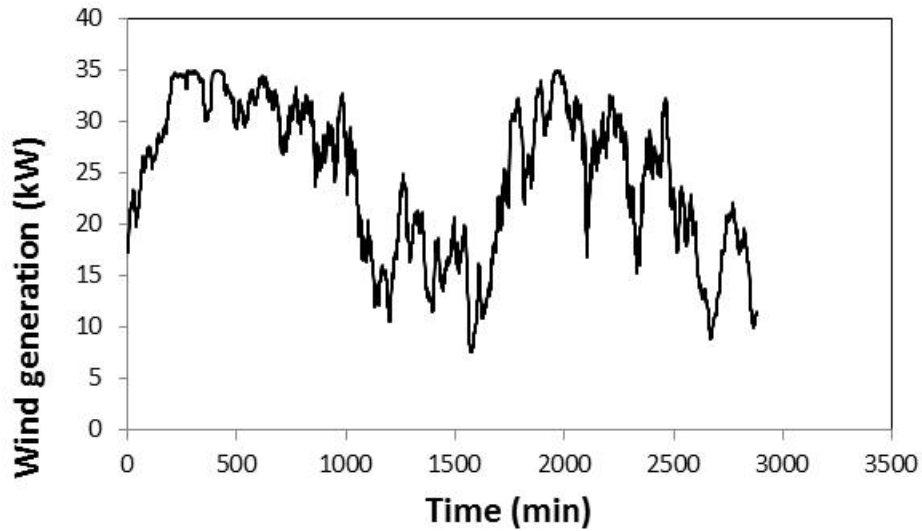


Figure 2.2. Wind Generation Data Provided by a South-Central Washington State Commercial Wind Generation Facility.

The load fluctuations between 7:30 AM and 7:30 PM were assumed to be the same as those at the Rankin Avenue substation as shown below in Figure 2.3. (Sowder 2013).

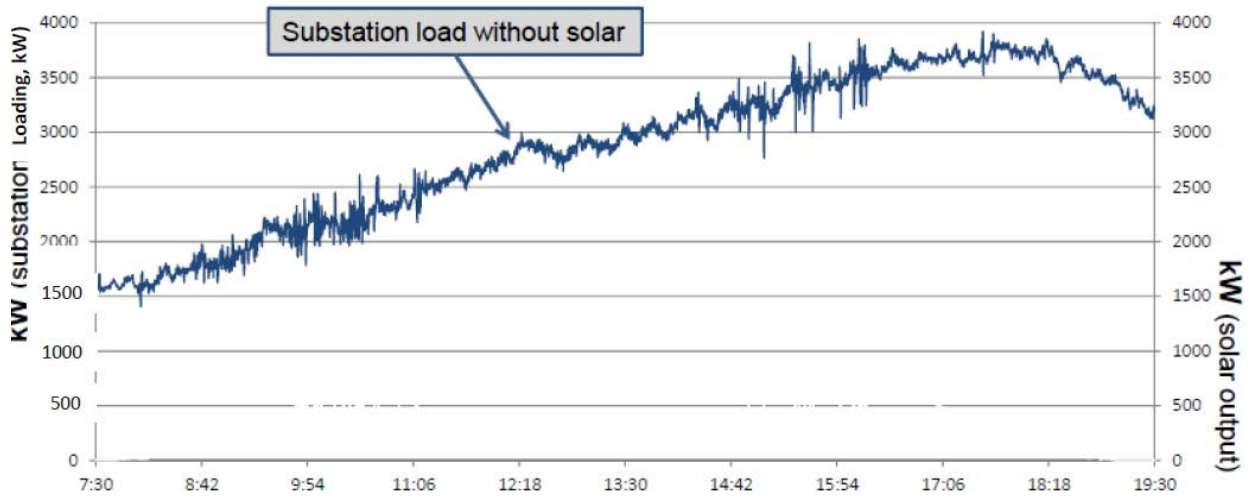


Figure 2.3. Load at the Rankin Avenue Substation in Mount Holly, NC (Sowder 2013)

To generate a 24-hour load, the load profile of a community or facility served by a 25 kilovolt-ampere (kVA) transformer was used as shown in Figure 2.4 (Pipattanasomporn et al. 2011). Note that the peak load in this figure is about 14.5 kW. The load was scaled to 100 kW peak, and the load at night calculated. A small adjustment was made to ensure continuity at the end points of 7:30 AM and 7:30 PM at the Rankin Avenue substation.

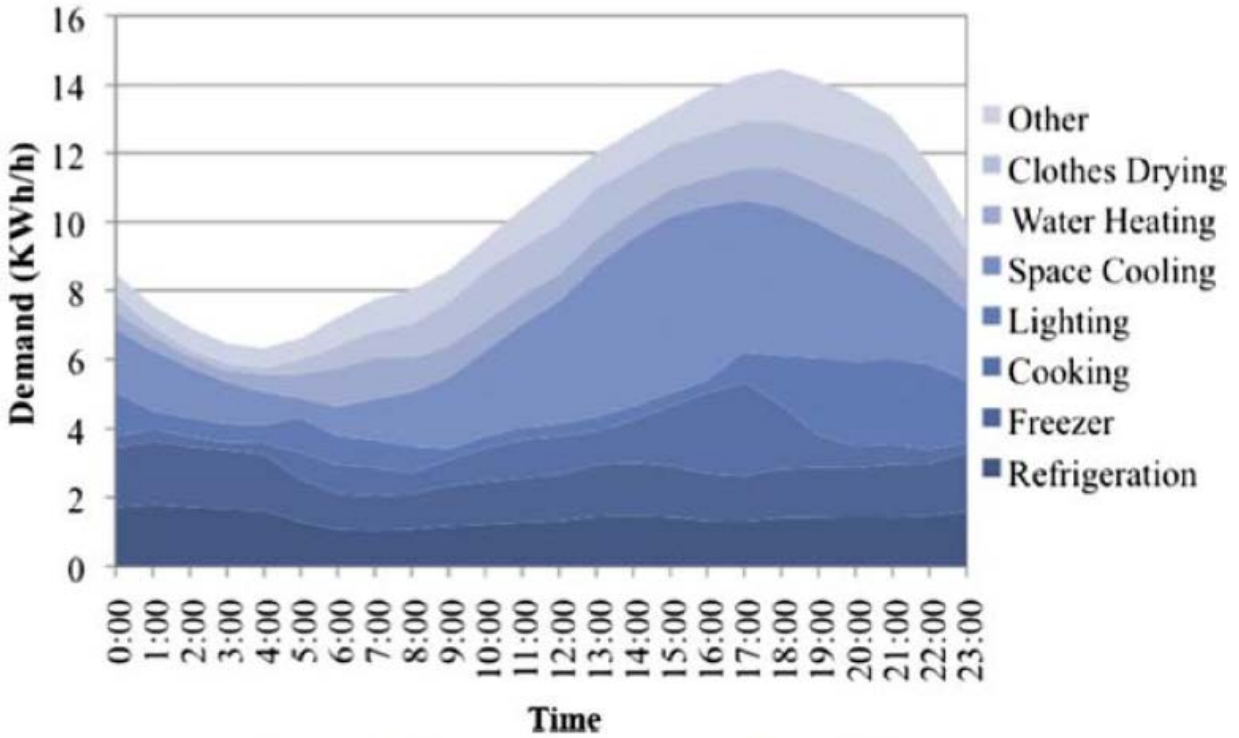


Figure 2.4. Load Profile used to Calculate Load from 7:30 PM to 7:30 AM (Pipattanasomporn et al. 2011)

The net load was calculated by subtracting load from renewable generation. The capacity of the generators was set to the average of this net load. The ESS discharges when the net load is positive and charges when the net load is negative, as shown in Figure 2.5. Note that the gas turbine output of 23.8 kW does not include the additional 2.5 kW generation capacity needed to bring the ESS back to its starting SOC.

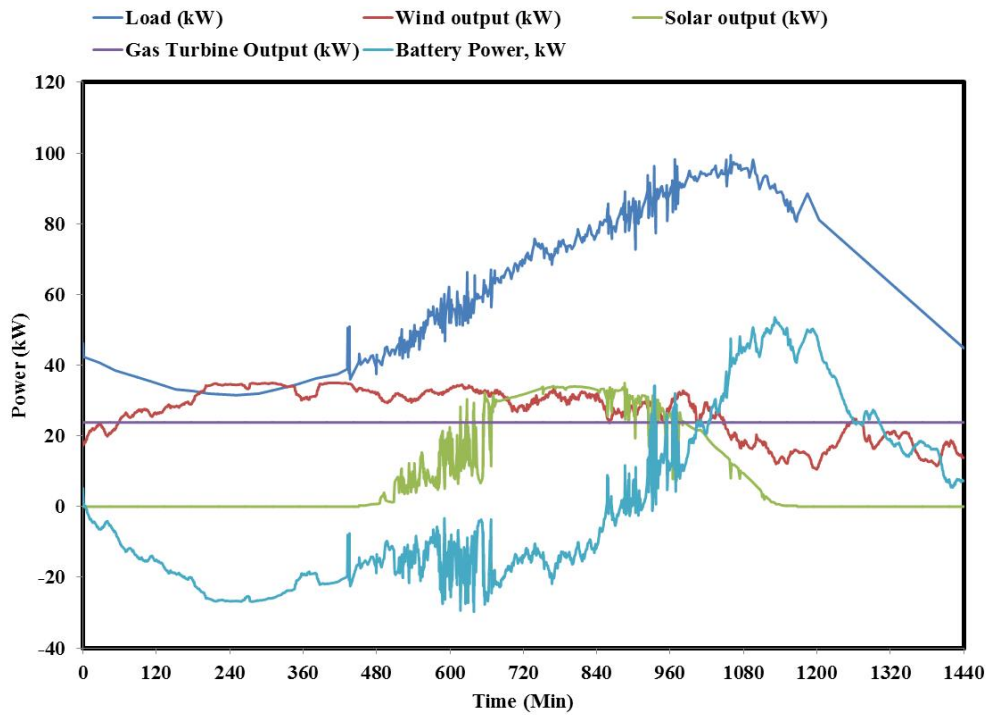


Figure 2.5. Generation, Load and ESS Power in the Microgrid (kW) during a 24-Hour Period

The change in capacity of the ESS was calculated over a 24-hour period. Since the RTE was assumed to be 80%, and the gas turbine generator capacity was equal to average of net load, the ESS capacity is lower than the starting SOC. Hence, the starting SOC is adjusted such that the ESS SOC is always positive. In applying the protocol, it is up to the vendor to specify the SOC range the ESS will be subjected to, which would determine the starting SOC for the ESS. The ESS energy capacity over a 24-hour period is shown in Figure 2.6.

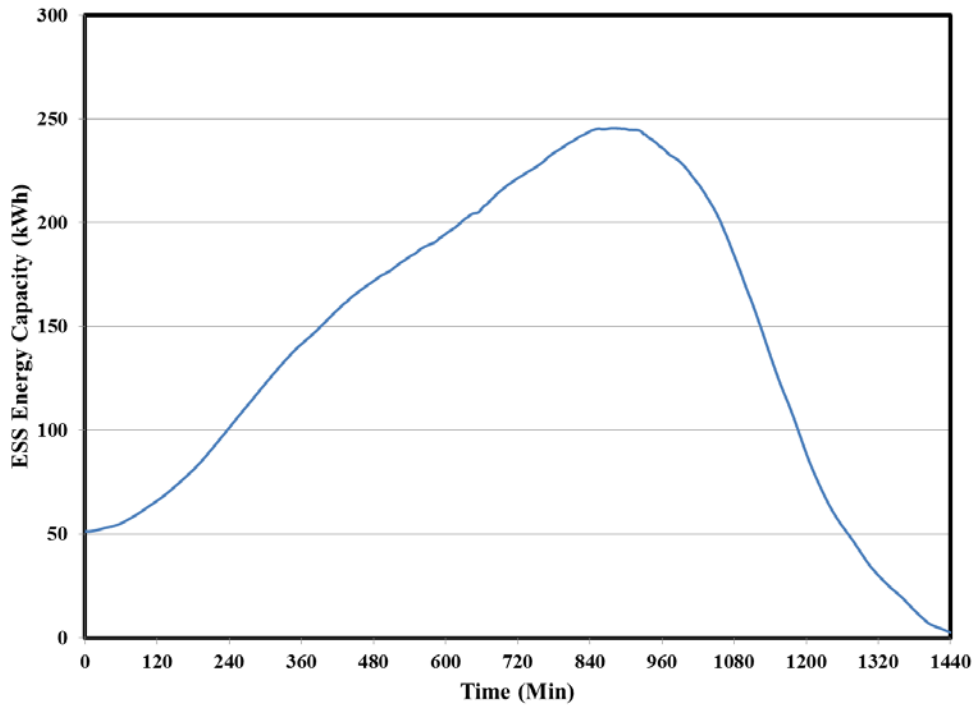


Figure 2.6. The ESS Energy Capacity for a 24-Hour Period

The ESS charge-discharge power, along with ramp rate, is shown in Figure 2.7 (charge is below the x-axis). The ramp rate is calculated over one minute.

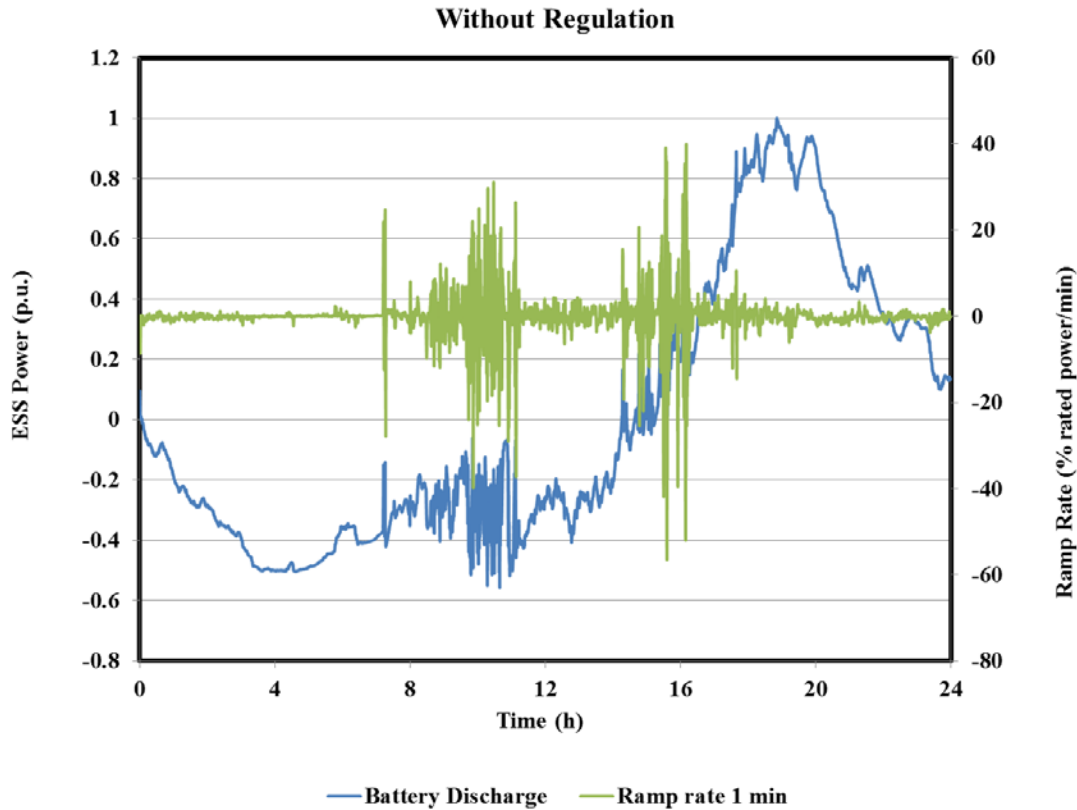


Figure 2.7. The ESS Charge-Discharge Power and One-Minute Ramp Rate

The frequency regulation duty cycle applied in the 2012 Protocol was superimposed on the ESS charge/discharge curve (Figure 2.8). The balancing signal is simply generation minus load. Hence, when the balancing signal is negative, the ESS needs to discharge. In performing this aggregation of curves, discharge of the ESS was considered to have a positive sign and charge to have a negative sign. Thus, the balancing signal, which ranges from -1 to 1 power unit (p.u.) was multiplied by -1 to get the correct sign for the ESS charge or discharge.

The signal was applied to the ESS rated power, which is taken to be the maximum of charge or discharge power in Figure 2.5. The superimposed signal is shown in Figure 2.8.

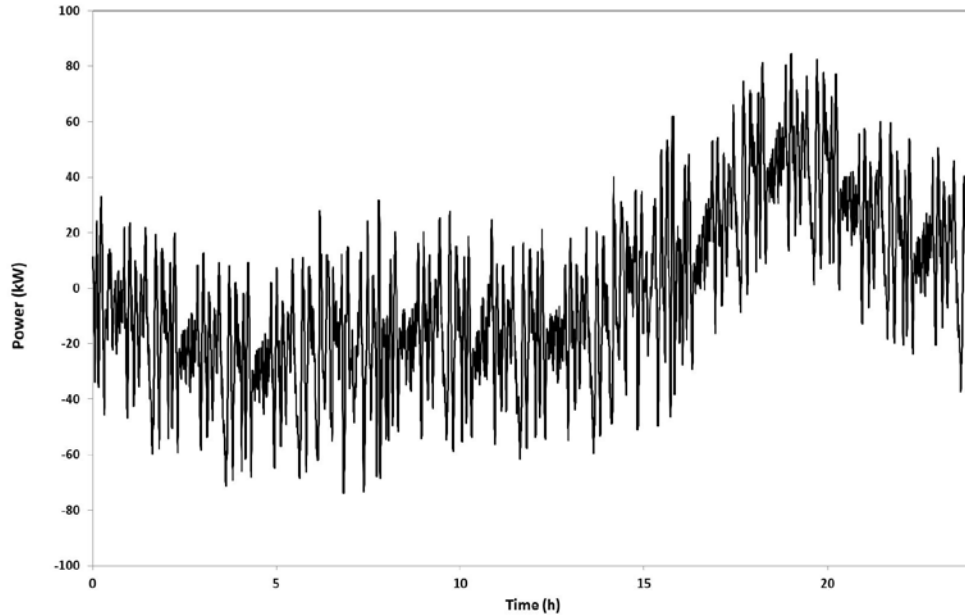


Figure 2.8. Consolidated Duty Cycle, with Solar and Wind 35% of Peak Power, and with Regulation, but without VAR support, Power Quality, Frequency Response, or Black Start

Clearly, the ESS power trend is the same as seen in Figure 2.5 and Figure 2.7, where frequency regulation is not considered. The spikes in Figure 2.8 are due to the frequency regulation signal. The maximum power of the duty cycle in Figure 2.8 is taken to be the ESS rated power for this application. For this figure, the rated power (around 80 kW) corresponds to maximum discharge power.

In addition, VAR support, power quality, frequency response and black start were other services that were included in the duty cycle. A brief description of the duty cycle for each of these services is given below.

3.0 VAR Support

The unit for apparent power S in an AC circuit, volt-amperes (VA), is the product of the root mean square (RMS) voltage and the RMS current; the unit for reactive power Q is VAR, while the unit for real power P is watts. The three are related to each other by the following Pythagorean relationship:

$$S = \sqrt{P^2 + Q^2}$$

An ESS can provide voltage ride-through during voltage sags or voltage increases based on the need to inject or absorb reactive power to mitigate voltage sag or increase, respectively. This compensation can be done by the ESS power conversion system. The capacitor injects reactive power, while an inductor absorbs reactive power.

The ESS has a specific rated voltage as determined by the protocol. To compensate for reactive power, the real power of the ESS is used. Based on efficiency of conversion for, say, 1 MVAR, the MW of storage power needed would vary.

It is not clear what the ESS duty cycle would be for VAR support. It can be assumed that VAR support may be needed for up to 4 seconds at a time. It is also assumed that if rated power is 100 kW of storage, the ESS can provide a maximum of 100 kVA, assuming the conversion efficiency of the ESS is 1. If all of the power provided is reactive, it can provide a maximum of 100 kilovolt-amperes reactive (kVAR), ignoring losses associated with inefficiency of conversion of real power to reactive power.

As a result, if 100 kVAR is needed from the ESS for 4 seconds, the ESS will be subjected to 100 kW discharge for 4 seconds. Assuming this happens twice in one hour and VAR absorption of 100 kVAR also happens twice in an hour, then charge at 100 kW for 4 seconds will occur twice in an hour.

The EPRI-DOE Handbook,¹ (page 7-26), states that the grid voltage stability duty profile is up to 2 seconds full power discharge. The duty cycle suggested for an ESS in an islanded microgrid application was 1 second full power discharge, 1 event per day, 10 events per year.

The power quality duty cycle was represented by a 2-second full power discharge, 1 event per hour, 100 events per year.

For this work, it was assumed that the ESS would absorb as well as provide reactive power. The VAR support and power quality duty cycles were combined into one 8-second discharge every 30 minutes and one 8-second charge every 30 minutes at half the ESS rated power, which is peak power with regulation. In other words, every 15 minutes, a charge or a discharge of 8 seconds occurs.

¹ *EPRI-DOE Handbook of Energy Storage for Transmission and Distribution Applications*, Electric Power Research Institute 10001834, December 2003.

4.0 Frequency Response

Frequency response consists of primary, secondary and tertiary response (Eto et al. 2010). Primary frequency response involves charging or discharging the ESS for 30 seconds. Secondary response simply is a response to the frequency regulation signal. Tertiary frequency response corresponds to tertiary frequency control provided by generators that are on standby mode, and is therefore not relevant to ESS. For the purpose of determining the duty cycle for an ESS in an islanded mode, the power used is considered half the rated power of the ESS, which is the same as peak power with regulation. During the duty cycle, one charge and one discharge will be applied per day, separated by 12 hours.

The determination and reporting of ratings for ESS to be applied in an islanded microgrid would then be based on using the above duty cycle and the metrics as discussed in the Background section above.

5.0 Black Start

Black start refers to the process of restoring electric power from a complete blackout, without relying on an external power source. In terms of the microgrid, a black start means the failure of all generating sources within the microgrid. If any renewable energy sources are part of the power system, they will not be able to come back on line until grid voltage and frequency are restored and stable. If we want the ESS to have black start capability, the following are required:

- capacity to operate expected maximum microgrid demand by itself for up to 60 seconds **OR** automated load management to disconnect any noncritical loads and capacity to operate all critical loads by itself for up to 60 seconds
- capacity to provide electrical power to start offline generators
- capability to operate in isochronous speed control while other generation sources are offline
- capability to hand off isochronous speed control to any one generator that comes back on line and go to droop speed control
- possible capability to keep operating in isochronous speed control with other generating sources in droop speed control¹

For this work, the black start duty cycle must correspond to discharge at rated power for 60 seconds once in 24 hours. Note that during black start, the ESS is not used for any other application such as regulation, voltage/VAR support, or frequency response.

¹ Email from PNNL's Matt Engels forwarded to Microgrid subgroup January 28, 2014.

6.0 Duty-Cycle Signal

As discussed above, the duty cycles to be applied in determining the performance of an ESS as an islanded microgrid were developed for three scenarios:

1. microgrid with renewables (where renewables consisted of a mix of solar and wind generation)
2. microgrid with renewables but no frequency regulation
3. microgrid with no renewables and no frequency regulation

Each use case above involves storing some excess energy and providing it when needed, which is addressed in the peak-shaving application criteria in the protocol. All of the above include VAR support, power quality, frequency response and black start.

Data used as the basis for the duty cycles are presented in Table 6.1.

Table 6.1. Duty-Cycle Signal for Islanded Microgrid Applications of Energy Storage Systems

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
0:00:00	0.596379603	1.143436201	0.153789913	0:00:04	0.590236735	1.131070024	0.146708472
0:00:08	0.584093866	1.131202602	0.139627031	0:00:12	0.077950997	0.631335181	-0.367454409
0:00:16	0.071808129	0.631467768	-0.37453585	0:00:20	0.06566526	0.631600347	-0.381617291
0:00:24	0.059522391	0.631732925	-0.388698731	0:00:28	0.053379523	0.621239281	-0.395780172
0:00:32	0.047236654	0.610745645	-0.402861613	0:00:36	0.041093785	0.09216628	-0.409943053
0:00:40	0.034950917	0.070891678	-0.417024494	0:00:44	0.028808048	0.049617072	-0.424105935
0:00:48	0.022665179	0.032657309	-0.431187375	0:00:52	0.016522311	0.015697544	-0.438268816
0:00:56	0.011348193	0.003776007	-0.444037681	0:01:00	0.510353559	-0.001193438	0.055856299
0:01:04	0.510457807	-0.005507854	0.055750278	0:01:08	0.510562056	0.002932331	0.055644258
0:01:12	0.510666305	0.011372516	0.055538238	0:01:16	0.510770554	0.01603817	0.055432217
0:01:20	0.510874802	0.016929291	0.055326197	0:01:24	0.510979051	0.017820413	0.055220176
0:01:28	0.5110833	0.011067174	0.055114156	0:01:32	0.511187549	0.004313935	0.055008136
0:01:36	0.011291798	-0.003365068	-0.445097885	0:01:40	0.011396046	-0.01135266	-0.445203905
0:01:44	0.011500295	-0.019340252	-0.445309926	0:01:48	0.011604544	-0.032340314	-0.445415946
0:01:52	0.011708793	-0.045340377	-0.445521967	0:01:56	0.011813041	-0.054165179	-0.445627987
0:02:00	0.01191729	-0.061598232	-0.445734007	0:02:04	0.011151098	-0.069550138	-0.445840028
0:02:08	0.010384906	-0.075047729	-0.445946048	0:02:12	0.009618714	-0.080545321	-0.446052069
0:02:16	0.008852522	-0.09492275	-0.446158089	0:02:20	0.00808633	-0.118180026	-0.446264109
0:02:24	0.007320138	-0.141437292	-0.44637013	0:02:28	0.006553945	-0.166657852	-0.44647615
0:02:32	0.005787753	-0.19187842	-0.446582171	0:02:36	0.005021561	-0.218613003	-0.446688191
0:02:40	0.004255369	-0.2468616	-0.446794211	0:02:44	0.003489177	-0.274861172	-0.446900232
0:02:48	0.002722985	-0.302113631	-0.447006252	0:02:52	0.001956793	-0.32936609	-0.447112273
0:02:56	0.001190601	-0.358684158	-0.447218293	0:03:00	0.000424409	-0.390067835	-0.447324314
0:03:04	0.000590996	-0.420895496	-0.447430334	0:03:08	0.000757583	-0.429272055	-0.447536354
0:03:12	0.00092417	-0.437648615	-0.447642375	0:03:16	0.001090757	-0.439077292	-0.447748395
0:03:20	0.001257344	-0.433558017	-0.447854416	0:03:24	0.001423931	-0.428038742	-0.447960436
0:03:28	0.001590518	-0.414721722	-0.448066456	0:03:32	0.001757105	-0.393606921	-0.448172477
0:03:36	0.001923692	-0.366101837	-0.448278497	0:03:40	0.002090279	-0.332206505	-0.448384518
0:03:44	0.002256866	-0.298311138	-0.448490538	0:03:48	0.002423453	-0.257753972	-0.448596558
0:03:52	0.00259004	-0.217196824	-0.448702579	0:03:56	0.002756627	-0.177005504	-0.448808599
0:04:00	0.002923214	-0.13718003	-0.44891462	0:04:04	0.001826977	-0.098107307	-0.44902064
0:04:08	0.00073074	-0.075209327	-0.449126661	0:04:12	-0.000365497	-0.052311356	-0.449232681
0:04:16	-0.001461734	-0.038276839	-0.449338701	0:04:20	-0.002557971	-0.033105785	-0.449444722

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
0:04:24	-0.003654208	-0.02793473	-0.449550742	0:04:28	-0.004750445	-0.02153294	-0.449656763
0:04:32	-0.005846682	-0.015131152	-0.449762783	0:04:36	-0.006942919	-0.005010248	-0.449868803
0:04:40	-0.008039157	0.008829768	-0.449974824	0:04:44	-0.009135394	0.022669784	-0.450080844
0:04:48	-0.010231631	0.028137038	-0.450186865	0:04:52	-0.011327868	0.033604294	-0.450292885
0:04:56	-0.012424105	0.040715143	-0.450398905	0:05:00	-0.013520342	0.049469582	-0.450504926
0:05:04	-0.013473462	0.058905419	-0.450610946	0:05:08	-0.013426583	0.076528164	-0.450716967
0:05:12	-0.013379703	0.0941509	-0.450822987	0:05:16	-0.013332824	0.106580436	-0.450929008
0:05:20	-0.013285944	0.1172789	-0.451035028	0:05:24	-0.013239065	0.127977364	-0.451141048
0:05:28	-0.013192185	0.142448357	-0.451247069	0:05:32	-0.013145306	0.156919324	-0.451353089
0:05:36	-0.013098426	0.168718817	-0.45145911	0:05:40	-0.013051547	0.177846819	-0.45156513
0:05:44	-0.013004667	0.186974803	-0.45167115	0:05:48	-0.012957788	0.192762313	-0.451777171
0:05:52	-0.012910908	0.198549822	-0.451883191	0:05:56	-0.012864029	0.203445756	-0.451989212
0:06:00	-0.012817149	0.208044487	-0.452095232	0:06:04	-0.014152747	0.211819145	-0.452201252
0:06:08	-0.015488345	0.218606945	-0.452307273	0:06:12	-0.016823943	0.225394763	-0.452413293
0:06:16	-0.018159541	0.235752912	-0.452519314	0:06:20	-0.019495139	0.24968143	-0.452625334
0:06:24	-0.020830737	0.263609929	-0.452731354	0:06:28	-0.022166335	0.279711976	-0.452837375
0:06:32	-0.023501933	0.295814023	-0.452943395	0:06:36	-0.02483753	0.304442352	-0.453049416
0:06:40	-0.026173128	0.305596894	-0.453155436	0:06:44	-0.027508726	0.306751471	-0.453261457
0:06:48	-0.028844324	0.296274645	-0.453367477	0:06:52	-0.030179922	0.285797783	-0.453473497
0:06:56	-0.03151552	0.270385372	-0.453579518	0:07:00	-0.032851118	0.250037394	-0.453685538
0:07:04	-0.033161102	0.230300768	-0.453791559	0:07:08	-0.033471087	0.21786197	-0.453897579
0:07:12	-0.033781071	0.20542319	-0.454003599	0:07:16	-0.034091056	0.19467831	-0.45410962
0:07:20	-0.03440104	0.18562733	-0.45421564	0:07:24	-0.034711025	0.17657635	-0.454321661
0:07:28	-0.035021009	0.164810373	-0.454427681	0:07:32	-0.035330994	0.153044378	-0.454533701
0:07:36	-0.035640978	0.136128573	-0.454639722	0:07:40	-0.035950962	0.114062933	-0.454745742
0:07:44	-0.036260947	0.091997301	-0.454851763	0:07:48	-0.036570931	0.068595319	-0.454957783
0:07:52	-0.036880916	0.045193342	-0.455063804	0:07:56	-0.0371909	0.019979632	-0.455169824
0:08:00	-0.037500885	-0.007045811	-0.455275844	0:08:04	-0.038075843	-0.034229199	-0.455381865
0:08:08	-0.038650801	-0.062862419	-0.455487885	0:08:12	-0.039225759	-0.091495635	-0.455593906
0:08:16	-0.039800718	-0.112574856	-0.455699926	0:08:20	-0.040375676	-0.131136073	-0.455805946
0:08:24	-0.040950634	-0.149697289	-0.455911967	0:08:28	-0.041525592	-0.159821596	-0.456017987
0:08:32	-0.04210055	-0.169945911	-0.456124008	0:08:36	-0.042675509	-0.180510524	-0.456230028
0:08:40	-0.043250467	-0.191515427	-0.456336048	0:08:44	-0.043825425	-0.202520329	-0.456442069
0:08:48	-0.044400383	-0.232587468	-0.456548089	0:08:52	-0.044975341	-0.262654625	-0.45665411
0:08:56	-0.045550299	-0.275407557	-0.45676013	0:09:00	-0.046125258	-0.282389109	-0.456866151
0:09:04	-0.046671495	-0.289353524	-0.456972171	0:09:08	-0.047217733	-0.317174961	-0.457078191
0:09:12	-0.047776397	-0.344996398	-0.457184212	0:09:16	-0.048310207	-0.36517427	-0.457290232
0:09:20	-0.048856445	-0.377708559	-0.457396253	0:09:24	-0.049402682	-0.390242848	-0.457502273
0:09:28	-0.04994892	-0.402777136	-0.457608293	0:09:32	-0.050495157	-0.415311425	-0.457714314
0:09:36	-0.051041395	-0.420179073	-0.457820334	0:09:40	-0.051587632	-0.417380114	-0.457926355
0:09:44	-0.052133869	-0.414581155	-0.458032375	0:09:48	-0.052680107	-0.400129617	-0.458138395
0:09:52	-0.053226344	-0.385678044	-0.458244416	0:09:56	-0.053772582	-0.377456268	-0.458350436
0:10:00	-0.054318819	-0.371311043	-0.458456457	0:10:04	-0.055080336	-0.365294143	-0.458562477
0:10:08	-0.055841853	-0.351628615	-0.458668498	0:10:12	-0.056603369	-0.337963087	-0.458774518
0:10:16	-0.057364886	-0.323198989	-0.458880538	0:10:20	-0.058126403	-0.307336305	-0.458986559
0:10:24	-0.05888792	-0.291473603	-0.459092579	0:10:28	-0.059649436	-0.277930367	-0.4591986
0:10:32	-0.060410953	-0.264387113	-0.45930462	0:10:36	-0.06117247	-0.248535958	-0.45941064
0:10:40	-0.061933986	-0.230376884	-0.459516661	0:10:44	-0.062695503	-0.21221781	-0.459622681
0:10:48	-0.06345702	-0.186731542	-0.459728702	0:10:52	-0.064218537	-0.161245265	-0.459834722
0:10:56	-0.064980053	-0.136221644	-0.459940742	0:11:00	-0.06574157	-0.111352242	-0.460046763
0:11:04	-0.065937268	-0.08614556	-0.460152783	0:11:08	-0.066132965	-0.058276246	-0.460258804
0:11:12	-0.066328663	-0.030406932	-0.460364824	0:11:16	-0.066524361	-0.018287462	-0.460470845
0:11:20	-0.066720058	-0.011417941	-0.460576865	0:11:24	-0.066915756	-0.00454842	-0.460682885
0:11:28	-0.067111454	0.008635392	-0.460788906	0:11:32	-0.067307151	0.021819203	-0.460894926
0:11:36	-0.067502849	0.03917938	-0.461000947	0:11:40	-0.067698547	0.06071592	-0.461106967
0:11:44	-0.067894244	0.082252459	-0.461212987	0:11:48	-0.068089942	0.108416445	-0.461319008
0:11:52	-0.068285639	0.134580432	-0.461425028	0:11:56	-0.068481337	0.157279608	-0.461531049

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
0:12:00	-0.068677035	0.176513975	-0.461637069	0:12:04	-0.068470348	0.195988197	-0.461743089
0:12:08	-0.068263661	0.211791788	-0.46184911	0:12:12	-0.068056974	0.227595378	-0.46195513
0:12:16	-0.067850288	0.238801783	-0.462061151	0:12:20	-0.067643601	0.245410968	-0.462167171
0:12:24	-0.067436914	0.25202017	-0.462273191	0:12:28	-0.067230227	0.263214726	-0.462379212
0:12:32	-0.06702354	0.274409247	-0.462485232	0:12:36	-0.066816854	0.285603803	-0.462591253
0:12:40	-0.066610167	0.296798324	-0.462697273	0:12:44	-0.06640348	0.306480784	-0.462803294
0:12:48	-0.066196793	0.311626992	-0.462909314	0:12:52	-0.065990106	0.316773164	-0.463015334
0:12:56	-0.06578342	0.321206084	-0.463121355	0:13:00	-0.065576733	0.32492575	-0.463227375
0:13:04	-0.066182146	0.328161337	-0.463333396	0:13:08	-0.06678756	0.331396923	-0.463439416
0:13:12	-0.067392974	0.334632509	-0.463545436	0:13:16	-0.067998387	0.344275362	-0.463651457
0:13:20	-0.068603801	0.360325481	-0.463757477	0:13:24	-0.069209214	0.376375635	-0.463863498
0:13:28	-0.069814628	0.391083702	-0.463969518	0:13:32	-0.070420042	0.405791733	-0.464075538
0:13:36	-0.071025455	0.412910541	-0.464181559	0:13:40	-0.071630869	0.412440091	-0.464287579
0:13:44	-0.072236282	0.411969641	-0.4643936	0:13:48	-0.072841696	0.39866906	-0.46449962
0:13:52	-0.07344711	0.38536848	-0.464605641	0:13:56	-0.074052523	0.369112813	-0.464711661
0:14:00	-0.074657937	0.349902022	-0.464817681	0:14:04	-0.075048812	0.330819115	-0.464923702
0:14:08	-0.075439687	0.313415754	-0.465029722	0:14:12	-0.075830562	0.296012358	-0.465135743
0:14:16	-0.076221437	0.28772236	-0.465241763	0:14:20	-0.076612312	0.288545761	-0.465347783
0:14:24	-0.077003188	0.289369127	-0.465453804	0:14:28	-0.077394063	0.278206221	-0.465559824
0:14:32	-0.077784938	0.267043316	-0.465665845	0:14:36	-0.078175813	0.261133184	-0.465771865
0:14:40	-0.078566688	0.260475791	-0.465877885	0:14:44	-0.078957563	0.259818398	-0.465983906
0:14:48	-0.079348438	0.260624354	-0.466089926	0:14:52	-0.079739313	0.261430346	-0.466195947
0:14:56	-0.080130189	0.260659258	-0.466301967	0:15:00	-0.580521064	-0.241688837	-0.966407988
0:15:04	-0.580859507	-0.244005715	-0.966514008	0:15:08	-0.58119795	-0.254742315	-0.966620028
0:15:12	-0.081536393	0.234521103	-0.466726049	0:15:16	-0.081874837	0.223784503	-0.466832069
0:15:20	-0.08221328	0.21304792	-0.46693809	0:15:24	-0.082551723	0.20231132	-0.46704411
0:15:28	-0.082890166	0.189219369	-0.46715013	0:15:32	-0.083228609	0.176127418	-0.467256151
0:15:36	-0.083567053	0.163317589	-0.467362171	0:15:40	-0.083905496	0.150789898	-0.467468192
0:15:44	-0.084243939	0.138262207	-0.467574212	0:15:48	-0.084582382	0.110679376	-0.467680232
0:15:52	-0.084920826	0.083096562	-0.467786253	0:15:56	-0.085259269	0.056945298	-0.467892273
0:16:00	-0.085597712	0.031271221	-0.467998294	0:16:04	-0.085254748	0.006003316	-0.468104314
0:16:08	-0.084911785	-0.017199966	-0.468210335	0:16:12	-0.084568821	-0.04040325	-0.468316355
0:16:16	-0.084225857	-0.059539866	-0.468422375	0:16:20	-0.083882894	-0.074609816	-0.468528396
0:16:24	-0.08353993	-0.089679764	-0.468634416	0:16:28	-0.083196966	-0.090060161	-0.468740437
0:16:32	-0.082854003	-0.090440553	-0.468846457	0:16:36	-0.082511039	-0.095441837	-0.468952477
0:16:40	-0.082168075	-0.105064014	-0.469058498	0:16:44	-0.081825112	-0.11468619	-0.469164518
0:16:48	-0.081482148	-0.13021751	-0.469270539	0:16:52	-0.081139185	-0.145748818	-0.469376559
0:16:56	-0.080796221	-0.15876363	-0.469482579	0:17:00	-0.080453257	-0.169261931	-0.4695886
0:17:04	-0.080383791	-0.179923259	-0.46969462	0:17:08	-0.080314326	-0.199774534	-0.469800641
0:17:12	-0.08024486	-0.219625809	-0.469906661	0:17:16	-0.080175394	-0.231604994	-0.470012682
0:17:20	-0.080105928	-0.235712071	-0.470118702	0:17:24	-0.080036462	-0.239819148	-0.470224722
0:17:28	-0.079966996	-0.252547204	-0.470330743	0:17:32	-0.079897531	-0.26527526	-0.470436763
0:17:36	-0.079828065	-0.283007562	-0.470542784	0:17:40	-0.079758599	-0.305744073	-0.470648804
0:17:44	-0.079689133	-0.328480603	-0.470754824	0:17:48	-0.079619667	-0.348013943	-0.470860845
0:17:52	-0.079550201	-0.367547284	-0.470966865	0:17:56	-0.079480736	-0.385219949	-0.471072886
0:18:00	-0.07941127	-0.401031975	-0.471178906	0:18:04	-0.079620488	-0.41701012	-0.471284926
0:18:08	-0.079829705	-0.426297297	-0.471390947	0:18:12	-0.080038923	-0.435584438	-0.471496967
0:18:16	-0.080248141	-0.45005944	-0.471602988	0:18:20	-0.080457359	-0.469722269	-0.471709008
0:18:24	-0.080666577	-0.489385097	-0.471815028	0:18:28	-0.080875794	-0.476671792	-0.471921049
0:18:32	-0.081085012	-0.463958486	-0.472027069	0:18:36	-0.08129423	-0.465262809	-0.47213309
0:18:40	-0.081503448	-0.480584761	-0.47223911	0:18:44	-0.081712666	-0.495906749	-0.472345131
0:18:48	-0.081921884	-0.501116927	-0.472451151	0:18:52	-0.082131101	-0.506327104	-0.472557171
0:18:56	-0.082340319	-0.509848498	-0.472663192	0:19:00	-0.082549537	-0.512806963	-0.472769212
0:19:04	-0.082947156	-0.515877768	-0.472875233	0:19:08	-0.083344776	-0.507120159	-0.472981253
0:19:12	-0.083742395	-0.498362514	-0.473087273	0:19:16	-0.084140015	-0.485057283	-0.473193294
0:19:20	-0.084537634	-0.467204394	-0.473299314	0:19:24	-0.084935253	-0.449351506	-0.473405335
0:19:28	-0.085332873	-0.423868856	-0.473511355	0:19:32	-0.085730492	-0.398386241	-0.473617375

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
0:19:36	-0.086128112	-0.378881768	-0.473723396	0:19:40	-0.086525731	-0.365355473	-0.473829416
0:19:44	-0.08692335	-0.351829178	-0.473935437	0:19:48	-0.08732097	-0.336083131	-0.474041457
0:19:52	-0.087718589	-0.320337083	-0.474147478	0:19:56	-0.088116209	-0.300914665	-0.474253498
0:20:00	-0.088513828	-0.277815878	-0.474359518	0:20:04	-0.088817624	-0.254661182	-0.474465539
0:20:08	-0.08912142	-0.228291163	-0.474571559	0:20:12	-0.089425215	-0.201921163	-0.47467758
0:20:16	-0.089729011	-0.181840036	-0.4747836	0:20:20	-0.090032807	-0.168047791	-0.47488962
0:20:24	-0.090336603	-0.154255554	-0.474995641	0:20:28	-0.090640399	-0.152377029	-0.475101661
0:20:32	-0.090944194	-0.150498504	-0.475207682	0:20:36	-0.09124799	-0.149679271	-0.475313702
0:20:40	-0.091551786	-0.149919347	-0.475419722	0:20:44	-0.091855582	-0.150159422	-0.475525743
0:20:48	-0.092159378	-0.143134001	-0.475631763	0:20:52	-0.092463173	-0.136108589	-0.475737784
0:20:56	-0.092766969	-0.129083172	-0.475843804	0:21:00	-0.093070765	-0.122057755	-0.475949825
0:21:04	-0.093501812	-0.115108191	-0.476055845	0:21:08	-0.093932859	-0.103290579	-0.476161865
0:21:12	-0.094363906	-0.091472965	-0.476267886	0:21:16	-0.094794954	-0.081651557	-0.476373906
0:21:20	-0.095226001	-0.073826354	-0.476479927	0:21:24	-0.095657048	-0.066001149	-0.476585947
0:21:28	-0.096088095	-0.067915629	-0.476691967	0:21:32	-0.096519142	-0.069830107	-0.476797988
0:21:36	-0.096950189	-0.071744587	-0.476904008	0:21:40	-0.097381237	-0.073659065	-0.477010029
0:21:44	-0.097812284	-0.075573544	-0.477116049	0:21:48	-0.098243331	-0.08250467	-0.477222069
0:21:52	-0.098674378	-0.089435798	-0.47732809	0:21:56	-0.099105425	-0.095336261	-0.47743411
0:22:00	-0.099536472	-0.100206059	-0.477540131	0:22:04	-0.100130521	-0.10517302	-0.477646151
0:22:08	-0.100724569	-0.106199228	-0.477752172	0:22:12	-0.101318617	-0.107225437	-0.477858192
0:22:16	-0.101912665	-0.108627435	-0.477964212	0:22:20	-0.102506713	-0.110405214	-0.478070233
0:22:24	-0.103100761	-0.112182994	-0.478176253	0:22:28	-0.10369481	-0.110991421	-0.478282274
0:22:32	-0.104288858	-0.109799848	-0.478388294	0:22:36	-0.104882906	-0.108608276	-0.478494314
0:22:40	-0.105476954	-0.107416703	-0.478600335	0:22:44	-0.106071002	-0.10622513	-0.478706355
0:22:48	-0.106666505	-0.097862362	-0.478812376	0:22:52	-0.107259099	-0.089499594	-0.478918396
0:22:56	-0.107853147	-0.088838802	-0.479024416	0:23:00	-0.108447195	-0.095879985	-0.479130437
0:23:04	-0.108261184	-0.102456189	-0.479236457	0:23:08	-0.108075172	-0.099959123	-0.479342478
0:23:12	-0.107889161	-0.097462056	-0.479448498	0:23:16	-0.10770315	-0.096258551	-0.479554519
0:23:20	-0.107517138	-0.096348607	-0.479660539	0:23:24	-0.107331127	-0.096438663	-0.479766559
0:23:28	-0.107145116	-0.09529784	-0.47987258	0:23:32	-0.106959105	-0.09415702	-0.4799786
0:23:36	-0.106773093	-0.095376769	-0.480084621	0:23:40	-0.106587082	-0.098957087	-0.480190641
0:23:44	-0.106401071	-0.102537405	-0.480296661	0:23:48	-0.10621506	-0.116944934	-0.480402682
0:23:52	-0.106029048	-0.131352462	-0.480508702	0:23:56	-0.105843037	-0.141199575	-0.480614723
0:24:00	-0.105657026	-0.146486261	-0.480720743	0:24:04	-0.106238981	-0.15223073	-0.480826763
0:24:08	-0.106820937	-0.148879582	-0.480932784	0:24:12	-0.107402892	-0.145528434	-0.481038804
0:24:16	-0.107984848	-0.147239391	-0.481144825	0:24:20	-0.108566803	-0.154012445	-0.481250845
0:24:24	-0.109148758	-0.160785507	-0.481356865	0:24:28	-0.109730714	-0.170345834	-0.481462886
0:24:32	-0.110312669	-0.17990616	-0.481568906	0:24:36	-0.110894625	-0.188978704	-0.481674927
0:24:40	-0.11147658	-0.197563455	-0.481780947	0:24:44	-0.112058536	-0.206148215	-0.481886968
0:24:48	-0.112640491	-0.202148771	-0.481992988	0:24:52	-0.113222447	-0.198149327	-0.482099008
0:24:56	-0.113804402	-0.193192996	-0.482205029	0:25:00	-0.114386357	-0.187279761	-0.482311049
0:25:04	-0.11475597	-0.181239951	-0.48241707	0:25:08	-0.115125582	-0.169775183	-0.48252309
0:25:12	-0.115495194	-0.158310423	-0.48262911	0:25:16	-0.115864807	-0.144144861	-0.482735131
0:25:20	-0.116234419	-0.1272785	-0.482841151	0:25:24	-0.116604032	-0.110412138	-0.482947172
0:25:28	-0.116973644	-0.113603712	-0.483053192	0:25:32	-0.117343256	-0.11679528	-0.483159212
0:25:36	-0.117712869	-0.113676614	-0.483265233	0:25:40	-0.118082481	-0.104247709	-0.483371253
0:25:44	-0.118452093	-0.094818803	-0.483477274	0:25:48	-0.118821706	-0.079549677	-0.483583294
0:25:52	-0.119191318	-0.064280551	-0.483689315	0:25:56	-0.11956093	-0.050076564	-0.483795335
0:26:00	-0.119930543	-0.036937712	-0.483901355	0:26:04	-0.119790346	-0.023494974	-0.484007376
0:26:08	-0.119650148	-0.032252235	-0.484113396	0:26:12	-0.119509951	-0.041009496	-0.484219417
0:26:16	-0.119369754	-0.05217719	-0.484325437	0:26:20	-0.119229557	-0.065755314	-0.484431457
0:26:24	-0.11908936	-0.079333439	-0.484537478	0:26:28	-0.118949163	-0.072587843	-0.484643498
0:26:32	-0.118808965	-0.065842248	-0.484749519	0:26:36	-0.118668768	-0.057069497	-0.484855539
0:26:40	-0.118528571	-0.046269593	-0.484961559	0:26:44	-0.118388374	-0.035469689	-0.48506758
0:26:48	-0.118248177	-0.029507333	-0.4851736	0:26:52	-0.11810798	-0.023544975	-0.485279621
0:26:56	-0.117967782	-0.023037203	-0.485385641	0:27:00	-0.117852803	-0.024362652	-0.485525829
0:27:04	-0.117872379	-0.025768313	-0.485607479	0:27:08	-0.117891955	-0.025296041	-0.485815129

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
0:27:12	-0.117911531	-0.024823768	-0.485959779	0:27:16	-0.117931107	-0.026208889	-0.486104429
0:27:20	-0.117950684	-0.028213144	-0.486249079	0:27:24	-0.11797026	-0.0302174	-0.486393729
0:27:28	-0.117989836	-0.017995376	-0.486538379	0:27:32	-0.118009412	-0.005773352	-0.486683029
0:27:36	-0.118028989	-0.003342805	-0.486827679	0:27:40	-0.118048565	-0.010703727	-0.486972329
0:27:44	-0.118068141	-0.018064649	-0.487116979	0:27:48	-0.118087717	-0.029475341	-0.487261629
0:27:52	-0.118107293	-0.040886029	-0.487406279	0:27:56	-0.11812687	-0.061027106	-0.487550929
0:28:00	-0.118146446	-0.089898565	-0.487695579	0:28:04	-0.118359212	-0.11604129	-0.487840229
0:28:08	-0.118571978	-0.133652328	-0.487984879	0:28:12	-0.118784744	-0.151263361	-0.488129529
0:28:16	-0.11899751	-0.160322102	-0.488274179	0:28:20	-0.119210276	-0.160828551	-0.488418828
0:28:24	-0.119423042	-0.161334992	-0.488563478	0:28:28	-0.119635808	-0.166367852	-0.488708128
0:28:32	-0.119848575	-0.171400712	-0.488852778	0:28:36	-0.120061341	-0.169089378	-0.488997428
0:28:40	-0.120274107	-0.15943384	-0.489142078	0:28:44	-0.120486873	-0.149778302	-0.489286728
0:28:48	-0.120699639	-0.140122769	-0.489431378	0:28:52	-0.120912405	-0.130467231	-0.489576028
0:28:56	-0.121125171	-0.118431894	-0.489720678	0:29:00	-0.121337937	-0.105603292	-0.489865328
0:29:04	-0.121150171	-0.092535938	-0.490009978	0:29:08	-0.120962405	-0.083169764	-0.490154628
0:29:12	-0.120774638	-0.07380359	-0.490299278	0:29:16	-0.120586872	-0.062326449	-0.490443928
0:29:20	-0.120399106	-0.04873834	-0.490588578	0:29:24	-0.12021134	-0.035150232	-0.490733228
0:29:28	-0.120023573	-0.030805421	-0.490877878	0:29:32	-0.119835807	-0.026460603	-0.491022528
0:29:36	-0.119648041	-0.023178314	-0.491167178	0:29:40	-0.119460275	-0.020958541	-0.491311828
0:29:44	-0.119272508	-0.018738768	-0.491456478	0:29:48	-0.119084742	-0.020222234	-0.491601128
0:29:52	-0.118896976	-0.021705699	-0.491745778	0:29:56	-0.11870921	-0.023189165	-0.491890428
0:30:00	0.381478557	0.475327369	0.007964922	0:30:04	0.382088579	0.474095604	0.007820272
0:30:08	0.382698601	0.475396019	0.007675622	0:30:12	-0.116691377	-0.023303566	-0.492469028
0:30:16	-0.116081355	-0.018265723	-0.492613678	0:30:20	-0.115471333	-0.009490445	-0.492758328
0:30:24	-0.11486131	-0.000715172	-0.492902978	0:30:28	-0.114251288	9.3996E-05	-0.493047628
0:30:32	-0.113641266	0.000903164	-0.493192278	0:30:36	-0.113031244	-0.001981674	-0.493336928
0:30:40	-0.112421222	-0.008560508	-0.493481578	0:30:44	-0.1118112	-0.016274618	-0.493626228
0:30:48	-0.111201178	-0.027394545	-0.493770878	0:30:52	-0.110591155	-0.038514468	-0.493915528
0:30:56	-0.109981133	-0.047938462	-0.494060178	0:31:00	-0.109371111	-0.055666521	-0.494204828
0:31:04	-0.109677985	-0.063941128	-0.494349478	0:31:08	-0.10998486	-0.078815803	-0.494494127
0:31:12	-0.110291734	-0.093690481	-0.494638777	0:31:16	-0.110598608	-0.11022356	-0.494783427
0:31:20	-0.110905483	-0.128415051	-0.494928077	0:31:24	-0.111212357	-0.146606537	-0.495072727
0:31:28	-0.111519231	-0.160910702	-0.495217377	0:31:32	-0.111826105	-0.175214866	-0.495362027
0:31:36	-0.11213298	-0.188236056	-0.495506677	0:31:40	-0.112439854	-0.199974269	-0.495651327
0:31:44	-0.112746728	-0.211712474	-0.495795977	0:31:48	-0.113053603	-0.214442455	-0.495940627
0:31:52	-0.113360477	-0.217172428	-0.496085277	0:31:56	-0.113667351	-0.219902401	-0.496229927
0:32:00	-0.113974225	-0.222632391	-0.496374577	0:32:04	-0.113402704	-0.224838766	-0.496519227
0:32:08	-0.112831182	-0.227045141	-0.496663877	0:32:12	-0.112259661	-0.229251515	-0.496808527
0:32:16	-0.111688139	-0.227848813	-0.496953177	0:32:20	-0.111116618	-0.222837016	-0.497097827
0:32:24	-0.110545096	-0.217825219	-0.497242477	0:32:28	-0.109973575	-0.205619712	-0.497387127
0:32:32	-0.109402053	-0.193414214	-0.497531777	0:32:36	-0.108830532	-0.185448503	-0.497676427
0:32:40	-0.10825901	-0.181722595	-0.497821077	0:32:44	-0.107687489	-0.177996678	-0.497965727
0:32:48	-0.107115967	-0.167414021	-0.498110377	0:32:52	-0.106544446	-0.156831365	-0.498255027
0:32:56	-0.105972924	-0.151012766	-0.498399677	0:33:00	-0.105401403	-0.149958243	-0.498544327
0:33:04	-0.105534362	-0.146930034	-0.498688977	0:33:08	-0.105667322	-0.136720977	-0.498833627
0:33:12	-0.105800282	-0.126511916	-0.498978277	0:33:16	-0.105933241	-0.117873228	-0.499122927
0:33:20	-0.106066201	-0.110804908	-0.499267577	0:33:24	-0.10619916	-0.103736589	-0.499412227
0:33:28	-0.10633212	-0.108623368	-0.499556877	0:33:32	-0.106465079	-0.113510147	-0.499701527
0:33:36	-0.106598039	-0.115080913	-0.499846177	0:33:40	-0.106730999	-0.113335675	-0.499990827
0:33:44	-0.106863958	-0.111590438	-0.500135477	0:33:48	-0.106996918	-0.115125154	-0.500280127
0:33:52	-0.107129877	-0.11865987	-0.500424776	0:33:56	-0.107262837	-0.115756716	-0.500569426
0:34:00	-0.107395796	-0.106415692	-0.500714076	0:34:04	-0.106570436	-0.096503427	-0.500858726
0:34:08	-0.105745076	-0.097629348	-0.501003376	0:34:12	-0.104919716	-0.098755268	-0.501148026
0:34:16	-0.104094356	-0.093813528	-0.501292676	0:34:20	-0.103268996	-0.082804127	-0.501437326
0:34:24	-0.102443635	-0.071794725	-0.501581976	0:34:28	-0.101618275	-0.052785281	-0.501726626
0:34:32	-0.100792915	-0.033775838	-0.501871276	0:34:36	-0.099967555	-0.017699382	-0.502015926
0:34:40	-0.099142195	-0.004555918	-0.502160576	0:34:44	-0.098316834	0.008587545	-0.502305226

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
0:34:48	-0.097491474	0.010617442	-0.502449876	0:34:52	-0.096666114	0.012647339	-0.502594526
0:34:56	-0.095840754	0.013107547	-0.502739176	0:35:00	-0.095015394	0.011998061	-0.502883826
0:35:04	-0.094934687	0.010600651	-0.503028476	0:35:08	-0.09485398	0.009671097	-0.503173126
0:35:12	-0.094773273	0.008741538	-0.503317776	0:35:16	-0.094692565	0.007811984	-0.503462426
0:35:20	-0.094611858	0.015320081	-0.503607076	0:35:24	-0.094531151	0.022828174	-0.503751726
0:35:28	-0.094450444	0.024506904	-0.503896376	0:35:32	-0.094369737	0.026185643	-0.504041026
0:35:36	-0.09428903	0.024650135	-0.504185676	0:35:40	-0.094208323	0.022043202	-0.504330326
0:35:44	-0.094127616	0.01846207	-0.504474976	0:35:48	-0.094046909	0.01195829	-0.504619626
0:35:52	-0.093966202	0.005454518	-0.504764276	0:35:56	-0.093885495	-0.004028896	-0.504908926
0:36:00	-0.093804788	-0.014505526	-0.505053576	0:36:04	-0.093065386	-0.021480651	-0.505198226
0:36:08	-0.092325985	-0.019129182	-0.505342876	0:36:12	-0.091586584	-0.016777714	-0.505487526
0:36:16	-0.090847183	-0.018668046	-0.505632176	0:36:20	-0.090107782	-0.021972311	-0.505776826
0:36:24	-0.089368381	-0.024413253	-0.505921476	0:36:28	-0.08862898	-0.024264231	-0.506066126
0:36:32	-0.087889578	-0.024115206	-0.506210776	0:36:36	-0.087150177	-0.020878801	-0.506355426
0:36:40	-0.086410776	-0.016613266	-0.506500075	0:36:44	-0.085671375	-0.010165306	-0.506644725
0:36:48	-0.084931974	0.002829941	-0.506789375	0:36:52	-0.084192573	0.015825188	-0.506934025
0:36:56	-0.083453172	0.026569728	-0.507078675	0:37:00	-0.08271377	0.036564028	-0.507223325
0:37:04	-0.082546784	0.043709314	-0.507367975	0:37:08	-0.082379797	0.043331168	-0.507512625
0:37:12	-0.08221281	0.042953023	-0.507657275	0:37:16	-0.082045823	0.051771477	-0.507801925
0:37:20	-0.081878836	0.063655461	-0.507946575	0:37:24	-0.081711849	0.069786551	-0.508091225
0:37:28	-0.081544863	0.058658984	-0.508235875	0:37:32	-0.081377876	0.047531417	-0.508380525
0:37:36	-0.081210889	0.035293636	-0.508525175	0:37:40	-0.081043902	0.022685781	-0.508669825
0:37:44	-0.080876915	0.003796535	-0.508814475	0:37:48	-0.080709928	-0.033936873	-0.508959125
0:37:52	-0.080542942	-0.071670284	-0.509103775	0:37:56	-0.080375955	-0.098356007	-0.509248425
0:38:00	-0.080208968	-0.125041723	-0.509393075	0:38:04	-0.080207073	-0.151364623	-0.509537725
0:38:08	-0.080205179	-0.176303821	-0.509682375	0:38:12	-0.080203285	-0.201243019	-0.509827025
0:38:16	-0.08020139	-0.205002234	-0.509971675	0:38:20	-0.080199496	-0.201701471	-0.510116325
0:38:24	-0.080197602	-0.198400708	-0.510260975	0:38:28	-0.080195707	-0.195099936	-0.510405625
0:38:32	-0.080193813	-0.191799174	-0.510550275	0:38:36	-0.080191919	-0.193269841	-0.510694925
0:38:40	-0.080190024	-0.196330991	-0.510839575	0:38:44	-0.08018813	-0.200713338	-0.510984225
0:38:48	-0.080186236	-0.209059238	-0.511128875	0:38:52	-0.080184341	-0.217405139	-0.511273525
0:38:56	-0.080182447	-0.218531873	-0.511418175	0:39:00	-0.080180553	-0.217252183	-0.511562825
0:39:04	-0.079926383	-0.21834337	-0.511707475	0:39:08	-0.079672213	-0.226998288	-0.511852125
0:39:12	-0.079418042	-0.235653206	-0.511996775	0:39:16	-0.079163872	-0.239656721	-0.512141425
0:39:20	-0.078909702	-0.24210975	-0.512286075	0:39:24	-0.078655532	-0.240012618	-0.512430724
0:39:28	-0.078401362	-0.233365359	-0.512575374	0:39:32	-0.078147192	-0.226718082	-0.512720024
0:39:36	-0.077893022	-0.216753904	-0.512864674	0:39:40	-0.077638852	-0.205684087	-0.513009324
0:39:44	-0.077384682	-0.195127874	-0.513153974	0:39:48	-0.077130512	-0.185085238	-0.513298624
0:39:52	-0.076876342	-0.175042603	-0.513443274	0:39:56	-0.076622172	-0.157349643	-0.513587924
0:40:00	-0.076368002	-0.137106568	-0.513732574	0:40:04	-0.077068813	-0.128791174	-0.513877224
0:40:08	-0.077769625	-0.131834194	-0.514021874	0:40:12	-0.078470436	-0.134877222	-0.514166524
0:40:16	-0.079171247	-0.14316781	-0.514311174	0:40:20	-0.079872059	-0.1532076	-0.514455824
0:40:24	-0.08057287	-0.15436693	-0.514600474	0:40:28	-0.081273682	-0.14664581	-0.514745124
0:40:32	-0.081974493	-0.13892469	-0.514889774	0:40:36	-0.082675305	-0.122635601	-0.515034424
0:40:40	-0.083376116	-0.103490525	-0.515179074	0:40:44	-0.084076928	-0.083847793	-0.515323724
0:40:48	-0.084777739	-0.062712102	-0.515468374	0:40:52	-0.08547855	-0.041576412	-0.515613024
0:40:56	-0.086179362	-0.02619629	-0.515757674	0:41:00	-0.086880173	-0.012734691	-0.515902324
0:41:04	-0.08698106	0.000368425	-0.516046974	0:41:08	-0.087081947	0.011323279	-0.516191624
0:41:12	-0.087182834	0.022278132	-0.516336274	0:41:16	-0.087283721	0.030954271	-0.516480924
0:41:20	-0.087384608	0.038870849	-0.516625574	0:41:24	-0.087485495	0.045336469	-0.516770224
0:41:28	-0.087586382	0.047449257	-0.516914874	0:41:32	-0.087687269	0.049562045	-0.517059524
0:41:36	-0.087788156	0.063987948	-0.517204174	0:41:40	-0.087889043	0.082518225	-0.517348824
0:41:44	-0.08798993	0.09527604	-0.517493474	0:41:48	-0.088090817	0.090716459	-0.517638124
0:41:52	-0.088191704	0.086156878	-0.517782774	0:41:56	-0.088292591	0.079052824	-0.517927424
0:42:00	-0.088393478	0.071100602	-0.518072074	0:42:04	-0.089146595	0.061127233	-0.518216724
0:42:08	-0.089899712	0.046256767	-0.518361374	0:42:12	-0.090652829	0.031386291	-0.518506023
0:42:16	-0.091405946	0.020969542	-0.518650673	0:42:20	-0.092159062	0.01203738	-0.518795323

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
0:42:24	-0.092912179	0.003653002	-0.518939973	0:42:28	-0.093665296	-0.003088017	-0.519084623
0:42:32	-0.094418413	-0.009829036	-0.519229273	0:42:36	-0.09517153	-0.018551006	-0.519373923
0:42:40	-0.095924647	-0.027933296	-0.519518573	0:42:44	-0.096677763	-0.038359885	-0.519663223
0:42:48	-0.09743088	-0.051919374	-0.519807873	0:42:52	-0.098183997	-0.065478862	-0.519952523
0:42:56	-0.098937114	-0.074358192	-0.520097173	0:43:00	-0.099690231	-0.081677468	-0.520241823
0:43:04	-0.099620817	-0.088676317	-0.520386473	0:43:08	-0.099551403	-0.096184766	-0.520531123
0:43:12	-0.099481989	-0.103693219	-0.520675773	0:43:16	-0.099412575	-0.111955495	-0.520820423
0:43:20	-0.099343161	-0.120469048	-0.520965073	0:43:24	-0.099273747	-0.128541757	-0.521109723
0:43:28	-0.099204333	-0.135291924	-0.521254373	0:43:32	-0.09913492	-0.1420421	-0.521399023
0:43:36	-0.099065506	-0.150448763	-0.521543673	0:43:40	-0.098996092	-0.15940758	-0.521688323
0:43:44	-0.098926678	-0.167609274	-0.521832973	0:43:48	-0.098857264	-0.173539582	-0.521977623
0:43:52	-0.09878785	-0.179469881	-0.522122273	0:43:56	-0.098718436	-0.170329397	-0.522266923
0:44:00	-0.098649022	-0.161188905	-0.522411573	0:44:04	-0.098680384	-0.150383992	-0.522556223
0:44:08	-0.098711746	-0.134405554	-0.522700873	0:44:12	-0.098743107	-0.118427121	-0.522845523
0:44:16	-0.098774469	-0.106716026	-0.522990173	0:44:20	-0.098805831	-0.096427383	-0.523134823
0:44:24	-0.098837193	-0.088165969	-0.523279473	0:44:28	-0.098868555	-0.085986246	-0.523424123
0:44:32	-0.098899916	-0.083806523	-0.523568773	0:44:36	-0.098931278	-0.078164201	-0.523713423
0:44:40	-0.09896264	-0.07136768	-0.523858073	0:44:44	-0.098994002	-0.065099482	-0.524002723
0:44:48	-0.099025363	-0.060416257	-0.524147373	0:44:52	-0.099056725	-0.055733033	-0.524292023
0:44:56	-0.099088087	-0.045011759	-0.524436672	0:45:00	-0.599119449	-0.532277803	-1.024581322
0:45:04	-0.599444392	-0.52158324	-1.024725972	0:45:08	-0.599769335	-0.516481853	-1.024870622
0:45:12	-0.100094279	-0.011380467	-0.525015272	0:45:16	-0.100419222	-0.005318316	-0.525159922
0:45:20	-0.100744165	0.001064084	-0.525304572	0:45:24	-0.101069109	0.006420563	-0.525449222
0:45:28	-0.101394052	0.008699289	-0.525593872	0:45:32	-0.101718995	0.010978016	-0.525738522
0:45:36	-0.102043939	0.01432894	-0.525883172	0:45:40	-0.102368882	0.018752052	-0.526027822
0:45:44	-0.102693825	0.023175165	-0.526172472	0:45:48	-0.103018769	0.02205641	-0.526317122
0:45:52	-0.103343712	0.020937664	-0.526461772	0:45:56	-0.103668655	0.024018982	-0.526606422
0:46:00	-0.103993599	0.031300373	-0.526751072	0:46:04	-0.104684486	0.038363631	-0.526895722
0:46:08	-0.105375373	0.046895478	-0.527040372	0:46:12	-0.10606626	0.055427326	-0.527185022
0:46:16	-0.106757147	0.058792755	-0.527329672	0:46:20	-0.107448034	0.056991772	-0.527474322
0:46:24	-0.108138921	0.05519079	-0.527618972	0:46:28	-0.108829808	0.038148963	-0.527763622
0:46:32	-0.109520695	0.021107136	-0.527908272	0:46:36	-0.110211582	0.003153159	-0.528052922
0:46:40	-0.110902469	-0.015712965	-0.528197572	0:46:44	-0.111593356	-0.034579092	-0.528342222
0:46:48	-0.112284243	-0.056064529	-0.528486872	0:46:52	-0.11297513	-0.077549966	-0.528631522
0:46:56	-0.113666017	-0.092869017	-0.528776172	0:47:00	-0.114356904	-0.102021681	-0.528920822
0:47:04	-0.114384159	-0.110778765	-0.529065472	0:47:08	-0.114411415	-0.109675751	-0.529210122
0:47:12	-0.114438671	-0.108572737	-0.529354772	0:47:16	-0.114465926	-0.109185914	-0.529499422
0:47:20	-0.114493182	-0.111515289	-0.529644072	0:47:24	-0.114520437	-0.11384466	-0.529788722
0:47:28	-0.114547693	-0.119930568	-0.529933372	0:47:32	-0.114574948	-0.126016476	-0.530078022
0:47:36	-0.114602204	-0.126390859	-0.530222672	0:47:40	-0.114629459	-0.121053717	-0.530367322
0:47:44	-0.114656715	-0.115716575	-0.530511971	0:47:48	-0.114683971	-0.110379433	-0.530656621
0:47:52	-0.114711226	-0.105042288	-0.530801271	0:47:56	-0.114738482	-0.095075072	-0.530945921
0:48:00	-0.114765737	-0.080477778	-0.531090571	0:48:04	-0.115377536	-0.066228923	-0.531235221
0:48:08	-0.115989335	-0.064866338	-0.531379871	0:48:12	-0.116601133	-0.063503752	-0.531524521
0:48:16	-0.117212932	-0.060459522	-0.531669171	0:48:20	-0.117824731	-0.055733645	-0.531813821
0:48:24	-0.11843653	-0.051007767	-0.531958471	0:48:28	-0.119048328	-0.046281891	-0.532103121
0:48:32	-0.119660127	-0.041556015	-0.532247771	0:48:36	-0.120271926	-0.034895001	-0.532392421
0:48:40	-0.120883725	-0.026298847	-0.532537071	0:48:44	-0.121495523	-0.017702695	-0.532681721
0:48:48	-0.122107322	-0.023937707	-0.532826371	0:48:52	-0.122719121	-0.030172723	-0.532971021
0:48:56	-0.123330919	-0.03179406	-0.533115671	0:49:00	-0.123942718	-0.028801721	-0.533260321
0:49:04	-0.124007467	-0.025483295	-0.533404971	0:49:08	-0.124072216	-0.011974146	-0.533549621
0:49:12	-0.124136965	0.001534997	-0.533694271	0:49:16	-0.124201714	0.005984787	-0.533838921
0:49:20	-0.124266463	0.007414781	-0.533983571	0:49:24	-0.124331211	0.008844776	-0.534128221
0:49:28	-0.12439596	0.009102238	-0.534272871	0:49:32	-0.124460709	0.009359699	-0.534417521
0:49:36	-0.124525458	0.009029496	-0.534562171	0:49:40	-0.124590207	0.008111161	-0.534706821
0:49:44	-0.124654956	0.007193732	-0.534851471	0:49:48	-0.124719705	0.009026008	-0.534996121
0:49:52	-0.124784453	0.010858293	-0.535140771	0:49:56	-0.124849202	0.019659946	-0.535285421

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
0:50:00	-0.124913951	0.035430985	-0.535430071	0:50:04	-0.125516449	0.050881471	-0.535574721
0:50:08	-0.126118947	0.06201359	-0.535719371	0:50:12	-0.126721444	0.073145708	-0.535864021
0:50:16	-0.127323942	0.085204068	-0.536008671	0:50:20	-0.12792644	0.098188672	-0.536153321
0:50:24	-0.128528937	0.111173275	-0.536297971	0:50:28	-0.129131435	0.114934303	-0.53644262
0:50:32	-0.129733933	0.118695331	-0.53658727	0:50:36	-0.13033643	0.125686657	-0.53673192
0:50:40	-0.130938928	0.135908299	-0.53687657	0:50:44	-0.131541426	0.14612994	-0.53702122
0:50:48	-0.132143923	0.163705263	-0.53716587	0:50:52	-0.132746421	0.181280603	-0.53731052
0:50:56	-0.133348919	0.201422445	-0.53745517	0:51:00	-0.133951416	0.224130825	-0.53759982
0:51:04	-0.133628132	0.247391031	-0.53774447	0:51:08	-0.133304848	0.260042797	-0.53788912
0:51:12	-0.132981564	0.272694562	-0.53803377	0:51:16	-0.132658279	0.279162683	-0.53817842
0:51:20	-0.132334995	0.279447161	-0.53832307	0:51:24	-0.132011711	0.279731638	-0.53846772
0:51:28	-0.131688427	0.283474298	-0.53861237	0:51:32	-0.131365143	0.287216924	-0.53875702
0:51:36	-0.131041858	0.288452381	-0.53890167	0:51:40	-0.130718574	0.28718067	-0.53904632
0:51:44	-0.13039529	0.285908959	-0.53919097	0:51:48	-0.130072006	0.281258722	-0.53933562
0:51:52	-0.129748721	0.276608449	-0.53948027	0:51:56	-0.129425437	0.264633647	-0.53962492
0:52:00	-0.129102153	0.245334281	-0.53976957	0:52:04	-0.129599295	0.225545872	-0.53991422
0:52:08	-0.130096436	0.190377582	-0.54005887	0:52:12	-0.130593578	0.155209293	-0.54020352
0:52:16	-0.131090719	0.127452615	-0.54034817	0:52:20	-0.131587861	0.102166493	-0.54049282
0:52:24	-0.132085002	0.076880352	-0.54063747	0:52:28	-0.132582144	0.048362448	-0.54078212
0:52:32	-0.133079285	0.019844544	-0.54092677	0:52:36	-0.133576427	-0.00130728	-0.54107142
0:52:40	-0.134073568	-0.015093023	-0.54121607	0:52:44	-0.13457071	-0.028878766	-0.54136072
0:52:48	-0.135067851	-0.045158527	-0.54150537	0:52:52	-0.135564993	-0.061438287	-0.54165002
0:52:56	-0.136062134	-0.076000531	-0.54179467	0:53:00	-0.136526532	-0.089970751	-0.541894955
0:53:04	-0.136866826	-0.103866995	-0.541983285	0:53:08	-0.13720712	-0.121278925	-0.542071615
0:53:12	-0.137547414	-0.138690858	-0.542159945	0:53:16	-0.137887707	-0.146997586	-0.542248276
0:53:20	-0.138228001	-0.14619911	-0.542336606	0:53:24	-0.138568295	-0.145400633	-0.542424936
0:53:28	-0.138908589	-0.142937896	-0.542513266	0:53:32	-0.139248883	-0.135482386	-0.542601597
0:53:36	-0.139589177	-0.131148538	-0.542689927	0:53:40	-0.139929471	-0.129936348	-0.542778257
0:53:44	-0.140269765	-0.128724158	-0.542866587	0:53:48	-0.140610059	-0.120101129	-0.542954918
0:53:52	-0.140950353	-0.1114781	-0.543043248	0:53:56	-0.141290646	-0.103587499	-0.543131578
0:54:00	-0.14163094	-0.096429325	-0.543219908	0:54:04	-0.142690559	-0.089699929	-0.543308238
0:54:08	-0.143750178	-0.091015186	-0.543396569	0:54:12	-0.144809796	-0.092330442	-0.543484899
0:54:16	-0.145869415	-0.097646488	-0.543573229	0:54:20	-0.146929034	-0.106963325	-0.543661559
0:54:24	-0.147988653	-0.116280162	-0.54374989	0:54:28	-0.149048271	-0.134213047	-0.54383822
0:54:32	-0.15010789	-0.152145935	-0.54392655	0:54:36	-0.151167509	-0.172768124	-0.54401488
0:54:40	-0.152227127	-0.194286755	-0.544103211	0:54:44	-0.153286746	-0.215805377	-0.544191541
0:54:48	-0.154346365	-0.23109136	-0.544279871	0:54:52	-0.155405984	-0.246377352	-0.544368201
0:54:56	-0.156465602	-0.25787765	-0.544456532	0:55:00	-0.157525221	-0.265592254	-0.544544862
0:55:04	-0.157653203	-0.272751525	-0.544633192	0:55:08	-0.157781186	-0.283596847	-0.544721522
0:55:12	-0.157909168	-0.294442169	-0.544809852	0:55:16	-0.158037151	-0.31108756	-0.544898183
0:55:20	-0.158165133	-0.333533002	-0.544986513	0:55:24	-0.158293116	-0.355978461	-0.545074843
0:55:28	-0.158421098	-0.379581468	-0.545163173	0:55:32	-0.15854908	-0.403184458	-0.545251504
0:55:36	-0.158677063	-0.420076956	-0.545339834	0:55:40	-0.158805045	-0.434732664	-0.545428164
0:55:44	-0.158933028	-0.44668089	-0.545516494	0:55:48	-0.15906101	-0.450506845	-0.545604825
0:55:52	-0.159188993	-0.454332836	-0.545693155	0:55:56	-0.159316975	-0.461414741	-0.545781485
0:56:00	-0.159444957	-0.469581928	-0.545869815	0:56:04	-0.159763451	-0.476176911	-0.545958146
0:56:08	-0.160081945	-0.477714462	-0.546046476	0:56:12	-0.160400438	-0.479252012	-0.546134806
0:56:16	-0.160718932	-0.483053994	-0.546223136	0:56:20	-0.161037425	-0.487610798	-0.546311466
0:56:24	-0.161355919	-0.494727069	-0.546399797	0:56:28	-0.161674413	-0.509521848	-0.546488127
0:56:32	-0.161992906	-0.524316627	-0.546576457	0:56:36	-0.1623114	-0.5284992	-0.546664787
0:56:40	-0.162629893	-0.529144358	-0.546753118	0:56:44	-0.162948387	-0.528241394	-0.546841448
0:56:48	-0.16326688	-0.522693884	-0.546929778	0:56:52	-0.163585374	-0.517146409	-0.547018108
0:56:56	-0.163903868	-0.505371553	-0.547106439	0:57:00	-0.164222361	-0.491520892	-0.547194769
0:57:04	-0.164658873	-0.47393666	-0.547283099	0:57:08	-0.165095384	-0.444940738	-0.547371429
0:57:12	-0.165531896	-0.415944816	-0.54745976	0:57:16	-0.165968408	-0.385758339	-0.54754809
0:57:20	-0.166404919	-0.355174981	-0.54763642	0:57:24	-0.166841431	-0.331347059	-0.54772475
0:57:28	-0.167277943	-0.314274557	-0.54781308	0:57:32	-0.167714454	-0.297202054	-0.547901411

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
0:57:36	-0.168150966	-0.268388096	-0.547989741	0:57:40	-0.168587478	-0.235660334	-0.548078071
0:57:44	-0.169023989	-0.206011008	-0.548166401	0:57:48	-0.169460501	-0.18559701	-0.548254732
0:57:52	-0.169897013	-0.165183016	-0.548343062	0:57:56	-0.170333524	-0.150353129	-0.548431392
0:58:00	-0.170770036	-0.13552324	-0.548519722	0:58:04	-0.171415548	-0.120145607	-0.548608053
0:58:08	-0.17206106	-0.102750989	-0.548696383	0:58:12	-0.172706572	-0.08535637	-0.548784713
0:58:16	-0.173352084	-0.068343438	-0.548873043	0:58:20	-0.173997596	-0.051457734	-0.548961374
0:58:24	-0.174643108	-0.036707023	-0.549049704	0:58:28	-0.17528862	-0.028361286	-0.549138034
0:58:32	-0.175934132	-0.02001555	-0.549226364	0:58:36	-0.176579644	-0.006165154	-0.549314694
0:58:40	-0.177225156	0.009520132	-0.549403025	0:58:44	-0.177870668	0.028542064	-0.549491355
0:58:48	-0.178516179	0.057573961	-0.549579685	0:58:52	-0.179161691	0.086605859	-0.549668015
0:58:56	-0.179807203	0.104126141	-0.549756346	0:59:00	-0.180452715	0.117809247	-0.549844676
0:59:04	-0.180790299	0.129016332	-0.549933006	0:59:08	-0.181127882	0.132244793	-0.550021336
0:59:12	-0.181465466	0.135473254	-0.550109667	0:59:16	-0.18180305	0.136743511	-0.550197997
0:59:20	-0.182140633	0.137361005	-0.550286327	0:59:24	-0.182478217	0.141045539	-0.550374657
0:59:28	-0.1828158	0.15393114	-0.550462988	0:59:32	-0.183153384	0.166816742	-0.550551318
0:59:36	-0.183490967	0.176386011	-0.550639648	0:59:40	-0.183828551	0.184849818	-0.550727978
0:59:44	-0.184166134	0.193052822	-0.550816308	0:59:48	-0.184503718	0.200473362	-0.550904639
0:59:52	-0.184841301	0.207893901	-0.550992969	0:59:56	-0.185178885	0.230384167	-0.551081299
1:00:00	0.314483531	0.757897651	-0.051169629	1:00:04	1	1	1
1:00:08	1	1	1	1:00:12	1	1	1
1:00:16	1	1	1	1:00:20	1	1	1
1:00:24	1	1	1	1:00:28	1	1	1
1:00:32	1	1	1	1:00:36	1	1	1
1:00:40	1	1	1	1:00:44	1	1	1
1:00:48	1	1	1	1:00:52	1	1	1
1:00:56	1	1	1	1:01:00	1	1	1
1:01:04	-0.198311168	0.189941822	-0.552582913	1:01:08	-0.198393074	0.191125407	-0.552671243
1:01:12	-0.198474981	0.192309028	-0.552759574	1:01:16	-0.198556887	0.194005693	-0.552847904
1:01:20	-0.198638793	0.195873362	-0.552936234	1:01:24	-0.1987207	0.19616619	-0.553024564
1:01:28	-0.198802606	0.191734424	-0.553112895	1:01:32	-0.198884512	0.187302658	-0.553201225
1:01:36	-0.198966419	0.175237985	-0.553289555	1:01:40	-0.199048325	0.160628999	-0.553377885
1:01:44	-0.199130231	0.145227174	-0.553466216	1:01:48	-0.199212138	0.127446833	-0.553554546
1:01:52	-0.199294044	0.109666492	-0.553642876	1:01:56	-0.19937595	0.097048662	-0.553731206
1:02:00	-0.199457857	0.086151681	-0.553819536	1:02:04	-0.200100378	0.073444724	-0.553907867
1:02:08	-0.2007429	0.056310376	-0.553996197	1:02:12	-0.201385421	0.039176029	-0.554084527
1:02:16	-0.202027943	0.015589683	-0.554172857	1:02:20	-0.202670464	-0.010147337	-0.554261188
1:02:24	-0.203312986	-0.033677688	-0.554349518	1:02:28	-0.203955507	-0.050588058	-0.554437848
1:02:32	-0.204598029	-0.067498428	-0.554526178	1:02:36	-0.20524055	-0.084408794	-0.554614509
1:02:40	-0.205883072	-0.101319164	-0.554702839	1:02:44	-0.206525594	-0.116908311	-0.554791169
1:02:48	-0.207168115	-0.128533793	-0.554879499	1:02:52	-0.207810637	-0.140159275	-0.55496783
1:02:56	-0.208453158	-0.144759995	-0.55505616	1:03:00	-0.20909568	-0.147019127	-0.55514449
1:03:04	-0.209154096	-0.150633922	-0.55523282	1:03:08	-0.209212513	-0.15936024	-0.55532115
1:03:12	-0.209270929	-0.168086557	-0.555409481	1:03:16	-0.209329346	-0.159366995	-0.555497811
1:03:20	-0.209387762	-0.144832138	-0.555586141	1:03:24	-0.209446179	-0.13029728	-0.555674471
1:03:28	-0.209504596	-0.120714899	-0.555762802	1:03:32	-0.209563012	-0.116084994	-0.555851132
1:03:36	-0.209621429	-0.117198217	-0.555939462	1:03:40	-0.209679845	-0.120225816	-0.556027792
1:03:44	-0.209738262	-0.123105616	-0.556116123	1:03:48	-0.209796678	-0.125542013	-0.556204453
1:03:52	-0.209855095	-0.12797841	-0.556292783	1:03:56	-0.209913511	-0.118152349	-0.556381113
1:04:00	-0.209971928	-0.1042388	-0.556469444	1:04:04	-0.210224049	-0.088265424	-0.556557774
1:04:08	-0.210476171	-0.065766165	-0.556646104	1:04:12	-0.210728292	-0.043266903	-0.556734434
1:04:16	-0.210980414	-0.030853476	-0.556822764	1:04:20	-0.211232535	-0.021801984	-0.556911095
1:04:24	-0.211484656	-0.014889104	-0.556999425	1:04:28	-0.211736778	-0.014392053	-0.557087755
1:04:32	-0.211988899	-0.013895001	-0.557176085	1:04:36	-0.212241021	-0.028566856	-0.557264416
1:04:40	-0.212493142	-0.048295017	-0.557352746	1:04:44	-0.212745263	-0.06884256	-0.557441076
1:04:48	-0.212997385	-0.091848268	-0.557529406	1:04:52	-0.213249506	-0.114853978	-0.557617737
1:04:56	-0.213501628	-0.1374554	-0.557706067	1:05:00	-0.213753749	-0.159922059	-0.557794397
1:05:04	-0.213986532	-0.178566597	-0.557882727	1:05:08	-0.214219315	-0.185779344	-0.557971058

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
1:05:12	-0.214452098	-0.192992091	-0.558059388	1:05:16	-0.214684881	-0.193979238	-0.558147718
1:05:20	-0.214917664	-0.192891188	-0.558236048	1:05:24	-0.215150447	-0.190970383	-0.558324378
1:05:28	-0.21538323	-0.186551322	-0.558412709	1:05:32	-0.215616013	-0.182132258	-0.558501039
1:05:36	-0.215848796	-0.17251763	-0.558589369	1:05:40	-0.216081579	-0.157707434	-0.558677699
1:05:44	-0.216314362	-0.142897238	-0.55876603	1:05:48	-0.216547145	-0.134770261	-0.55885436
1:05:52	-0.216779928	-0.126643283	-0.55894269	1:05:56	-0.217012711	-0.127995469	-0.55903102
1:06:00	-0.217245494	-0.138826818	-0.559119351	1:06:04	-0.217560956	-0.149707452	-0.559207681
1:06:08	-0.217876419	-0.189708732	-0.559296011	1:06:12	-0.218191881	-0.229710013	-0.559384341
1:06:16	-0.218507344	-0.268443498	-0.559472672	1:06:20	-0.218822806	-0.305909169	-0.559561002
1:06:24	-0.219138269	-0.343374859	-0.559649332	1:06:28	-0.219453731	-0.358534477	-0.559737662
1:06:32	-0.219769194	-0.373694095	-0.559825992	1:06:36	-0.220084656	-0.391493921	-0.559914323
1:06:40	-0.220400119	-0.41193392	-0.560002653	1:06:44	-0.220715581	-0.432373918	-0.560090983
1:06:48	-0.221031044	-0.438805578	-0.560179313	1:06:52	-0.221346506	-0.445237238	-0.560267644
1:06:56	-0.221661969	-0.454093496	-0.560355974	1:07:00	-0.221977431	-0.465374352	-0.560444304
1:07:04	-0.222120321	-0.476552374	-0.560532634	1:07:08	-0.22226321	-0.474721164	-0.560620965
1:07:12	-0.222406099	-0.472889917	-0.560709295	1:07:16	-0.222548989	-0.472652058	-0.560797625
1:07:20	-0.222691878	-0.47400755	-0.560885955	1:07:24	-0.222834768	-0.475363043	-0.560974286
1:07:28	-0.222977657	-0.475340066	-0.561062616	1:07:32	-0.223120546	-0.475317053	-0.561150946
1:07:36	-0.223263436	-0.471622893	-0.561239276	1:07:40	-0.223406325	-0.464257516	-0.561327606
1:07:44	-0.223549215	-0.456892138	-0.561415937	1:07:48	-0.223692104	-0.451423924	-0.561504267
1:07:52	-0.223834994	-0.445955746	-0.561592597	1:07:56	-0.223977883	-0.439576416	-0.561680927
1:08:00	-0.224120772	-0.43228597	-0.561769258	1:08:04	-0.224548326	-0.42516519	-0.561857588
1:08:08	-0.22497588	-0.411476658	-0.561945918	1:08:12	-0.225403434	-0.397788125	-0.562034248
1:08:16	-0.225830988	-0.383398918	-0.562122579	1:08:20	-0.226258542	-0.368776157	-0.562210909
1:08:24	-0.226686096	-0.35415338	-0.562299239	1:08:28	-0.22711365	-0.33181683	-0.562387569
1:08:32	-0.227541204	-0.309480281	-0.5624759	1:08:36	-0.227968758	-0.286768612	-0.56256423
1:08:40	-0.228396311	-0.263681815	-0.56265256	1:08:44	-0.228823865	-0.240595027	-0.56274089
1:08:48	-0.229251419	-0.205089486	-0.56282922	1:08:52	-0.229678973	-0.169583943	-0.562917551
1:08:56	-0.230106527	-0.133236644	-0.563005881	1:09:00	-0.230534081	-0.096608758	-0.563094211
1:09:04	-0.231130956	-0.060081803	-0.563182541	1:09:08	-0.23172783	-0.03315171	-0.563270872
1:09:12	-0.232324705	-0.006221616	-0.563359202	1:09:16	-0.232921579	0.020403253	-0.563447532
1:09:20	-0.233518454	0.046722907	-0.563535862	1:09:24	-0.234115328	0.073042561	-0.563624193
1:09:28	-0.234712203	0.096004668	-0.563712523	1:09:32	-0.235309078	0.118966775	-0.563800853
1:09:36	-0.235905952	0.132180431	-0.563889183	1:09:40	-0.236502827	0.1356456	-0.563977514
1:09:44	-0.237099701	0.139110769	-0.564065844	1:09:48	-0.237696576	0.127972464	-0.564154174
1:09:52	-0.23829345	0.11683416	-0.564242504	1:09:56	-0.238890325	0.113198102	-0.564330834
1:10:00	-0.2394872	0.117064291	-0.564419165	1:10:04	-0.239034086	0.121556345	-0.564507495
1:10:08	-0.238580971	0.123914608	-0.564595825	1:10:12	-0.238127857	0.12627289	-0.564684155
1:10:16	-0.237674743	0.124848783	-0.564772486	1:10:20	-0.237221629	0.119642321	-0.564860816
1:10:24	-0.236768515	0.11443586	-0.564949146	1:10:28	-0.236315401	0.112577814	-0.565037476
1:10:32	-0.235862287	0.11071975	-0.565125807	1:10:36	-0.235409173	0.113346581	-0.565214137
1:10:40	-0.234956059	0.12045827	-0.565302467	1:10:44	-0.234502945	0.12756996	-0.565390797
1:10:48	-0.234049831	0.123738433	-0.565479128	1:10:52	-0.233596717	0.119906906	-0.565567458
1:10:56	-0.233143603	0.116896677	-0.565655788	1:11:00	-0.232690489	0.114707746	-0.565744118
1:11:04	-0.232851447	0.112152775	-0.565832448	1:11:08	-0.233012406	0.100051587	-0.565920779
1:11:12	-0.233173364	0.087950398	-0.566009109	1:11:16	-0.233334323	0.078229253	-0.566097439
1:11:20	-0.233495281	0.070888152	-0.566185769	1:11:24	-0.23365624	0.064506452	-0.5662741
1:11:28	-0.233817198	0.061002917	-0.56636243	1:11:32	-0.233978157	0.0574994	-0.56645076
1:11:36	-0.234139115	0.0489894	-0.56653909	1:11:40	-0.234300074	0.035472915	-0.566627421
1:11:44	-0.234461032	0.021956448	-0.566715751	1:11:48	-0.23462199	0.010726494	-0.566804081
1:11:52	-0.234782949	-0.00050346	-0.566892411	1:11:56	-0.234943907	-0.014475539	-0.566980742
1:12:00	-0.235104866	-0.03118975	-0.567069072	1:12:04	-0.234502004	-0.04744866	-0.567157402
1:12:08	-0.233899143	-0.044168546	-0.567245732	1:12:12	-0.233296282	-0.040888433	-0.567334062
1:12:16	-0.23269342	-0.038191917	-0.567422393	1:12:20	-0.232090559	-0.036078998	-0.567510723
1:12:24	-0.231487697	-0.03396607	-0.567599053	1:12:28	-0.230884836	-0.037161804	-0.567687383
1:12:32	-0.230281975	-0.040357538	-0.567775714	1:12:36	-0.229679113	-0.040793489	-0.567864044
1:12:40	-0.229076252	-0.038469668	-0.567952374	1:12:44	-0.228473391	-0.036145846	-0.568040704

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
1:12:48	-0.227870529	-0.041392426	-0.568129035	1:12:52	-0.227267668	-0.046639014	-0.568217365
1:12:56	-0.226664806	-0.057830818	-0.568305695	1:13:00	-0.226061945	-0.074967837	-0.568394025
1:13:04	-0.22599433	-0.092423913	-0.568482356	1:13:08	-0.225926715	-0.094850122	-0.568570686
1:13:12	-0.225859099	-0.097276327	-0.568659016	1:13:16	-0.225791484	-0.102108794	-0.568747346
1:13:20	-0.225723869	-0.109347521	-0.568835676	1:13:24	-0.225656254	-0.116586248	-0.568924007
1:13:28	-0.225588639	-0.123824974	-0.569012337	1:13:32	-0.225521024	-0.138887924	-0.569100667
1:13:36	-0.225453409	-0.152539683	-0.569188997	1:13:40	-0.225385793	-0.161957872	-0.569277328
1:13:44	-0.225318178	-0.171376062	-0.569365658	1:13:48	-0.225250563	-0.183548062	-0.569453988
1:13:52	-0.225182948	-0.195720062	-0.569542318	1:13:56	-0.225115333	-0.207613814	-0.569630649
1:14:00	-0.225047718	-0.219229322	-0.569718979	1:14:04	-0.224817585	-0.230747946	-0.569807309
1:14:08	-0.224587452	-0.238767031	-0.569895639	1:14:12	-0.224357319	-0.246786116	-0.56998397
1:14:16	-0.224127186	-0.259406978	-0.5700723	1:14:20	-0.223897054	-0.276629618	-0.57016063
1:14:24	-0.223666921	-0.293852257	-0.57024896	1:14:28	-0.223436788	-0.305962597	-0.57033729
1:14:32	-0.223206655	-0.318072938	-0.570425621	1:14:36	-0.222976522	-0.326108162	-0.570513951
1:14:40	-0.22274639	-0.330068287	-0.570602281	1:14:44	-0.222516257	-0.334028395	-0.570690611
1:14:48	-0.222286124	-0.33552763	-0.570778942	1:14:52	-0.222055991	-0.337026882	-0.570867272
1:14:56	-0.221825858	-0.337477129	-0.570955602	1:15:00	-0.721595726	-0.836878406	-1.071043932
1:15:04	-0.721553859	-0.836391905	-1.071132263	1:15:08	-0.721511992	-0.846272085	-1.071220593
1:15:12	-0.221470125	-0.356152247	-0.571308923	1:15:16	-0.221428259	-0.366032427	-0.571397253
1:15:20	-0.221386392	-0.37591259	-0.571485584	1:15:24	-0.221344525	-0.38579277	-0.571573914
1:15:28	-0.221302658	-0.381196636	-0.571662244	1:15:32	-0.221260792	-0.37660052	-0.571750574
1:15:36	-0.221218925	-0.369357534	-0.571838904	1:15:40	-0.221177058	-0.359467679	-0.571927235
1:15:44	-0.221135191	-0.349577824	-0.572015565	1:15:48	-0.221093325	-0.329016339	-0.572103895
1:15:52	-0.221051458	-0.308454836	-0.572192225	1:15:56	-0.221009591	-0.299140184	-0.572280556
1:16:00	-0.220967724	-0.301072347	-0.572368886	1:16:04	-0.220855641	-0.302962674	-0.572457216
1:16:08	-0.220743558	-0.293956132	-0.572545546	1:16:12	-0.220631475	-0.284949589	-0.572633877
1:16:16	-0.220519392	-0.272185342	-0.572722207	1:16:20	-0.220407309	-0.255663362	-0.572810537
1:16:24	-0.220295226	-0.239141383	-0.572898867	1:16:28	-0.220183143	-0.22023761	-0.572987198
1:16:32	-0.22007106	-0.201333837	-0.573075528	1:16:36	-0.219958976	-0.193247435	-0.573163858
1:16:40	-0.219846893	-0.18876682	-0.573252188	1:16:44	-0.21973481	-0.184286208	-0.573340518
1:16:48	-0.219622727	-0.17433962	-0.573428849	1:16:52	-0.219510644	-0.164393032	-0.573517179
1:16:56	-0.219398561	-0.155394948	-0.573605509	1:17:00	-0.219286478	-0.147345366	-0.573693839
1:17:04	-0.219442919	-0.139455849	-0.57378217	1:17:08	-0.21959936	-0.12543438	-0.5738705
1:17:12	-0.219755801	-0.111412912	-0.57395883	1:17:16	-0.219912243	-0.091168704	-0.57404716
1:17:20	-0.220068684	-0.064701754	-0.574135491	1:17:24	-0.220225125	-0.038234809	-0.574223821
1:17:28	-0.220381566	-0.025370167	-0.574312151	1:17:32	-0.220538007	-0.012505535	-0.574400481
1:17:36	-0.220694449	-0.003364348	-0.574488812	1:17:40	-0.22085089	0.002053383	-0.574577142
1:17:44	-0.221007331	0.008251163	-0.574665472	1:17:48	-0.221163772	0.016789123	-0.574753802
1:17:52	-0.221320214	0.025327082	-0.574842132	1:17:56	-0.221476655	0.038372657	-0.574930463
1:18:00	-0.221633096	0.052920753	-0.575018793	1:18:04	-0.221879083	0.067415472	-0.575107123
1:18:08	-0.22212507	0.078806857	-0.575195453	1:18:12	-0.222371057	0.090198242	-0.575283784
1:18:16	-0.222617044	0.095806293	-0.575372114	1:18:20	-0.222863031	0.09563101	-0.575460444
1:18:24	-0.223109018	0.095455744	-0.575548774	1:18:28	-0.223355005	0.088464926	-0.575637105
1:18:32	-0.223600992	0.081474108	-0.575725435	1:18:36	-0.223846979	0.074928704	-0.575813765
1:18:40	-0.224092965	0.06882875	-0.575902095	1:18:44	-0.224338952	0.062728796	-0.575990426
1:18:48	-0.224584939	0.058559262	-0.576078756	1:18:52	-0.224830926	0.054389727	-0.576167086
1:18:56	-0.225076913	0.050220192	-0.576255416	1:19:00	-0.2253229	0.046050658	-0.576343746
1:19:04	-0.225604921	0.042974148	-0.576432077	1:19:08	-0.225886943	0.04324115	-0.576520407
1:19:12	-0.226168964	0.043508152	-0.576608737	1:19:16	-0.226450985	0.04735881	-0.576697067
1:19:20	-0.226733006	0.054793142	-0.576785398	1:19:24	-0.227015027	0.062227473	-0.576873728
1:19:28	-0.227297048	0.072711471	-0.576962058	1:19:32	-0.22757907	0.083195451	-0.577050388
1:19:36	-0.227861091	0.083197547	-0.577138719	1:19:40	-0.228143112	0.072717721	-0.577227049
1:19:44	-0.228425133	0.062237896	-0.577315379	1:19:48	-0.228707154	0.05808051	-0.577403709
1:19:52	-0.228989176	0.053923125	-0.57749204	1:19:56	-0.229271197	0.056148117	-0.57758037
1:20:00	-0.229553218	0.060500592	-0.5776687	1:20:04	-0.23010843	0.064690205	-0.57775703
1:20:08	-0.230663642	0.069598916	-0.57784536	1:20:12	-0.231218853	0.074507644	-0.577933691
1:20:16	-0.231774065	0.073602375	-0.578022021	1:20:20	-0.232329277	0.066883111	-0.578110351

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
1:20:24	-0.232884489	0.060163846	-0.578198681	1:20:28	-0.233439701	0.054031847	-0.578287012
1:20:32	-0.233994913	0.047899848	-0.578375342	1:20:36	-0.234550124	0.036803344	-0.578463672
1:20:40	-0.235105336	0.020742315	-0.578552002	1:20:44	-0.235660548	0.004681295	-0.578640333
1:20:48	-0.23621576	-0.003816296	-0.578728663	1:20:52	-0.236770972	-0.012313887	-0.578816993
1:20:56	-0.237326184	-0.022320394	-0.578905323	1:21:00	-0.237881395	-0.033835818	-0.578993654
1:21:04	-0.237448785	-0.044762424	-0.579081984	1:21:08	-0.237016175	-0.04506144	-0.579170314
1:21:12	-0.236583565	-0.045360447	-0.579258644	1:21:16	-0.236150955	-0.049032118	-0.579346974
1:21:20	-0.235718344	-0.056076444	-0.579435305	1:21:24	-0.235285734	-0.063120771	-0.579523635
1:21:28	-0.234853124	-0.06532625	-0.579611965	1:21:32	-0.234420514	-0.06753172	-0.579700295
1:21:36	-0.233987904	-0.066083617	-0.579788626	1:21:40	-0.233555294	-0.060981928	-0.579876956
1:21:44	-0.233122683	-0.055880243	-0.579965286	1:21:48	-0.232690073	-0.060093987	-0.580053616
1:21:52	-0.232257463	-0.064199472	-0.580141947	1:21:56	-0.231824853	-0.070984309	-0.580230277
1:22:00	-0.231392243	-0.080394365	-0.580318607	1:22:04	-0.232065572	-0.090463655	-0.580406937
1:22:08	-0.232738901	-0.106450889	-0.580495268	1:22:12	-0.23341223	-0.122438123	-0.580583598
1:22:16	-0.23408556	-0.13684785	-0.580671928	1:22:20	-0.234758889	-0.149680068	-0.580760258
1:22:24	-0.235432218	-0.162512288	-0.580848588	1:22:28	-0.236105548	-0.163724354	-0.580936919
1:22:32	-0.236778877	-0.164936421	-0.581025249	1:22:36	-0.237452206	-0.168138652	-0.581113579
1:22:40	-0.238125535	-0.173331047	-0.581201909	1:22:44	-0.238798865	-0.178523441	-0.58129024
1:22:48	-0.239472194	-0.179712236	-0.58137857	1:22:52	-0.240145523	-0.180901031	-0.5814669
1:22:56	-0.240818853	-0.178807939	-0.58155523	1:23:00	-0.241492182	-0.173432954	-0.581643561
1:23:04	-0.241974318	-0.167944002	-0.581731891	1:23:08	-0.242456454	-0.162455051	-0.581820221
1:23:12	-0.24293859	-0.156966099	-0.581908551	1:23:16	-0.243420726	-0.152570163	-0.581996882
1:23:20	-0.243902862	-0.149267242	-0.582085212	1:23:24	-0.244384998	-0.145964321	-0.582173542
1:23:28	-0.244867134	-0.1426614	-0.582261872	1:23:32	-0.24534927	-0.129161154	-0.582350202
1:23:36	-0.245831406	-0.113302014	-0.582438533	1:23:40	-0.246313542	-0.090366194	-0.582526863
1:23:44	-0.246795678	-0.067430374	-0.582615193	1:23:48	-0.247277814	-0.054171712	-0.582703523
1:23:52	-0.24775995	-0.040913049	-0.582791854	1:23:56	-0.248242086	-0.025987525	-0.582880184
1:24:00	-0.248724222	-0.009395129	-0.582968514	1:24:04	-0.249184373	0.007210371	-0.583056844
1:24:08	-0.249644523	0.022346251	-0.583145175	1:24:12	-0.250105144	0.037481834	-0.583234142
1:24:16	-0.250566779	0.045499614	-0.583324483	1:24:20	-0.251028414	0.046400162	-0.583414825
1:24:24	-0.251490049	0.04730071	-0.583505166	1:24:28	-0.251951684	0.05496881	-0.583595508
1:24:32	-0.252413319	0.062636892	-0.583685849	1:24:36	-0.252874954	0.068798954	-0.583776191
1:24:40	-0.253336589	0.07345496	-0.583866532	1:24:44	-0.253798223	0.078110984	-0.583956874
1:24:48	-0.254259858	0.085462979	-0.584047215	1:24:52	-0.254721493	0.092814991	-0.584137557
1:24:56	-0.255183128	0.102918774	-0.584227899	1:25:00	-0.255644763	0.115774363	-0.58431824
1:25:04	-0.255514487	0.128982763	-0.584408582	1:25:08	-0.255384211	0.140295704	-0.584498923
1:25:12	-0.255253936	0.151608645	-0.584589265	1:25:16	-0.25512366	0.162177601	-0.584679606
1:25:20	-0.254993384	0.172002642	-0.584769948	1:25:24	-0.254863108	0.181827648	-0.584860289
1:25:28	-0.254732832	0.195457071	-0.584950631	1:25:32	-0.254602556	0.209086494	-0.585040972
1:25:36	-0.25447228	0.220059383	-0.585131314	1:25:40	-0.254342004	0.228375739	-0.585221655
1:25:44	-0.254211728	0.236692095	-0.585311997	1:25:48	-0.254081453	0.241239528	-0.585402338
1:25:52	-0.253951177	0.24578696	-0.58549268	1:25:56	-0.253820901	0.253952849	-0.585583021
1:26:00	-0.253690625	0.265737194	-0.585673363	1:26:04	-0.253945342	0.277292051	-0.585763704
1:26:08	-0.254200059	0.284619407	-0.585854046	1:26:12	-0.254454776	0.291946763	-0.585944387
1:26:16	-0.254709493	0.295531877	-0.586034729	1:26:20	-0.25496421	0.295374786	-0.58612507
1:26:24	-0.255218927	0.295217694	-0.586215412	1:26:28	-0.255473645	0.288316092	-0.586305753
1:26:32	-0.255728362	0.281414489	-0.586396095	1:26:36	-0.255983079	0.27055452	-0.586486437
1:26:40	-0.256237796	0.25573622	-0.586576778	1:26:44	-0.256492513	0.24091792	-0.58666712
1:26:48	-0.25674723	0.234112708	-0.586757461	1:26:52	-0.257001947	0.227307532	-0.586847803
1:26:56	-0.257256664	0.214226229	-0.586938144	1:27:00	-0.257511381	0.194868835	-0.587028486
1:27:04	-0.257685117	0.175559711	-0.587118827	1:27:08	-0.257858853	0.153522498	-0.587209169
1:27:12	-0.258032589	0.131485285	-0.58729951	1:27:16	-0.258206325	0.111479235	-0.587389852
1:27:20	-0.258380062	0.09350433	-0.587480193	1:27:24	-0.258553798	0.075529424	-0.587570535
1:27:28	-0.258727534	0.071685452	-0.587660876	1:27:32	-0.25890127	0.067841479	-0.587751218
1:27:36	-0.259075006	0.067070178	-0.587841559	1:27:40	-0.259248742	0.069371549	-0.587931901
1:27:44	-0.259422478	0.071672937	-0.588022242	1:27:48	-0.259596214	0.062097858	-0.588112584
1:27:52	-0.25976995	0.052522779	-0.588202925	1:27:56	-0.259943686	0.040413317	-0.588293267

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
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1:28:08	-0.261119654	-0.006189412	-0.588564291	1:28:12	-0.26162077	-0.023309374	-0.588654633
1:28:16	-0.262121886	-0.039959371	-0.588744974	1:28:20	-0.262623001	-0.0564527	-0.588835316
1:28:24	-0.263124117	-0.071769989	-0.588925658	1:28:28	-0.263625233	-0.083559106	-0.589015999
1:28:32	-0.264126349	-0.095348223	-0.589106341	1:28:36	-0.264627465	-0.105644336	-0.589196682
1:28:40	-0.265128581	-0.114447446	-0.589287024	1:28:44	-0.265629696	-0.123250556	-0.589377365
1:28:48	-0.266130812	-0.122114746	-0.589467707	1:28:52	-0.266631928	-0.120978936	-0.589558048
1:28:56	-0.267133044	-0.120177111	-0.58964839	1:29:00	-0.26763416	-0.119709276	-0.589738731
1:29:04	-0.267522856	-0.118876387	-0.589829073	1:29:08	-0.267411553	-0.114400278	-0.589919414
1:29:12	-0.26730025	-0.109924169	-0.590009756	1:29:16	-0.267188946	-0.105184218	-0.590100097
1:29:20	-0.267077643	-0.100180426	-0.590190439	1:29:24	-0.26696634	-0.095176634	-0.59028078
1:29:28	-0.266855036	-0.105802711	-0.590371122	1:29:32	-0.266743733	-0.116428788	-0.590461463
1:29:36	-0.266632429	-0.129542938	-0.590551805	1:29:40	-0.266521126	-0.145145164	-0.590642146
1:29:44	-0.266409823	-0.160747389	-0.590732488	1:29:48	-0.266298519	-0.168590682	-0.590822829
1:29:52	-0.266187216	-0.176433975	-0.590913171	1:29:56	-0.266075913	-0.180358983	-0.591003512
1:30:00	0.234035391	0.31963429	-0.091093854	1:30:04	0.233459912	0.319218185	-0.091184196
1:30:08	0.232884433	0.321741306	-0.091274537	1:30:12	-0.267691046	-0.175735574	-0.591364879
1:30:16	-0.268266525	-0.182851278	-0.59145522	1:30:20	-0.268842005	-0.199605808	-0.591545562
1:30:24	-0.269417484	-0.216360336	-0.591635903	1:30:28	-0.269992963	-0.237974283	-0.591726245
1:30:32	-0.270568442	-0.25958823	-0.591816586	1:30:36	-0.271143921	-0.275686113	-0.591906928
1:30:40	-0.2717194	-0.286267949	-0.591997269	1:30:44	-0.272294879	-0.296849776	-0.592087611
1:30:48	-0.272870358	-0.296830721	-0.592177952	1:30:52	-0.273445837	-0.296811666	-0.592268294
1:30:56	-0.274021316	-0.29389708	-0.592358635	1:31:00	-0.274596795	-0.288086945	-0.592448977
1:31:04	-0.274747945	-0.282023874	-0.592539318	1:31:08	-0.274899095	-0.26581985	-0.59262966
1:31:12	-0.275050244	-0.249615834	-0.592720001	1:31:16	-0.275201394	-0.235819802	-0.592810343
1:31:20	-0.275352544	-0.224431766	-0.592900684	1:31:24	-0.275503694	-0.213043725	-0.592991026
1:31:28	-0.275654843	-0.223811662	-0.593081367	1:31:32	-0.275805993	-0.234579603	-0.593171709
1:31:36	-0.275957143	-0.244023763	-0.59326205	1:31:40	-0.276108293	-0.252144155	-0.593352392
1:31:44	-0.276259442	-0.260264538	-0.593442734	1:31:48	-0.276410592	-0.268384921	-0.593533075
1:31:52	-0.276561742	-0.276505313	-0.593623417	1:31:56	-0.276712891	-0.286998429	-0.593713758
1:32:00	-0.276864041	-0.299864271	-0.5938041	1:32:04	-0.276600289	-0.312482795	-0.593894441
1:32:08	-0.276336537	-0.323534518	-0.593984783	1:32:12	-0.276072785	-0.33458624	-0.594075124
1:32:16	-0.275809033	-0.34313568	-0.594165466	1:32:20	-0.275545281	-0.349182837	-0.594255807
1:32:24	-0.275281529	-0.355229994	-0.594346149	1:32:28	-0.275017777	-0.363228266	-0.59443649
1:32:32	-0.274754025	-0.371226556	-0.594526832	1:32:36	-0.274490273	-0.381201542	-0.594617173
1:32:40	-0.274226521	-0.393153243	-0.594707515	1:32:44	-0.273962769	-0.405104943	-0.594797856
1:32:48	-0.273699017	-0.414450348	-0.594888198	1:32:52	-0.273435265	-0.423795735	-0.594978539
1:32:56	-0.273171513	-0.431419101	-0.595068881	1:33:00	-0.272907761	-0.437320427	-0.595159222
1:33:04	-0.272817237	-0.443325013	-0.595249564	1:33:08	-0.272726713	-0.44296065	-0.595339905
1:33:12	-0.272636189	-0.442596288	-0.595430247	1:33:16	-0.272545665	-0.438549267	-0.595520588
1:33:20	-0.272455141	-0.433274669	-0.59561093	1:33:24	-0.272364617	-0.42800009	-0.595701272
1:33:28	-0.272274093	-0.414607538	-0.595791613	1:33:32	-0.272183569	-0.40121497	-0.595881955
1:33:36	-0.272093045	-0.392109823	-0.595972296	1:33:40	-0.272002521	-0.395866907	-0.596062638
1:33:44	-0.271911997	-0.399623991	-0.596152979	1:33:48	-0.271821473	-0.414589216	-0.596243321
1:33:52	-0.271730949	-0.429554441	-0.596333662	1:33:56	-0.271640425	-0.436642478	-0.596424004
1:34:00	-0.271549901	-0.435853326	-0.596514345	1:34:04	-0.272078356	-0.435433137	-0.596604687
1:34:08	-0.27260681	-0.429245602	-0.596695028	1:34:12	-0.273135264	-0.423058067	-0.59678537
1:34:16	-0.273663719	-0.41542223	-0.596875711	1:34:20	-0.274192173	-0.406338071	-0.596966053
1:34:24	-0.274720627	-0.397253913	-0.597056394	1:34:28	-0.275249082	-0.405670295	-0.597146736
1:34:32	-0.275777536	-0.41408666	-0.597237077	1:34:36	-0.27630599	-0.421918531	-0.597327419
1:34:40	-0.276834445	-0.42916589	-0.59741776	1:34:44	-0.277362899	-0.436413249	-0.597508102
1:34:48	-0.277891353	-0.435135469	-0.597598443	1:34:52	-0.278419808	-0.433857671	-0.597688785
1:34:56	-0.278948262	-0.428498078	-0.597779126	1:35:00	-0.279476716	-0.419056689	-0.597869468
1:35:04	-0.278741127	-0.408861823	-0.59795981	1:35:08	-0.278005537	-0.407237076	-0.598050151
1:35:12	-0.277269948	-0.405612329	-0.598140493	1:35:16	-0.276534359	-0.411461175	-0.598230834
1:35:20	-0.275798769	-0.424783595	-0.598321176	1:35:24	-0.27506318	-0.438106016	-0.598411517
1:35:28	-0.27432759	-0.452200188	-0.598501859	1:35:32	-0.273592001	-0.466294342	-0.5985922

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
1:35:36	-0.272856411	-0.477157382	-0.598682542	1:35:40	-0.272120822	-0.486943347	-0.598772883
1:35:44	-0.271385233	-0.496729313	-0.598863225	1:35:48	-0.270649643	-0.502333396	-0.598953566
1:35:52	-0.269914054	-0.50793748	-0.599043908	1:35:56	-0.269178464	-0.510460666	-0.599134249
1:36:00	-0.268442875	-0.509902921	-0.599224591	1:36:04	-0.26921935	-0.510246493	-0.599314932
1:36:08	-0.269995824	-0.519352114	-0.599405274	1:36:12	-0.270772299	-0.528457735	-0.599495615
1:36:16	-0.271548774	-0.532292711	-0.599585957	1:36:20	-0.272325249	-0.530857042	-0.599676298
1:36:24	-0.273101724	-0.529421373	-0.59976664	1:36:28	-0.273878198	-0.534250959	-0.599856981
1:36:32	-0.274654673	-0.539080545	-0.599947323	1:36:36	-0.275431148	-0.541830772	-0.600037664
1:36:40	-0.276207623	-0.542501642	-0.600128006	1:36:44	-0.276984097	-0.546043855	-0.600218347
1:36:48	-0.277760572	-0.558200138	-0.600308689	1:36:52	-0.278537047	-0.57035642	-0.600399031
1:36:56	-0.279313522	-0.582512702	-0.600489372	1:37:00	-0.280089996	-0.594668984	-0.600579714
1:37:04	-0.280048711	-0.606337812	-0.600670055	1:37:08	-0.280007425	-0.619605286	-0.600760397
1:37:12	-0.279966139	-0.632872759	-0.600850738	1:37:16	-0.279924853	-0.639975135	-0.60094108
1:37:20	-0.279883568	-0.640912484	-0.601031421	1:37:24	-0.279842282	-0.641849832	-0.601121763
1:37:28	-0.279800996	-0.651111165	-0.601212104	1:37:32	-0.27975971	-0.660373467	-0.601302446
1:37:36	-0.279718425	-0.666631273	-0.601392787	1:37:40	-0.279677139	-0.669885068	-0.601483129
1:37:44	-0.279635853	-0.673138863	-0.60157347	1:37:48	-0.279594567	-0.658411333	-0.601663812
1:37:52	-0.279553282	-0.643683767	-0.601754153	1:37:56	-0.279511996	-0.631278155	-0.601844495
1:38:00	-0.27947071	-0.621194424	-0.601934836	1:38:04	-0.279843518	-0.611357564	-0.602055178
1:38:08	-0.280216325	-0.601520668	-0.602115519	1:38:12	-0.280589132	-0.591683772	-0.602205861
1:38:16	-0.28096194	-0.582345993	-0.602296202	1:38:20	-0.281334747	-0.573507296	-0.602386544
1:38:24	-0.281707555	-0.564668563	-0.602476885	1:38:28	-0.282080362	-0.555829866	-0.602567227
1:38:32	-0.28245317	-0.546991169	-0.602657569	1:38:36	-0.282825977	-0.543344455	-0.60274791
1:38:40	-0.283198784	-0.541428413	-0.602838252	1:38:44	-0.283571592	-0.539512372	-0.602928593
1:38:48	-0.283944399	-0.532300992	-0.603018935	1:38:52	-0.284317207	-0.525089577	-0.603109276
1:38:56	-0.284690014	-0.524079784	-0.603199618	1:39:00	-0.285062822	-0.529271542	-0.603289959
1:39:04	-0.285032829	-0.534223233	-0.603380301	1:39:08	-0.285002836	-0.543908542	-0.603470642
1:39:12	-0.284972844	-0.553593851	-0.603560984	1:39:16	-0.284942851	-0.555509448	-0.603651325
1:39:20	-0.284912859	-0.549655332	-0.603741667	1:39:24	-0.284882866	-0.542332253	-0.603832008
1:39:28	-0.284852873	-0.530602213	-0.603922235	1:39:32	-0.284822881	-0.518872173	-0.604012691
1:39:36	-0.284792888	-0.506001711	-0.604103033	1:39:40	-0.284762896	-0.491990896	-0.604193374
1:39:44	-0.284732903	-0.477980082	-0.604283716	1:39:48	-0.284702911	-0.468968681	-0.604374057
1:39:52	-0.284672918	-0.459957245	-0.604464399	1:39:56	-0.284642925	-0.448466335	-0.60455474
1:40:00	-0.284612933	-0.4344959	-0.604645082	1:40:04	-0.284934356	-0.420734956	-0.604735423
1:40:08	-0.28525578	-0.399873905	-0.604825765	1:40:12	-0.285577203	-0.379012854	-0.604916107
1:40:16	-0.285898627	-0.356594549	-0.605006448	1:40:20	-0.28622005	-0.33261899	-0.60509679
1:40:24	-0.286541474	-0.308643413	-0.605187131	1:40:28	-0.286862898	-0.290597766	-0.605277473
1:40:32	-0.287184321	-0.272552109	-0.605367814	1:40:36	-0.287505745	-0.255290257	-0.605458156
1:40:40	-0.287827168	-0.238812198	-0.605548497	1:40:44	-0.288148592	-0.222334143	-0.605638839
1:40:48	-0.288470015	-0.194963099	-0.60572918	1:40:52	-0.288791439	-0.167592055	-0.605819522
1:40:56	-0.289112862	-0.143879431	-0.605909863	1:41:00	-0.289434286	-0.123825226	-0.606000205
1:41:04	-0.289087633	-0.103372796	-0.606090546	1:41:08	-0.28874098	-0.090772115	-0.606180888
1:41:12	-0.288394327	-0.078171429	-0.606271229	1:41:16	-0.288047674	-0.062470555	-0.606361571
1:41:20	-0.287701021	-0.043669473	-0.606451912	1:41:24	-0.287354368	-0.0248684	-0.606542254
1:41:28	-0.287007716	-0.007457602	-0.606632595	1:41:32	-0.286661063	0.009953187	-0.606722937
1:41:36	-0.28631441	0.033043476	-0.606813278	1:41:40	-0.285967757	0.061813247	-0.60690362
1:41:44	-0.285621104	0.083904361	-0.606993961	1:41:48	-0.285274451	0.085959501	-0.607084303
1:41:52	-0.284927798	0.088014642	-0.607174645	1:41:56	-0.284581145	0.098130143	-0.607264986
1:42:00	-0.284234492	0.116305987	-0.607355328	1:42:04	-0.284578805	0.134069957	-0.607445669
1:42:08	-0.284923118	0.147209278	-0.607536011	1:42:12	-0.28526743	0.160348563	-0.607626352
1:42:16	-0.285611743	0.17495166	-0.607716694	1:42:20	-0.285956055	0.191018533	-0.607807035
1:42:24	-0.286300368	0.207085406	-0.607897377	1:42:28	-0.28664468	0.216157178	-0.607987718
1:42:32	-0.286988993	0.225228951	-0.60807806	1:42:36	-0.287333305	0.234300723	-0.608168401
1:42:40	-0.287677618	0.243372496	-0.608258743	1:42:44	-0.28802193	0.252444268	-0.608349084
1:42:48	-0.288366243	0.259783556	-0.608439426	1:42:52	-0.288710555	0.267122808	-0.608529767
1:42:56	-0.289054868	0.265950494	-0.608620109	1:43:00	-0.28939918	0.256266542	-0.60871045
1:43:04	-0.289402616	0.246785818	-0.608800792	1:43:08	-0.289406051	0.227306728	-0.608891133

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
1:43:12	-0.289409486	0.207827638	-0.608981475	1:43:16	-0.289412921	0.191058767	-0.609071816
1:43:20	-0.289416356	0.177000185	-0.609162158	1:43:24	-0.289419791	0.162941568	-0.609252499
1:43:28	-0.289423227	0.146543837	-0.609342841	1:43:32	-0.289426662	0.130146106	-0.609433183
1:43:36	-0.289430097	0.118146738	-0.609523524	1:43:40	-0.289433532	0.119342475	-0.609613866
1:43:44	-0.289436967	0.120538213	-0.609704207	1:43:48	-0.289440402	0.119557188	-0.609794549
1:43:52	-0.289443838	0.118576181	-0.60988489	1:43:56	-0.289447273	0.118945309	-0.609975232
1:44:00	-0.289450708	0.120664608	-0.610065573	1:44:04	-0.289171249	0.121809277	-0.610155915
1:44:08	-0.288891791	0.120724228	-0.610246256	1:44:12	-0.288612332	0.11963918	-0.610336598
1:44:16	-0.288332874	0.121251345	-0.610426939	1:44:20	-0.288053415	0.125560726	-0.610517281
1:44:24	-0.287773956	0.129870106	-0.610607622	1:44:28	-0.287494498	0.128387803	-0.610697964
1:44:32	-0.287215039	0.1269055	-0.610788305	1:44:36	-0.286935581	0.120003843	-0.610878647
1:44:40	-0.286656122	0.107682816	-0.610968988	1:44:44	-0.286376664	0.09536177	-0.61105933
1:44:48	-0.286097205	0.075646398	-0.611149671	1:44:52	-0.285817746	0.055931026	-0.611240013
1:44:56	-0.285538288	0.038582552	-0.611330354	1:45:00	-0.785258829	-0.476399024	-1.111420696
1:45:04	-0.785459669	-0.491666917	-1.111511037	1:45:08	-0.785660509	-0.505507877	-1.111601379
1:45:12	-0.285861348	-0.019348855	-0.611691721	1:45:16	-0.286062188	-0.029842706	-0.611782062
1:45:20	-0.286263028	-0.036989455	-0.611872404	1:45:24	-0.286463867	-0.044136205	-0.611962745
1:45:28	-0.286664707	-0.057647977	-0.612053087	1:45:32	-0.286865547	-0.071159748	-0.612143428
1:45:36	-0.287066386	-0.085979171	-0.61223377	1:45:40	-0.287267226	-0.102106262	-0.612324111
1:45:44	-0.287468066	-0.118233353	-0.612414453	1:45:48	-0.287668905	-0.140771965	-0.612504794
1:45:52	-0.287869745	-0.163310577	-0.612595136	1:45:56	-0.288070585	-0.186382232	-0.612685477
1:46:00	-0.288271424	-0.20998693	-0.612775819	1:46:04	-0.287785766	-0.233182418	-0.61286616
1:46:08	-0.287300108	-0.247981077	-0.612956502	1:46:12	-0.28681445	-0.262779731	-0.613046843
1:46:16	-0.286328792	-0.271013698	-0.613137185	1:46:20	-0.285843133	-0.272682976	-0.613227526
1:46:24	-0.285357475	-0.274352255	-0.613317868	1:46:28	-0.284871817	-0.284403834	-0.613408209
1:46:32	-0.284386159	-0.294455405	-0.613498551	1:46:36	-0.283900501	-0.307071471	-0.613588892
1:46:40	-0.283414843	-0.320542365	-0.613679234	1:46:44	-0.282929184	-0.336254108	-0.613769575
1:46:48	-0.282443526	-0.358688404	-0.613859917	1:46:52	-0.281957868	-0.381122701	-0.613950258
1:46:56	-0.28147221	-0.391198343	-0.6140406	1:47:00	-0.280986552	-0.388915313	-0.614130942
1:47:04	-0.280838207	-0.386833367	-0.614221283	1:47:08	-0.280689862	-0.386760361	-0.614311625
1:47:12	-0.280541517	-0.386687355	-0.614401966	1:47:16	-0.280393172	-0.384667355	-0.614492308
1:47:20	-0.280244827	-0.380700343	-0.614582649	1:47:24	-0.280096482	-0.37673335	-0.614672991
1:47:28	-0.279948137	-0.379943242	-0.614763332	1:47:32	-0.279799792	-0.383153135	-0.614853674
1:47:36	-0.279651447	-0.395822626	-0.614944015	1:47:40	-0.279503102	-0.417951713	-0.615034357
1:47:44	-0.279354757	-0.440080801	-0.615124698	1:47:48	-0.279206412	-0.469441722	-0.61521504
1:47:52	-0.279058067	-0.498802695	-0.615305381	1:47:56	-0.278909722	-0.522202048	-0.615395723
1:48:00	-0.278761377	-0.539639851	-0.615486064	1:48:04	-0.278274414	-0.556875809	-0.615576406
1:48:08	-0.27778745	-0.574111766	-0.615666747	1:48:12	-0.277300486	-0.591347724	-0.615757089
1:48:16	-0.276813523	-0.606406937	-0.61584743	1:48:20	-0.276326559	-0.619289405	-0.615937772
1:48:24	-0.275839595	-0.632171874	-0.616028113	1:48:28	-0.275352632	-0.635017321	-0.616118455
1:48:32	-0.274865668	-0.637862768	-0.616208796	1:48:36	-0.274378704	-0.64070818	-0.616299138
1:48:40	-0.273891741	-0.643553627	-0.61638948	1:48:44	-0.273404777	-0.646399074	-0.616479821
1:48:48	-0.272917814	-0.641350953	-0.616570163	1:48:52	-0.27243085	-0.636302833	-0.616660504
1:48:56	-0.271943886	-0.629042545	-0.616750846	1:49:00	-0.271456923	-0.619570054	-0.616841187
1:49:04	-0.271120208	-0.610187195	-0.616931529	1:49:08	-0.270783493	-0.600804265	-0.61702187
1:49:12	-0.270446778	-0.591421406	-0.617112212	1:49:16	-0.270110063	-0.580397444	-0.617202553
1:49:20	-0.269773348	-0.567732414	-0.617292895	1:49:24	-0.269436633	-0.555067385	-0.617383236
1:49:28	-0.269099918	-0.531422206	-0.617473578	1:49:32	-0.268763203	-0.507777027	-0.617563919
1:49:36	-0.268426488	-0.482911128	-0.617654261	1:49:40	-0.268089773	-0.45682451	-0.617744602
1:49:44	-0.267753059	-0.430737875	-0.617834944	1:49:48	-0.267416344	-0.415269469	-0.617925285
1:49:52	-0.267079629	-0.39980108	-0.618015627	1:49:56	-0.266742914	-0.381810814	-0.618105968
1:50:00	-0.266406199	-0.361298707	-0.61819631	1:50:04	-0.266101819	-0.340805874	-0.618286651
1:50:08	-0.265797438	-0.321639424	-0.618376993	1:50:12	-0.265493058	-0.302472984	-0.618467334
1:50:16	-0.265188678	-0.291807104	-0.618557676	1:50:20	-0.264884297	-0.289641786	-0.618648018
1:50:24	-0.264579917	-0.287476476	-0.618738359	1:50:28	-0.264275537	-0.280120107	-0.618828701
1:50:32	-0.263971156	-0.272763748	-0.618919042	1:50:36	-0.263666776	-0.267242926	-0.619009384
1:50:40	-0.263362396	-0.263557659	-0.619099725	1:50:44	-0.263058015	-0.259872384	-0.619190067

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
1:50:48	-0.262753635	-0.257467482	-0.619280408	1:50:52	-0.262449255	-0.25506258	-0.61937075
1:50:56	-0.262144874	-0.250098424	-0.619461091	1:51:00	-0.261840494	-0.242575005	-0.619551433
1:51:04	-0.262123548	-0.235401755	-0.619641774	1:51:08	-0.262406602	-0.227612603	-0.619732116
1:51:12	-0.262689656	-0.219823455	-0.619822457	1:51:16	-0.26297271	-0.212627342	-0.619912799
1:51:20	-0.263255764	-0.206024264	-0.62000314	1:51:24	-0.263538817	-0.199421185	-0.620093482
1:51:28	-0.263821871	-0.196841772	-0.620183823	1:51:32	-0.264104925	-0.194262359	-0.620274165
1:51:36	-0.264387979	-0.192024314	-0.620364506	1:51:40	-0.264671033	-0.190127641	-0.620454848
1:51:44	-0.264954087	-0.188230967	-0.620545189	1:51:48	-0.265237141	-0.17734279	-0.620635531
1:51:52	-0.265520195	-0.166454613	-0.620725872	1:51:56	-0.265803249	-0.149202149	-0.620816214
1:52:00	-0.266088959	-0.12558698	-0.620910155	1:52:04	-0.265683318	-0.101559708	-0.62100443
1:52:08	-0.265277677	-0.070148338	-0.621098704	1:52:12	-0.264872035	-0.038736976	-0.621192978
1:52:16	-0.264466394	-0.006719492	-0.621287252	1:52:20	-0.264060752	0.025904124	-0.621381526
1:52:24	-0.263655111	0.058527722	-0.6214758	1:52:28	-0.263249469	0.085174972	-0.621570074
1:52:32	-0.262843828	0.111822205	-0.621664349	1:52:36	-0.262438186	0.130353437	-0.621758623
1:52:40	-0.262032545	0.140768635	-0.621852897	1:52:44	-0.261626903	0.151183832	-0.621947171
1:52:48	-0.261221262	0.167046203	-0.622041445	1:52:52	-0.26081562	0.182908609	-0.622135719
1:52:56	-0.260409979	0.194469079	-0.622229993	1:53:00	-0.260004338	0.201727684	-0.622324268
1:53:04	-0.260353084	0.208536575	-0.622418542	1:53:08	-0.26070183	0.206691356	-0.622512816
1:53:12	-0.261050577	0.204846172	-0.62260709	1:53:16	-0.261399323	0.203905567	-0.622701364
1:53:20	-0.261748069	0.203869576	-0.622795638	1:53:24	-0.262096816	0.203833585	-0.622889912
1:53:28	-0.262445562	0.203211145	-0.622984186	1:53:32	-0.262794308	0.202588741	-0.623078461
1:53:36	-0.263143055	0.202528555	-0.623172735	1:53:40	-0.263491801	0.204155198	-0.623267009
1:53:44	-0.263840547	0.205781841	-0.623361283	1:53:48	-0.264189294	0.206591521	-0.623455557
1:53:52	-0.26453804	0.207401236	-0.623549831	1:53:56	-0.264886787	0.202440017	-0.623644105
1:54:00	-0.265235533	0.191707863	-0.62373838	1:54:04	-0.265738255	0.180883927	-0.623832654
1:54:08	-0.266240977	0.172933396	-0.623926928	1:54:12	-0.266743699	0.164982864	-0.624021202
1:54:16	-0.26724642	0.159987562	-0.624115476	1:54:20	-0.267749142	0.157947561	-0.62420975
1:54:24	-0.268251864	0.155907559	-0.624304024	1:54:28	-0.268754586	0.155125832	-0.624398299
1:54:32	-0.269257308	0.154344068	-0.624492573	1:54:36	-0.26976003	0.156031528	-0.624586847
1:54:40	-0.270262752	0.16018821	-0.624681121	1:54:44	-0.270765473	0.164344856	-0.624775395
1:54:48	-0.271268195	0.163972996	-0.624869669	1:54:52	-0.271770917	0.163601135	-0.624963943
1:54:56	-0.272273639	0.161088877	-0.625058217	1:55:00	-0.272776361	0.156436221	-0.625152492
1:55:04	-0.273176604	0.15184465	-0.625246766	1:55:08	-0.273756847	0.144823579	-0.62534104
1:55:12	-0.27397709	0.137802508	-0.625435314	1:55:16	-0.2747377334	0.120624451	-0.625529588
1:55:20	-0.274777577	0.09328946	-0.625623862	1:55:24	-0.27517782	0.065954452	-0.625718136
1:55:28	-0.275578063	0.039202019	-0.625812411	1:55:32	-0.275978306	0.012449569	-0.625906685
1:55:36	-0.276378549	-0.011934722	-0.626000959	1:55:40	-0.276778793	-0.033950881	-0.626095233
1:55:44	-0.277179036	-0.055967031	-0.626189507	1:55:48	-0.277579279	-0.065930611	-0.626283781
1:55:52	-0.277979522	-0.075894192	-0.626378055	1:55:56	-0.278379765	-0.0880972	-0.62647233
1:56:00	-0.278780009	-0.102539636	-0.626566604	1:56:04	-0.279196631	-0.116991835	-0.626660878
1:56:08	-0.279613254	-0.127932565	-0.626755152	1:56:12	-0.280029877	-0.138873293	-0.626849426
1:56:16	-0.2804465	-0.147095444	-0.6269437	1:56:20	-0.280863123	-0.152599014	-0.627037974
1:56:24	-0.281279745	-0.158102584	-0.627132248	1:56:28	-0.281696368	-0.158629368	-0.627226523
1:56:32	-0.282112991	-0.159156153	-0.627320797	1:56:36	-0.282529614	-0.149189784	-0.627415071
1:56:40	-0.282946236	-0.128730264	-0.627509345	1:56:44	-0.283362859	-0.108270741	-0.627603619
1:56:48	-0.283779482	-0.101070628	-0.627697893	1:56:52	-0.284196105	-0.093870515	-0.627792167
1:56:56	-0.284612728	-0.085780701	-0.627886442	1:57:00	-0.28502935	-0.076801178	-0.627980716
1:57:04	-0.285203279	-0.067676997	-0.62807499	1:57:08	-0.285377207	-0.058552816	-0.628169264
1:57:12	-0.285551135	-0.049428626	-0.628263538	1:57:16	-0.285725063	-0.036416844	-0.628357812
1:57:20	-0.285898991	-0.019517461	-0.628452086	1:57:24	-0.28607292	-0.002618079	-0.628546361
1:57:28	-0.286246848	0.006869373	-0.628640635	1:57:32	-0.286420776	0.016356842	-0.628734909
1:57:36	-0.286594704	0.016299461	-0.628829183	1:57:40	-0.286768632	0.006697265	-0.628923457
1:57:44	-0.28694256	-0.002904931	-0.629017731	1:57:48	-0.287116489	-0.015586016	-0.629112005
1:57:52	-0.287290417	-0.028267092	-0.629206279	1:57:56	-0.287464345	-0.040151866	-0.629300554
1:58:00	-0.287638273	-0.051240328	-0.629394828	1:58:04	-0.287808866	-0.062207584	-0.629489102
1:58:08	-0.287979458	-0.07196494	-0.629583376	1:58:12	-0.288158051	-0.081722296	-0.62967765
1:58:16	-0.288320643	-0.090934454	-0.629771924	1:58:20	-0.288491236	-0.099601412	-0.629866198

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
1:58:24	-0.287461828	-0.108268371	-0.629960473	1:58:28	-0.287432421	-0.120156692	-0.630054747
1:58:32	-0.287403013	-0.132045013	-0.630149021	1:58:36	-0.287373606	-0.137034203	-0.630243295
1:58:40	-0.287344199	-0.135124264	-0.630337569	1:58:44	-0.287314791	-0.133214325	-0.630431843
1:58:48	-0.287285384	-0.145851264	-0.630526117	1:58:52	-0.287255976	-0.158488204	-0.630620392
1:58:56	-0.287226569	-0.169947356	-0.630714666	1:59:00	-0.287197161	-0.18022872	-0.63080894
1:59:04	-0.286801462	-0.190291744	-0.630903214	1:59:08	-0.286405763	-0.185362455	-0.630997488
1:59:12	-0.286010064	-0.180433168	-0.631091762	1:59:16	-0.285614365	-0.177634948	-0.631186036
1:59:20	-0.285218666	-0.176967796	-0.63128031	1:59:24	-0.284822967	-0.176300644	-0.631374585
1:59:28	-0.284427269	-0.171041845	-0.631468859	1:59:32	-0.28403157	-0.165783047	-0.631563133
1:59:36	-0.283635871	-0.153420573	-0.631657407	1:59:40	-0.283240172	-0.13395442	-0.631751681
1:59:44	-0.282844473	-0.114488269	-0.631845955	1:59:48	-0.282448774	-0.095701355	-0.631940229
1:59:52	-0.282053075	-0.076914441	-0.632034504	1:59:56	-0.281657376	-0.058874262	-0.632128778
2:00:00	0.218738323	0.418330089	-0.132223052	2:00:04	0.218387029	0.409416178	-0.132317326
2:00:08	0.218035735	0.413001025	-0.1324116	2:00:12	-0.282315559	-0.083414129	-0.632505874
2:00:16	-0.282666853	-0.079829274	-0.632600148	2:00:20	-0.283018147	-0.076244427	-0.632694423
2:00:24	-0.283369441	-0.072659581	-0.632788697	2:00:28	-0.283720736	-0.079700958	-0.632882971
2:00:32	-0.28407203	-0.086742326	-0.632977245	2:00:36	-0.284423324	-0.101869422	-0.633071519
2:00:40	-0.284774618	-0.119691757	-0.633165793	2:00:44	-0.285125912	-0.137514095	-0.633260067
2:00:48	-0.285477206	-0.15102159	-0.633354341	2:00:52	-0.2858285	-0.164529087	-0.633448616
2:00:56	-0.286179794	-0.173575815	-0.63354289	2:01:00	-0.286531088	-0.178161773	-0.633637164
2:01:04	-0.286552785	-0.182551264	-0.633731438	2:01:08	-0.286574481	-0.174186153	-0.633825712
2:01:12	-0.286596177	-0.165821041	-0.633919986	2:01:16	-0.286617874	-0.161230461	-0.63401426
2:01:20	-0.28663957	-0.160414415	-0.634108535	2:01:24	-0.286661266	-0.159598366	-0.634202809
2:01:28	-0.286682963	-0.16642668	-0.634297083	2:01:32	-0.286704659	-0.173254992	-0.634391357
2:01:36	-0.286726355	-0.181009069	-0.634485631	2:01:40	-0.286748052	-0.189071735	-0.634579905
2:01:44	-0.286769748	-0.197134401	-0.634674179	2:01:48	-0.286791445	-0.210209537	-0.634768454
2:01:52	-0.286813141	-0.223284673	-0.634862728	2:01:56	-0.286834837	-0.23218455	-0.634957002
2:02:00	-0.286856534	-0.239692677	-0.635051276	2:02:04	-0.287282737	-0.247441921	-0.63514555
2:02:08	-0.287708941	-0.252736851	-0.635239824	2:02:12	-0.288135145	-0.25803178	-0.635334098
2:02:16	-0.288561349	-0.272206548	-0.635428372	2:02:20	-0.288987553	-0.295261162	-0.635522647
2:02:24	-0.289413757	-0.318315767	-0.635616921	2:02:28	-0.289839961	-0.343333664	-0.635711195
2:02:32	-0.290266165	-0.368351571	-0.635805469	2:02:36	-0.290692369	-0.394883492	-0.635899743
2:02:40	-0.291118573	-0.422929428	-0.635994017	2:02:44	-0.291544777	-0.450726338	-0.636088291
2:02:48	-0.29197098	-0.477776135	-0.636182566	2:02:52	-0.292397184	-0.504825933	-0.63627684
2:02:56	-0.292823388	-0.533941339	-0.636371114	2:03:00	-0.293249592	-0.565123354	-0.636465388
2:03:04	-0.292971794	-0.595883724	-0.636559662	2:03:08	-0.292693995	-0.604193992	-0.636653936
2:03:12	-0.292416197	-0.61250426	-0.63674821	2:03:16	-0.292138399	-0.613866646	-0.636842485
2:03:20	-0.2918606	-0.60828108	-0.636936759	2:03:24	-0.291582802	-0.602695513	-0.637031033
2:03:28	-0.291305004	-0.589312202	-0.637125307	2:03:32	-0.291027205	-0.56813111	-0.637219581
2:03:36	-0.290749407	-0.540559735	-0.637313855	2:03:40	-0.290471609	-0.506598112	-0.637408129
2:03:44	-0.29019381	-0.472636453	-0.637502403	2:03:48	-0.289916012	-0.432012995	-0.637596678
2:03:52	-0.289638214	-0.391389556	-0.637690952	2:03:56	-0.289360415	-0.351131945	-0.637785226
2:04:00	-0.289082617	-0.31124018	-0.6378795	2:04:04	-0.289373687	-0.271687509	-0.637973774
2:04:08	-0.289664757	-0.248309581	-0.638068048	2:04:12	-0.289955827	-0.224931662	-0.638162322
2:04:16	-0.290246897	-0.210417198	-0.638256597	2:04:20	-0.290537967	-0.204766196	-0.638350871
2:04:24	-0.290829037	-0.199115194	-0.638445145	2:04:28	-0.291120107	-0.192233456	-0.638539419
2:04:32	-0.291411176	-0.18535172	-0.638633693	2:04:36	-0.291702246	-0.174750869	-0.638727967
2:04:40	-0.291993316	-0.160430904	-0.638822241	2:04:44	-0.292284386	-0.146110941	-0.638916516
2:04:48	-0.292575456	-0.140163739	-0.63901079	2:04:52	-0.292866526	-0.134216536	-0.639105064
2:04:56	-0.293157596	-0.126625739	-0.639199338	2:05:00	-0.293448666	-0.117391353	-0.639293612
2:05:04	-0.293678608	-0.108120525	-0.639387886	2:05:08	-0.29390855	-0.090662789	-0.63948216
2:05:12	-0.294138493	-0.073205062	-0.639576434	2:05:16	-0.294368435	-0.060940535	-0.639670709
2:05:20	-0.294598377	-0.05040708	-0.639764983	2:05:24	-0.29482832	-0.039873626	-0.639859257
2:05:28	-0.295058262	-0.025567641	-0.639953531	2:05:32	-0.295288204	-0.011261684	-0.640047805
2:05:36	-0.295518146	0.000372801	-0.640142079	2:05:40	-0.295748089	0.009335793	-0.640236353
2:05:44	-0.295978031	0.018298768	-0.640330628	2:05:48	-0.296207973	0.023921268	-0.640424902
2:05:52	-0.296437916	0.029543768	-0.640519176	2:05:56	-0.296667858	0.034274694	-0.64061345

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
2:06:00	-0.2968978	0.038708415	-0.640707724	2:06:04	-0.297012371	0.043210908	-0.640801998
2:06:08	-0.297126943	0.050726543	-0.640896272	2:06:12	-0.297241514	0.058242196	-0.640990547
2:06:16	-0.297356085	0.06932818	-0.641084821	2:06:20	-0.297470657	0.083984533	-0.641179095
2:06:24	-0.297585228	0.098640867	-0.641273369	2:06:28	-0.297699799	0.115470749	-0.641367643
2:06:32	-0.297814371	0.13230063	-0.641461917	2:06:36	-0.297928942	0.141656795	-0.641556191
2:06:40	-0.298043513	0.143539172	-0.641650465	2:06:44	-0.298158085	0.145421584	-0.64174474
2:06:48	-0.298272656	0.135672593	-0.641839014	2:06:52	-0.298387227	0.125923567	-0.641933288
2:06:56	-0.298501799	0.11123899	-0.642027562	2:07:00	-0.29861637	0.091618847	-0.642121836
2:07:04	-0.298460086	0.072160156	-0.64221611	2:07:08	-0.298303802	0.059999294	-0.642310384
2:07:12	-0.298147518	0.047838449	-0.642404659	2:07:16	-0.297991234	0.037371505	-0.642498933
2:07:20	-0.29783495	0.02859846	-0.642593207	2:07:24	-0.297678667	0.019825415	-0.642687481
2:07:28	-0.297522383	0.008337373	-0.642781755	2:07:32	-0.297366099	-0.003150686	-0.642876029
2:07:36	-0.297209815	-0.019788556	-0.642970303	2:07:40	-0.297053531	-0.041576261	-0.643064578
2:07:44	-0.296897247	-0.063363957	-0.643158852	2:07:48	-0.296740963	-0.086488004	-0.643253126
2:07:52	-0.296584679	-0.109612045	-0.6433474	2:07:56	-0.296428395	-0.134547821	-0.643441674
2:08:00	-0.296272111	-0.161295328	-0.643535948	2:08:04	-0.296497008	-0.18827005	-0.643630222
2:08:08	-0.296721904	-0.216694603	-0.643724496	2:08:12	-0.296946801	-0.245119153	-0.643818771
2:08:16	-0.297171697	-0.265989708	-0.643913045	2:08:20	-0.297396594	-0.284342258	-0.644007319
2:08:24	-0.29762149	-0.302694808	-0.644101593	2:08:28	-0.297846387	-0.312610448	-0.644195867
2:08:32	-0.298071283	-0.322526097	-0.644290141	2:08:36	-0.29829618	-0.332882044	-0.644384415
2:08:40	-0.298521076	-0.34367828	-0.64447869	2:08:44	-0.298745973	-0.354474516	-0.644572964
2:08:48	-0.298970869	-0.384332989	-0.644667238	2:08:52	-0.299195766	-0.414191479	-0.644761512
2:08:56	-0.299420662	-0.426735744	-0.644855786	2:09:00	-0.299645559	-0.433508631	-0.64495006
2:09:04	-0.299820391	-0.440251657	-0.645044334	2:09:08	-0.299995222	-0.467851704	-0.645138609
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2:09:20	-0.300519717	-0.527721134	-0.645421431	2:09:24	-0.300694549	-0.540034034	-0.645515705
2:09:28	-0.30086938	-0.552346934	-0.645609979	2:09:32	-0.301044212	-0.564659833	-0.645704253
2:09:36	-0.301219044	-0.569306091	-0.645798527	2:09:40	-0.301393875	-0.566285743	-0.645892802
2:09:44	-0.301568707	-0.563265395	-0.645987076	2:09:48	-0.301743539	-0.548592468	-0.64608135
2:09:52	-0.30191837	-0.533919506	-0.646175624	2:09:56	-0.302093202	-0.52547634	-0.646269898
2:10:00	-0.302268034	-0.519109726	-0.646364172	2:10:04	-0.302810629	-0.512962331	-0.646458446
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2:10:16	-0.304438417	-0.470475691	-0.646741269	2:10:20	-0.304981012	-0.454482511	-0.646835543
2:10:24	-0.305523608	-0.438489313	-0.646929817	2:10:28	-0.306066204	-0.424815582	-0.647024091
2:10:32	-0.3066088	-0.411141833	-0.647113865	2:10:36	-0.307151395	-0.395160182	-0.64721264
2:10:40	-0.307693991	-0.376870613	-0.647306914	2:10:44	-0.308236587	-0.358581043	-0.647401188
2:10:48	-0.308779183	-0.33296428	-0.647495462	2:10:52	-0.309321779	-0.307347508	-0.647589736
2:10:56	-0.309864374	-0.282193391	-0.64768401	2:11:00	-0.31040697	-0.257193494	-0.647778284
2:11:04	-0.31083522	-0.232125433	-0.647872558	2:11:08	-0.31126347	-0.20439474	-0.647966833
2:11:12	-0.311691721	-0.176664046	-0.648061107	2:11:16	-0.312119971	-0.164683198	-0.648155381
2:11:20	-0.312548221	-0.157952298	-0.648249655	2:11:24	-0.312976471	-0.151221398	-0.648343929
2:11:28	-0.313404722	-0.138176207	-0.648438203	2:11:32	-0.313832972	-0.125131017	-0.648532477
2:11:36	-0.314261222	-0.10790946	-0.648626752	2:11:40	-0.314689472	-0.086511542	-0.648721026
2:11:44	-0.315117723	-0.065113624	-0.6488153	2:11:48	-0.315545973	-0.039088259	-0.648909574
2:11:52	-0.315974223	-0.013062893	-0.649003848	2:11:56	-0.316402473	0.009497662	-0.649098122
2:12:00	-0.316830723	0.028593408	-0.649192396	2:12:04	-0.317123063	0.047770168	-0.649286671
2:12:08	-0.317415402	0.063276297	-0.649380945	2:12:12	-0.317707741	0.078782426	-0.649475219
2:12:16	-0.31800008	0.08969137	-0.649569493	2:12:20	-0.31829242	0.096003092	-0.649663767
2:12:24	-0.318584759	0.102314833	-0.649758041	2:12:28	-0.318877098	0.113211928	-0.649852315
2:12:32	-0.319169438	0.124108986	-0.649946589	2:12:36	-0.319461777	0.135006081	-0.650040864
2:12:40	-0.319754116	0.145903139	-0.650135138	2:12:44	-0.320046455	0.155288138	-0.650229412
2:12:48	-0.320338795	0.160136884	-0.650323686	2:12:52	-0.320631134	0.164985595	-0.65041796
2:12:56	-0.320923473	0.169121053	-0.650512234	2:13:00	-0.321215812	0.172543258	-0.650606508
2:13:04	-0.321666197	0.175871255	-0.650700783	2:13:08	-0.322116582	0.179199251	-0.650795057
2:13:12	-0.322566967	0.182527248	-0.650889331	2:13:16	-0.323017352	0.192262511	-0.650983605
2:13:20	-0.323467737	0.20840504	-0.651077879	2:13:24	-0.323918121	0.224547604	-0.651172153
2:13:28	-0.324368506	0.239348081	-0.651266427	2:13:32	-0.324818891	0.254148523	-0.651360702

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
2:13:36	-0.325269276	0.261359741	-0.651454976	2:13:40	-0.325719661	0.260981701	-0.65154925
2:13:44	-0.326170046	0.260603661	-0.651643524	2:13:48	-0.32662043	0.247395491	-0.651737798
2:13:52	-0.327070815	0.234187321	-0.651832072	2:13:56	-0.3275212	0.218024063	-0.651926346
2:14:00	-0.327971585	0.198905684	-0.65202062	2:14:04	-0.328265772	0.179880411	-0.652114895
2:14:08	-0.328559958	0.162534684	-0.652209169	2:14:12	-0.328854145	0.145188922	-0.652303443
2:14:16	-0.329148332	0.136956558	-0.652397717	2:14:20	-0.329442519	0.137837594	-0.652491991
2:14:24	-0.329736706	0.138718595	-0.652586265	2:14:28	-0.330030893	0.127613323	-0.652680539
2:14:32	-0.330325079	0.116508052	-0.652774814	2:14:36	-0.330619266	0.110655555	-0.652869088
2:14:40	-0.330913453	0.110055796	-0.652963362	2:14:44	-0.33120764	0.109456037	-0.653057636
2:14:48	-0.331501827	0.110319628	-0.65315191	2:14:52	-0.331796014	0.111183254	-0.653246184
2:14:56	-0.3320902	0.110469801	-0.653340458	2:15:00	-0.832384387	-0.39182066	-1.153434732
2:15:04	-0.832635109	-0.394085248	-1.153529007	2:15:08	-0.832885831	-0.404769559	-1.153623281
2:15:12	-0.333136552	0.084546148	-0.653717555	2:15:16	-0.333387274	0.073861838	-0.653811829
2:15:20	-0.333637996	0.063177545	-0.653906103	2:15:24	-0.333888717	0.052493234	-0.654000377
2:15:28	-0.334139439	0.039453573	-0.654094651	2:15:32	-0.334390161	0.026413911	-0.654188926
2:15:36	-0.334640883	0.013656371	-0.6542832	2:15:40	-0.334891604	0.00118097	-0.654377474
2:15:44	-0.335142326	-0.011294431	-0.654471748	2:15:48	-0.335393048	-0.038824974	-0.654566022
2:15:52	-0.335643769	-0.066355499	-0.654660296	2:15:56	-0.335894491	-0.092454473	-0.65475457
2:16:00	-0.336145213	-0.11807626	-0.654848845	2:16:04	-0.336379505	-0.143688258	-0.654943119
2:16:08	-0.336613798	-0.167235634	-0.655037393	2:16:12	-0.33684809	-0.190783011	-0.655131667
2:16:16	-0.337082382	-0.210263721	-0.655225941	2:16:20	-0.337316675	-0.225677764	-0.655320215
2:16:24	-0.337550967	-0.241091806	-0.655414489	2:16:28	-0.33778526	-0.241816296	-0.655508763
2:16:32	-0.338019552	-0.242540782	-0.655603038	2:16:36	-0.338253844	-0.247886159	-0.655697312
2:16:40	-0.338488137	-0.257852429	-0.655791586	2:16:44	-0.338722429	-0.267818699	-0.65588586
2:16:48	-0.338956722	-0.283694112	-0.655980134	2:16:52	-0.339191014	-0.299569513	-0.656074408
2:16:56	-0.339425306	-0.312928419	-0.656168682	2:17:00	-0.339659599	-0.323770813	-0.656262957
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2:17:12	-0.339394024	-0.374100609	-0.656545779	2:17:16	-0.339305499	-0.386068433	-0.656640053
2:17:20	-0.339216974	-0.39016415	-0.656734327	2:17:24	-0.339128449	-0.394259865	-0.656828601
2:17:28	-0.339039924	-0.40697656	-0.656922876	2:17:32	-0.3389514	-0.419693255	-0.65701715
2:17:36	-0.338862875	-0.437414197	-0.657111424	2:17:40	-0.33877435	-0.460139347	-0.657205698
2:17:44	-0.338685825	-0.482864516	-0.657299972	2:17:48	-0.3385973	-0.502386496	-0.657394246
2:17:52	-0.338508775	-0.521908475	-0.65748852	2:17:56	-0.33842025	-0.539569779	-0.657582794
2:18:00	-0.338331725	-0.555370445	-0.657677069	2:18:04	-0.338939595	-0.571586221	-0.657771343
2:18:08	-0.339547466	-0.581111028	-0.657865617	2:18:12	-0.340155336	-0.590635799	-0.657959891
2:18:16	-0.340763206	-0.605348432	-0.658054165	2:18:20	-0.341371076	-0.625248891	-0.658148439
2:18:24	-0.341978947	-0.64514935	-0.658242713	2:18:28	-0.342586817	-0.632673675	-0.658336988
2:18:32	-0.343194687	-0.620197999	-0.658431262	2:18:36	-0.343802557	-0.621739953	-0.658525536
2:18:40	-0.344410428	-0.637299536	-0.65861981	2:18:44	-0.345018298	-0.652859155	-0.658714084
2:18:48	-0.345626168	-0.658306963	-0.658808358	2:18:52	-0.346234038	-0.66375477	-0.658902632
2:18:56	-0.346841909	-0.667513795	-0.658996907	2:19:00	-0.347449779	-0.670709891	-0.659091181
2:19:04	-0.347812077	-0.673759641	-0.659185455	2:19:08	-0.348174375	-0.664980978	-0.659279729
2:19:12	-0.348536673	-0.656202278	-0.659374003	2:19:16	-0.348898971	-0.642875992	-0.659468277
2:19:20	-0.34926127	-0.62500205	-0.659562551	2:19:24	-0.349623568	-0.607128107	-0.659656825
2:19:28	-0.349985866	-0.581624403	-0.6597511	2:19:32	-0.350348164	-0.556120733	-0.659845374
2:19:36	-0.350710462	-0.536595206	-0.659939648	2:19:40	-0.35107276	-0.523047856	-0.660033922
2:19:44	-0.351435058	-0.509500507	-0.660128196	2:19:48	-0.351797357	-0.493733405	-0.66022247
2:19:52	-0.352159655	-0.477966303	-0.660316744	2:19:56	-0.352521953	-0.45852283	-0.660411019
2:20:00	-0.352884251	-0.435402989	-0.660505293	2:20:04	-0.352755179	-0.411990267	-0.660595967
2:20:08	-0.352626107	-0.385362223	-0.660693841	2:20:12	-0.352497035	-0.358734197	-0.660788115
2:20:16	-0.352367963	-0.338395044	-0.660882389	2:20:20	-0.352238892	-0.324344773	-0.660976663
2:20:24	-0.35210982	-0.310294511	-0.661070938	2:20:28	-0.351980748	-0.30815796	-0.661165212
2:20:32	-0.351851676	-0.30602141	-0.661259486	2:20:36	-0.351722604	-0.304944151	-0.66135376
2:20:40	-0.351593532	-0.3049262	-0.661448034	2:20:44	-0.351464446	-0.30490825	-0.661542308
2:20:48	-0.351335388	-0.297624804	-0.661636582	2:20:52	-0.351206316	-0.290341365	-0.661730856
2:20:56	-0.351077245	-0.283057923	-0.661825131	2:21:00	-0.350948173	-0.275774481	-0.661919405
2:21:04	-0.350957221	-0.268573369	-0.662013679	2:21:08	-0.350966269	-0.25650421	-0.662107953

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
2:21:12	-0.350975317	-0.244435048	-0.662202227	2:21:16	-0.350984365	-0.234362093	-0.662296501
2:21:20	-0.350993413	-0.226285343	-0.662390775	2:21:24	-0.351002461	-0.218208592	-0.66248505
2:21:28	-0.351011509	-0.219871524	-0.662579324	2:21:32	-0.351020557	-0.221534455	-0.662673598
2:21:36	-0.351029605	-0.223197388	-0.662767872	2:21:40	-0.351038653	-0.224860319	-0.662862146
2:21:44	-0.351047701	-0.226523251	-0.66295642	2:21:48	-0.351056749	-0.233202829	-0.663050694
2:21:52	-0.351065797	-0.23988241	-0.663144969	2:21:56	-0.351074845	-0.245531325	-0.663239243
2:22:00	-0.351083893	-0.250149577	-0.663333517	2:22:04	-0.350231973	-0.254254619	-0.663427791
2:22:08	-0.349380052	-0.254418908	-0.663522065	2:22:12	-0.348528132	-0.254583197	-0.663616339
2:22:16	-0.347676212	-0.255123275	-0.663710613	2:22:20	-0.346824292	-0.256039136	-0.663804887
2:22:24	-0.345972372	-0.256954996	-0.663899162	2:22:28	-0.345120452	-0.254901504	-0.663993436
2:22:32	-0.344268532	-0.252848012	-0.66408771	2:22:36	-0.343416611	-0.25079452	-0.664181984
2:22:40	-0.342564691	-0.248741028	-0.664276258	2:22:44	-0.341712771	-0.246687536	-0.664370532
2:22:48	-0.340860851	-0.237462848	-0.664464806	2:22:52	-0.340008931	-0.228238161	-0.664559081
2:22:56	-0.339157011	-0.22671545	-0.664653355	2:23:00	-0.33830509	-0.232894714	-0.664747629
2:23:04	-0.338552198	-0.239729093	-0.664841903	2:23:08	-0.338799306	-0.237490202	-0.664936177
2:23:12	-0.339046414	-0.235251311	-0.665030451	2:23:16	-0.339293522	-0.234305981	-0.665124725
2:23:20	-0.33954063	-0.234654213	-0.665219	2:23:24	-0.339787738	-0.235002445	-0.665313274
2:23:28	-0.340034846	-0.234119798	-0.665407548	2:23:32	-0.340281953	-0.233237153	-0.665501822
2:23:36	-0.340529061	-0.234715077	-0.665596096	2:23:40	-0.340776169	-0.238553571	-0.66569037
2:23:44	-0.341023277	-0.242392065	-0.665784644	2:23:48	-0.341270385	-0.257057769	-0.665878918
2:23:52	-0.341517493	-0.271723474	-0.665973193	2:23:56	-0.341764601	-0.281828761	-0.666067467
2:24:00	-0.342011709	-0.287373624	-0.666161741	2:24:04	-0.342493516	-0.293058395	-0.666256015
2:24:08	-0.342975323	-0.28964755	-0.666350289	2:24:12	-0.343457129	-0.286236705	-0.666444563
2:24:16	-0.343938936	-0.287887966	-0.666538837	2:24:20	-0.344420743	-0.294601322	-0.666633112
2:24:24	-0.34490255	-0.301314688	-0.666727386	2:24:28	-0.345384357	-0.310815318	-0.66682166
2:24:32	-0.345866164	-0.320315947	-0.666915934	2:24:36	-0.346347971	-0.329328794	-0.667010208
2:24:40	-0.346829778	-0.337853848	-0.667104482	2:24:44	-0.347311585	-0.346378911	-0.667198756
2:24:48	-0.347793392	-0.34231977	-0.667293031	2:24:52	-0.348275199	-0.338260629	-0.667387305
2:24:56	-0.348757006	-0.333244601	-0.667481579	2:25:00	-0.349238813	-0.327271668	-0.667575853
2:25:04	-0.349188684	-0.320981658	-0.667670127	2:25:08	-0.349138556	-0.309266689	-0.667764401
2:25:12	-0.349088428	-0.297551729	-0.667858675	2:25:16	-0.3490383	-0.283135965	-0.667952949
2:25:20	-0.348988172	-0.266019404	-0.668047224	2:25:24	-0.348938044	-0.248902841	-0.668141498
2:25:28	-0.348887915	-0.251844214	-0.668235772	2:25:32	-0.348837787	-0.254785582	-0.668330046
2:25:36	-0.348787659	-0.251416715	-0.66842432	2:25:40	-0.348737531	-0.241737609	-0.668518594
2:25:44	-0.348687403	-0.232058502	-0.668612868	2:25:48	-0.348637275	-0.216539176	-0.668707143
2:25:52	-0.348587146	-0.201019848	-0.668801417	2:25:56	-0.348537018	-0.186565661	-0.668895691
2:26:00	-0.34848689	-0.173176608	-0.668989965	2:26:04	-0.348538568	-0.159848243	-0.669084239
2:26:08	-0.348590245	-0.168719878	-0.669178513	2:26:12	-0.348641922	-0.177591513	-0.669272787
2:26:16	-0.3486936	-0.18887358	-0.669367062	2:26:20	-0.348745277	-0.202566077	-0.669461336
2:26:24	-0.348796955	-0.216258575	-0.66955561	2:26:28	-0.348848632	-0.209627353	-0.669649884
2:26:32	-0.34890031	-0.202996131	-0.669744158	2:26:36	-0.348951987	-0.194337754	-0.669838432
2:26:40	-0.349003665	-0.183652223	-0.669932706	2:26:44	-0.349055342	-0.172966693	-0.67002698
2:26:48	-0.349107019	-0.167118711	-0.670121255	2:26:52	-0.349158697	-0.161270726	-0.670215529
2:26:56	-0.349210374	-0.160877327	-0.670309803	2:27:00	-0.349262052	-0.162302118	-0.670404077
2:27:04	-0.34939939	-0.163777975	-0.670498351	2:27:08	-0.34936728	-0.163375899	-0.670592625
2:27:12	-0.349674067	-0.162973823	-0.670686899	2:27:16	-0.349811405	-0.164429139	-0.670781174
2:27:20	-0.349948743	-0.166503591	-0.670875448	2:27:24	-0.350086082	-0.168578043	-0.670969722
2:27:28	-0.35022342	-0.156426215	-0.671063996	2:27:32	-0.350360758	-0.144274387	-0.67115827
2:27:36	-0.350498097	-0.141914036	-0.671252544	2:27:40	-0.350635435	-0.149345155	-0.671346818
2:27:44	-0.350772774	-0.156776273	-0.671441093	2:27:48	-0.350910112	-0.168257162	-0.671535367
2:27:52	-0.35104745	-0.179738046	-0.671629641	2:27:56	-0.351184789	-0.199949318	-0.671723915
2:28:00	-0.351322127	-0.228890974	-0.671818189	2:28:04	-0.351140334	-0.254798508	-0.671912463
2:28:08	-0.350958541	-0.272174355	-0.672006737	2:28:12	-0.350776748	-0.289550198	-0.672101011
2:28:16	-0.350594955	-0.298373749	-0.672195286	2:28:20	-0.350413162	-0.298645008	-0.67228956
2:28:24	-0.35023137	-0.298916258	-0.672383834	2:28:28	-0.350049577	-0.303713927	-0.672478108
2:28:32	-0.349867784	-0.308511597	-0.672572382	2:28:36	-0.349685991	-0.305965072	-0.672666656
2:28:40	-0.349504198	-0.296074343	-0.67276093	2:28:44	-0.349322405	-0.286183615	-0.672855205

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
2:28:48	-0.349140612	-0.276292891	-0.672949479	2:28:52	-0.348958819	-0.266402163	-0.673043753
2:28:56	-0.348777026	-0.254131636	-0.673138027	2:29:00	-0.348595233	-0.241067843	-0.673232301
2:29:04	-0.348673847	-0.228159275	-0.673326575	2:29:08	-0.348752461	-0.218951885	-0.673420849
2:29:12	-0.348831075	-0.209744497	-0.673515124	2:29:16	-0.348909689	-0.198426141	-0.673609398
2:29:20	-0.348988303	-0.184996817	-0.673703672	2:29:24	-0.349066917	-0.171567494	-0.673797946
2:29:28	-0.349145531	-0.167381468	-0.673892222	2:29:32	-0.349224145	-0.163195435	-0.673986494
2:29:36	-0.349302759	-0.160071931	-0.674080768	2:29:40	-0.349381372	-0.158010943	-0.674175042
2:29:44	-0.349459986	-0.155949955	-0.674269317	2:29:48	-0.3495386	-0.157592206	-0.674363591
2:29:52	-0.349617214	-0.159234457	-0.674457865	2:29:56	-0.349695828	-0.160876708	-0.674552139
2:30:00	0.150225558	0.337481042	-0.174646413	2:30:04	0.14995496	0.335724353	-0.174740687
2:30:08	0.149684363	0.336499844	-0.174834961	2:30:12	-0.350586235	-0.162724665	-0.674929236
2:30:16	-0.350856833	-0.158211746	-0.67502351	2:30:20	-0.35112743	-0.149961392	-0.675117784
2:30:24	-0.351398028	-0.141711042	-0.675212058	2:30:28	-0.351668626	-0.141426799	-0.675306332
2:30:32	-0.351939223	-0.141142554	-0.675400606	2:30:36	-0.352209821	-0.144552316	-0.67549488
2:30:40	-0.352480419	-0.151656073	-0.675589155	2:30:44	-0.352751016	-0.159895107	-0.675683429
2:30:48	-0.353021614	-0.171539959	-0.675777703	2:30:52	-0.353292212	-0.183184805	-0.675871977
2:30:56	-0.353562809	-0.193133723	-0.675966251	2:31:00	-0.353833407	-0.201386706	-0.676060525
2:31:04	-0.35391699	-0.209528213	-0.676154799	2:31:08	-0.354000573	-0.224269787	-0.676249073
2:31:12	-0.354084156	-0.239011364	-0.676343348	2:31:16	-0.354167738	-0.255411343	-0.676437622
2:31:20	-0.354251321	-0.273469733	-0.676531896	2:31:24	-0.354334904	-0.291528119	-0.67662617
2:31:28	-0.354418487	-0.305699183	-0.676720444	2:31:32	-0.35450207	-0.319870247	-0.676814718
2:31:36	-0.354585653	-0.332758335	-0.676908992	2:31:40	-0.354669236	-0.344363448	-0.677003267
2:31:44	-0.354752819	-0.355968552	-0.677097541	2:31:48	-0.354836402	-0.358565434	-0.677191815
2:31:52	-0.354901706	-0.36115141	-0.677261323	2:31:56	-0.354935696	-0.363718721	-0.677288403
2:32:00	-0.354969687	-0.36628605	-0.677315484	2:32:04	-0.355232833	-0.368989957	-0.677342564
2:32:08	-0.35549598	-0.371693865	-0.677369645	2:32:12	-0.355759127	-0.374397772	-0.677396725
2:32:16	-0.356022273	-0.373492602	-0.677423806	2:32:20	-0.35628542	-0.368978338	-0.677450886
2:32:24	-0.356548567	-0.364464074	-0.677477966	2:32:28	-0.356811713	-0.3527561	-0.677505047
2:32:32	-0.35707486	-0.341048135	-0.677532127	2:32:36	-0.357338007	-0.333579956	-0.677559208
2:32:40	-0.357601153	-0.330351581	-0.677586288	2:32:44	-0.3578643	-0.327123197	-0.677613368
2:32:48	-0.358127447	-0.317038073	-0.677640449	2:32:52	-0.358390593	-0.306952949	-0.677667529
2:32:56	-0.35865374	-0.301631883	-0.67769461	2:33:00	-0.358916887	-0.301074893	-0.67772169
2:33:04	-0.35886279	-0.297935183	-0.677748771	2:33:08	-0.358808694	-0.287614625	-0.677775851
2:33:12	-0.358754597	-0.277294063	-0.677802931	2:33:16	-0.358700501	-0.268543873	-0.677830012
2:33:20	-0.358646405	-0.261364053	-0.677857092	2:33:24	-0.358592308	-0.254184232	-0.677884173
2:33:28	-0.358538212	-0.258959509	-0.677911253	2:33:32	-0.358484116	-0.263734787	-0.677938333
2:33:36	-0.358430019	-0.265194052	-0.677965414	2:33:40	-0.358375923	-0.263337314	-0.677992494
2:33:44	-0.358321827	-0.261480575	-0.678019575	2:33:48	-0.35826773	-0.26490379	-0.678046655
2:33:52	-0.358213634	-0.268327005	-0.678073736	2:33:56	-0.358159538	-0.26531235	-0.678100816
2:34:00	-0.358105441	-0.255859824	-0.678127896	2:34:04	-0.357855553	-0.24629059	-0.678154977
2:34:08	-0.357605665	-0.247759541	-0.678182057	2:34:12	-0.357355777	-0.249228491	-0.678209138
2:34:16	-0.357105889	-0.24462978	-0.678236218	2:34:20	-0.356856	-0.233963409	-0.678263298
2:34:24	-0.356606112	-0.223297037	-0.678290379	2:34:28	-0.356356224	-0.204630623	-0.678317459
2:34:32	-0.356106336	-0.18596421	-0.67834454	2:34:36	-0.355856448	-0.170230784	-0.67837162
2:34:40	-0.355606559	-0.157430351	-0.6783987	2:34:44	-0.355356671	-0.144629917	-0.678425781
2:34:48	-0.355106783	-0.14294305	-0.678452861	2:34:52	-0.354856895	-0.141256183	-0.678479942
2:34:56	-0.354607007	-0.141139005	-0.678507022	2:35:00	-0.354357119	-0.142591521	-0.678534103
2:35:04	-0.354368523	-0.144043837	-0.678561183	2:35:08	-0.354379927	-0.145028297	-0.678588263
2:35:12	-0.354391331	-0.146012762	-0.678615344	2:35:16	-0.354402735	-0.146997222	-0.678642424
2:35:20	-0.354414139	-0.139544031	-0.678669505	2:35:24	-0.354425543	-0.132090844	-0.678696585
2:35:28	-0.354436946	-0.13046702	-0.678723665	2:35:32	-0.35444835	-0.128843187	-0.678750746
2:35:36	-0.354459754	-0.130433601	-0.678777826	2:35:40	-0.354471158	-0.13309544	-0.678804907
2:35:44	-0.354482562	-0.136731477	-0.678831987	2:35:48	-0.354493966	-0.143290164	-0.678859068
2:35:52	-0.35450537	-0.149848841	-0.678886148	2:35:56	-0.354516774	-0.159387161	-0.678913228
2:36:00	-0.354528178	-0.169918697	-0.678940309	2:36:04	-0.354280824	-0.177187124	-0.678967389
2:36:08	-0.35403347	-0.175128958	-0.67899447	2:36:12	-0.353786116	-0.173070791	-0.67902155
2:36:16	-0.353538762	-0.175254424	-0.67904863	2:36:20	-0.353291408	-0.178851991	-0.679075711

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
2:36:24	-0.353044054	-0.181586235	-0.679102791	2:36:28	-0.3527967	-0.181730514	-0.679129872
2:36:32	-0.352549346	-0.181874791	-0.679156952	2:36:36	-0.352301992	-0.178931687	-0.679184033
2:36:40	-0.352054638	-0.174959454	-0.679211113	2:36:44	-0.351807284	-0.168804796	-0.679238193
2:36:48	-0.351559931	-0.156102851	-0.679265274	2:36:52	-0.351312577	-0.143400905	-0.679292354
2:36:56	-0.351065223	-0.132949667	-0.679319435	2:37:00	-0.350817869	-0.123248668	-0.679346515
2:37:04	-0.351412	-0.116557073	-0.679373595	2:37:08	-0.352006131	-0.11738891	-0.679400676
2:37:12	-0.352600262	-0.118220746	-0.679427756	2:37:16	-0.353194393	-0.109855982	-0.679454837
2:37:20	-0.353788525	-0.098425688	-0.679481917	2:37:24	-0.354382656	-0.09274829	-0.679508998
2:37:28	-0.354976787	-0.104329547	-0.679536078	2:37:32	-0.355570918	-0.115910805	-0.679563158
2:37:36	-0.356165049	-0.128602277	-0.679590239	2:37:40	-0.356759181	-0.141663823	-0.679617319
2:37:44	-0.357353312	-0.161006759	-0.6796444	2:37:48	-0.357947443	-0.199193858	-0.67967148
2:37:52	-0.358541574	-0.23738096	-0.67969856	2:37:56	-0.359135705	-0.264520373	-0.679725641
2:38:00	-0.359729837	-0.29165978	-0.679752721	2:38:04	-0.35967242	-0.317949584	-0.679779802
2:38:08	-0.359615004	-0.342855686	-0.679806882	2:38:12	-0.359557587	-0.367761788	-0.679833962
2:38:16	-0.359500171	-0.371487907	-0.679861043	2:38:20	-0.359442754	-0.368154048	-0.679888123
2:38:24	-0.359385337	-0.36482019	-0.679915204	2:38:28	-0.359327921	-0.361486322	-0.679942284
2:38:32	-0.359270504	-0.358152463	-0.679969365	2:38:36	-0.359213088	-0.359590035	-0.679996445
2:38:40	-0.359155671	-0.362618089	-0.680023525	2:38:44	-0.359098255	-0.36696734	-0.68005606
2:38:48	-0.359040838	-0.375280144	-0.680077686	2:38:52	-0.358983422	-0.383592949	-0.680104767
2:38:56	-0.358926005	-0.384686587	-0.680131847	2:39:00	-0.358868589	-0.383373801	-0.680158927
2:39:04	-0.35903629	-0.384716459	-0.680186008	2:39:08	-0.359203991	-0.393622848	-0.680213088
2:39:12	-0.359371693	-0.402529237	-0.680240169	2:39:16	-0.359539394	-0.406784223	-0.680267249
2:39:20	-0.359707095	-0.409488724	-0.68029433	2:39:24	-0.359874797	-0.407643062	-0.68032141
2:39:28	-0.360042498	-0.401247274	-0.68034849	2:39:32	-0.3602102	-0.394851468	-0.680375571
2:39:36	-0.360377901	-0.385138761	-0.680402651	2:39:40	-0.360545602	-0.374320415	-0.680429732
2:39:44	-0.360713304	-0.364015673	-0.680456812	2:39:48	-0.360881005	-0.354224508	-0.680483892
2:39:52	-0.361048706	-0.344433344	-0.680510973	2:39:56	-0.361216408	-0.326991855	-0.680538053
2:40:00	-0.361384109	-0.307000252	-0.680565134	2:40:04	-0.361759867	-0.298491098	-0.680592214
2:40:08	-0.362135624	-0.301340358	-0.680619295	2:40:12	-0.362511382	-0.304189627	-0.680646375
2:40:16	-0.362887139	-0.312286456	-0.680673455	2:40:20	-0.363262897	-0.322132486	-0.680700536
2:40:24	-0.363638655	-0.323098056	-0.680727616	2:40:28	-0.364014412	-0.315183177	-0.680754697
2:40:32	-0.36439017	-0.307268297	-0.680781777	2:40:36	-0.364765927	-0.290785448	-0.680808857
2:40:40	-0.365141685	-0.271446612	-0.680835938	2:40:44	-0.365517442	-0.251610121	-0.680863018
2:40:48	-0.3658932	-0.230280671	-0.680890099	2:40:52	-0.366268958	-0.208951221	-0.680917179
2:40:56	-0.366644715	-0.19337734	-0.68094426	2:41:00	-0.367020473	-0.179721981	-0.68097134
2:41:04	-0.366953276	-0.166518673	-0.68099842	2:41:08	-0.36688608	-0.155463627	-0.681025501
2:41:12	-0.366818883	-0.144408582	-0.681052581	2:41:16	-0.366751687	-0.135632251	-0.681079662
2:41:20	-0.366684491	-0.127615481	-0.681106742	2:41:24	-0.366617294	-0.121049669	-0.681133822
2:41:28	-0.366550098	-0.118836689	-0.681160903	2:41:32	-0.366482901	-0.116623709	-0.681187983
2:41:36	-0.366415705	-0.102097615	-0.681215064	2:41:40	-0.366348509	-0.083467145	-0.681242144
2:41:44	-0.366281312	-0.070609139	-0.681269224	2:41:48	-0.366214116	-0.075068528	-0.681296305
2:41:52	-0.366146919	-0.079527917	-0.681323385	2:41:56	-0.366079723	-0.086531779	-0.681350466
2:42:00	-0.366012526	-0.094383809	-0.681377546	2:42:04	-0.366271355	-0.10406254	-0.681404627
2:42:08	-0.366530183	-0.118638369	-0.681431707	2:42:12	-0.366789011	-0.133214206	-0.681458787
2:42:16	-0.367047839	-0.143336318	-0.681485868	2:42:20	-0.367306667	-0.151973842	-0.681512948
2:42:24	-0.367565495	-0.160063582	-0.681540029	2:42:28	-0.367824324	-0.166509963	-0.681567109
2:42:32	-0.368083152	-0.172956344	-0.681594189	2:42:36	-0.36834198	-0.181383677	-0.68162127
2:42:40	-0.368600808	-0.190471329	-0.68164835	2:42:44	-0.368859636	-0.20060328	-0.681675431
2:42:48	-0.369118464	-0.213868131	-0.681702511	2:42:52	-0.369377293	-0.227132981	-0.681729592
2:42:56	-0.369636121	-0.235717673	-0.681756672	2:43:00	-0.369894949	-0.242742312	-0.681783752
2:43:04	-0.370157061	-0.249938778	-0.681810833	2:43:08	-0.370419173	-0.257644845	-0.681837913
2:43:12	-0.370681286	-0.265350915	-0.681864994	2:43:16	-0.370943398	-0.273810809	-0.681892074
2:43:20	-0.37120551	-0.28252198	-0.681919154	2:43:24	-0.371467622	-0.290792307	-0.681946235
2:43:28	-0.371729734	-0.297740091	-0.681973315	2:43:32	-0.371991847	-0.304687884	-0.682000396
2:43:36	-0.372253959	-0.313292165	-0.682027476	2:43:40	-0.372516071	-0.322448599	-0.682054557
2:43:44	-0.372778183	-0.330847911	-0.682081637	2:43:48	-0.373040295	-0.336975837	-0.682108717
2:43:52	-0.373302408	-0.343103754	-0.682135798	2:43:56	-0.37356452	-0.334160888	-0.682162878

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
2:44:00	-0.373826632	-0.325218012	-0.682189959	2:44:04	-0.373523716	-0.314213842	-0.682217039
2:44:08	-0.373220799	-0.298036146	-0.682244119	2:44:12	-0.372917883	-0.281858454	-0.6822712
2:44:16	-0.372614967	-0.269948102	-0.68229828	2:44:20	-0.37231205	-0.2594602	-0.682325361
2:44:24	-0.372009134	-0.250999529	-0.682352441	2:44:28	-0.371706218	-0.248620548	-0.682379522
2:44:32	-0.371403301	-0.246241566	-0.682406602	2:44:36	-0.371100385	-0.240399987	-0.682433682
2:44:40	-0.370797469	-0.233404207	-0.682460763	2:44:44	-0.370494552	-0.226936751	-0.682487843
2:44:48	-0.370191636	-0.222054269	-0.682514924	2:44:52	-0.369888719	-0.217171786	-0.682542004
2:44:56	-0.369585803	-0.206251255	-0.682569084	2:45:00	-0.869282887	-0.693318041	-1.182596165
2:45:04	-0.869386895	-0.682491782	-1.182623245	2:45:08	-0.869490903	-0.677258698	-1.182650326
2:45:12	-0.369594911	-0.172025615	-0.682677406	2:45:16	-0.369698918	-0.165831769	-0.682704486
2:45:20	-0.369802926	-0.159317673	-0.682731567	2:45:24	-0.369906934	-0.153829498	-0.682758647
2:45:28	-0.370010942	-0.151419075	-0.682785728	2:45:32	-0.37011495	-0.149008652	-0.682812808
2:45:36	-0.370218958	-0.145526032	-0.682839889	2:45:40	-0.370322966	-0.140971223	-0.682866969
2:45:44	-0.370426974	-0.136416415	-0.682894049	2:45:48	-0.370530982	-0.137403473	-0.68292113
2:45:52	-0.37063499	-0.138390524	-0.68294821	2:45:56	-0.370738998	-0.135177509	-0.682975291
2:46:00	-0.370843006	-0.127764422	-0.683002371	2:46:04	-0.371401247	-0.120622096	-0.683029451
2:46:08	-0.371959489	-0.11201118	-0.683056532	2:46:12	-0.37251773	-0.103400265	-0.683083612
2:46:16	-0.373075972	-0.099955768	-0.683110693	2:46:20	-0.373634213	-0.101677683	-0.683137773
2:46:24	-0.3741192455	-0.103399597	-0.683164854	2:46:28	-0.374750696	-0.120362356	-0.683191934
2:46:32	-0.375308938	-0.137325115	-0.683219014	2:46:36	-0.37586718	-0.155200025	-0.683246095
2:46:40	-0.376425421	-0.173987081	-0.683273175	2:46:44	-0.376983663	-0.19277414	-0.683300256
2:46:48	-0.377541904	-0.214180509	-0.683327336	2:46:52	-0.378100146	-0.235586878	-0.683354416
2:46:56	-0.378658387	-0.250826861	-0.683381497	2:47:00	-0.379216629	-0.259900457	-0.683408577
2:47:04	-0.379297599	-0.26868956	-0.683435658	2:47:08	-0.379378569	-0.267618564	-0.683462738
2:47:12	-0.379459538	-0.266547569	-0.683489819	2:47:16	-0.379540508	-0.267192763	-0.683516899
2:47:20	-0.379621478	-0.269554156	-0.683543979	2:47:24	-0.379702448	-0.271915546	-0.68357106
2:47:28	-0.379783418	-0.278033472	-0.68359814	2:47:32	-0.379864388	-0.284151398	-0.683625221
2:47:36	-0.379945358	-0.284557799	-0.683652301	2:47:40	-0.380026328	-0.279252675	-0.683679381
2:47:44	-0.380107297	-0.273947552	-0.683706462	2:47:48	-0.380188267	-0.268642428	-0.683733542
2:47:52	-0.380269237	-0.263337302	-0.683760623	2:47:56	-0.380350207	-0.253402104	-0.683787703
2:48:00	-0.380431177	-0.238836828	-0.683814784	2:48:04	-0.38043548	-0.224225854	-0.683841864
2:48:08	-0.380439783	-0.22250115	-0.683868944	2:48:12	-0.380444086	-0.220776446	-0.683896025
2:48:16	-0.380448388	-0.217370097	-0.683923105	2:48:20	-0.380452691	-0.212282101	-0.683950186
2:48:24	-0.380456994	-0.207194105	-0.683977266	2:48:28	-0.380461297	-0.20210611	-0.684004346
2:48:32	-0.3804656	-0.197018115	-0.684031427	2:48:36	-0.380469903	-0.189994981	-0.684058507
2:48:40	-0.380474206	-0.181036709	-0.684085588	2:48:44	-0.380478508	-0.172078438	-0.684112668
2:48:48	-0.380482811	-0.177951331	-0.684139748	2:48:52	-0.380487114	-0.183824229	-0.684166829
2:48:56	-0.380491417	-0.185083446	-0.684193909	2:49:00	-0.38049572	-0.181728988	-0.68422099
2:49:04	-0.380588886	-0.178427501	-0.68424807	2:49:08	-0.380682053	-0.164935292	-0.684275151
2:49:12	-0.380775219	-0.151443088	-0.684302231	2:49:16	-0.380868386	-0.147010238	-0.684329311
2:49:20	-0.380961552	-0.145597183	-0.684356392	2:49:24	-0.381054719	-0.144184128	-0.684383472
2:49:28	-0.381147885	-0.143943605	-0.684410553	2:49:32	-0.381241052	-0.143703082	-0.684437633
2:49:36	-0.381334218	-0.144050225	-0.684464713	2:49:40	-0.381427385	-0.144985051	-0.684491794
2:49:44	-0.381520551	-0.145919868	-0.684518874	2:49:48	-0.381613718	-0.144104531	-0.684545955
2:49:52	-0.381706884	-0.142289185	-0.684573035	2:49:56	-0.381800051	-0.133504471	-0.684600116
2:50:00	-0.381893217	-0.117750372	-0.684627196	2:50:04	-0.382147239	-0.102092165	-0.684654276
2:50:08	-0.382401261	-0.090752325	-0.684681357	2:50:12	-0.382655283	-0.079412486	-0.684708437
2:50:16	-0.382909304	-0.067146404	-0.684735518	2:50:20	-0.383163326	-0.053954079	-0.684762598
2:50:24	-0.383417348	-0.040761755	-0.684789678	2:50:28	-0.38367137	-0.036793006	-0.684816759
2:50:32	-0.383925392	-0.032824257	-0.684843839	2:50:36	-0.384179413	-0.02562521	-0.68487092
2:50:40	-0.384433435	-0.015195847	-0.684898	2:50:44	-0.384687457	-0.004766485	-0.684925081
2:50:48	-0.384941479	0.013016558	-0.684952161	2:50:52	-0.385195501	0.03079962	-0.684979241
2:50:56	-0.385449522	0.051149183	-0.685006322	2:51:00	-0.385703544	0.074065284	-0.685033402
2:51:04	-0.385690555	0.097140528	-0.685060483	2:51:08	-0.385677566	0.109607332	-0.685087563
2:51:12	-0.385664576	0.122074135	-0.685114643	2:51:16	-0.385651587	0.128357294	-0.685141724
2:51:20	-0.385638598	0.12845681	-0.685168804	2:51:24	-0.385625609	0.128556325	-0.685195885
2:51:28	-0.385612619	0.132114024	-0.685222965	2:51:32	-0.38559963	0.135671687	-0.685250046

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
2:51:36	-0.385586641	0.136722182	-0.685277126	2:51:40	-0.385573652	0.135265509	-0.685304206
2:51:44	-0.385560662	0.133808836	-0.685331287	2:51:48	-0.385547673	0.128973637	-0.685358367
2:51:52	-0.385534684	0.124138402	-0.685385448	2:51:56	-0.385521695	0.111978638	-0.685412528
2:52:00	-0.385508706	0.09249431	-0.685439608	2:52:04	-0.384839204	0.073401318	-0.685466689
2:52:08	-0.384169703	0.038928446	-0.685493769	2:52:12	-0.383500201	0.004455575	-0.68552085
2:52:16	-0.3828307	-0.022605685	-0.68554793	2:52:20	-0.382161198	-0.04719639	-0.68557501
2:52:24	-0.381491697	-0.071787112	-0.685602091	2:52:28	-0.380822195	-0.099609599	-0.685629171
2:52:32	-0.380152694	-0.127432085	-0.685656252	2:52:36	-0.379483192	-0.147888491	-0.685683332
2:52:40	-0.378813691	-0.160978816	-0.685710413	2:52:44	-0.378144189	-0.174069141	-0.685737493
2:52:48	-0.377474688	-0.189653484	-0.685764573	2:52:52	-0.376805186	-0.205237828	-0.685791654
2:52:56	-0.376135685	-0.219104653	-0.685818734	2:53:00	-0.375466183	-0.232398973	-0.685845815
2:53:04	-0.375563416	-0.246150332	-0.685872895	2:53:08	-0.375660648	-0.263417377	-0.685899975
2:53:12	-0.37575788	-0.280684424	-0.685927056	2:53:16	-0.375855112	-0.288846267	-0.685954136
2:53:20	-0.375952344	-0.287902905	-0.685981217	2:53:24	-0.376049576	-0.286959543	-0.686008297
2:53:28	-0.376146808	-0.284351921	-0.686035378	2:53:32	-0.37624404	-0.276751525	-0.686062458
2:53:36	-0.376341272	-0.272272792	-0.686089538	2:53:40	-0.376438504	-0.270915716	-0.686116619
2:53:44	-0.376535736	-0.26955864	-0.686143699	2:53:48	-0.376632968	-0.260790726	-0.68617078
2:53:52	-0.3767302	-0.252022812	-0.68619786	2:53:56	-0.376827432	-0.243987325	-0.68622494
2:54:00	-0.376924664	-0.236684266	-0.686252021	2:54:04	-0.376661016	-0.229166092	-0.686279101
2:54:08	-0.376397368	-0.22969257	-0.686306182	2:54:12	-0.376133721	-0.230219047	-0.686333262
2:54:16	-0.375870073	-0.234746314	-0.686360343	2:54:20	-0.375606425	-0.243274373	-0.686387423
2:54:24	-0.375342777	-0.251802431	-0.686414503	2:54:28	-0.37507913	-0.268946538	-0.686441584
2:54:32	-0.374815482	-0.286090648	-0.686468664	2:54:36	-0.374551834	-0.305924057	-0.686495745
2:54:40	-0.374288186	-0.32665391	-0.686522825	2:54:44	-0.374024539	-0.347383754	-0.686549905
2:54:48	-0.373760891	-0.361880958	-0.686576986	2:54:52	-0.373497243	-0.376378171	-0.686604066
2:54:56	-0.373233595	-0.38708969	-0.686631147	2:55:00	-0.372969947	-0.394015516	-0.686658227
2:55:04	-0.373145328	-0.40120304	-0.686685307	2:55:08	-0.373320709	-0.412076615	-0.686712388
2:55:12	-0.37349609	-0.422950191	-0.686739468	2:55:16	-0.37367147	-0.439623835	-0.686766549
2:55:20	-0.373846851	-0.46209753	-0.686793629	2:55:24	-0.374022232	-0.484571243	-0.68682071
2:55:28	-0.374197612	-0.508202504	-0.68684779	2:55:32	-0.374372993	-0.531833747	-0.68687487
2:55:36	-0.374548374	-0.548754498	-0.686901951	2:55:40	-0.374723755	-0.56343846	-0.686929031
2:55:44	-0.374899135	-0.575414939	-0.686956112	2:55:48	-0.375074516	-0.579269148	-0.686983192
2:55:52	-0.375249897	-0.583123392	-0.687010272	2:55:56	-0.375425278	-0.590233551	-0.687037353
2:56:00	-0.375600658	-0.59842899	-0.687064433	2:56:04	-0.375564315	-0.604812461	-0.687091514
2:56:08	-0.375527971	-0.606138499	-0.687118594	2:56:12	-0.375491628	-0.607446536	-0.687145675
2:56:16	-0.375455284	-0.611055005	-0.687172755	2:56:20	-0.375418941	-0.615400296	-0.687199835
2:56:24	-0.375382597	-0.622305054	-0.687226916	2:56:28	-0.375346254	-0.63688832	-0.687253996
2:56:32	-0.37530991	-0.651471587	-0.687281077	2:56:36	-0.375273567	-0.655442647	-0.687308157
2:56:40	-0.375237223	-0.655876292	-0.687335237	2:56:44	-0.37520088	-0.654761815	-0.687362318
2:56:48	-0.375164536	-0.649002791	-0.687389398	2:56:52	-0.375128193	-0.643243804	-0.687416479
2:56:56	-0.375091849	-0.631257436	-0.687443559	2:57:00	-0.375055506	-0.617195262	-0.68747064
2:57:04	-0.375278769	-0.599483915	-0.68749772	2:57:08	-0.375502033	-0.57036088	-0.6875248
2:57:12	-0.375725297	-0.541237844	-0.687551881	2:57:16	-0.375948561	-0.510924253	-0.687578961
2:57:20	-0.376171824	-0.480213781	-0.687606042	2:57:24	-0.376395088	-0.456258746	-0.687633122
2:57:28	-0.376618352	-0.439059129	-0.687660202	2:57:32	-0.376841616	-0.421859513	-0.687687283
2:57:36	-0.377064879	-0.392918441	-0.687714363	2:57:40	-0.377288143	-0.360063566	-0.687741444
2:57:44	-0.377511407	-0.330287126	-0.687768524	2:57:48	-0.377734671	-0.309746014	-0.687795605
2:57:52	-0.377957934	-0.289204906	-0.687822685	2:57:56	-0.378181198	-0.274247905	-0.687849765
2:58:00	-0.378404462	-0.259290903	-0.687876846	2:58:04	-0.379096306	-0.243940888	-0.687903926
2:58:08	-0.37978815	-0.226573887	-0.687931007	2:58:12	-0.380479994	-0.209206887	-0.687958087
2:58:16	-0.381171838	-0.192221573	-0.687985167	2:58:20	-0.381863683	-0.175363487	-0.688012248
2:58:24	-0.382555527	-0.160640393	-0.688039328	2:58:28	-0.383247371	-0.152322274	-0.688066409
2:58:32	-0.383939215	-0.144004156	-0.688093489	2:58:36	-0.384631059	-0.130181378	-0.688120569
2:58:40	-0.385322904	-0.11452371	-0.68814765	2:58:44	-0.386014748	-0.095529396	-0.68817473
2:58:48	-0.386706592	-0.066525116	-0.688201811	2:58:52	-0.387398436	-0.037520836	-0.688228891
2:58:56	-0.38809028	-0.020028173	-0.688255972	2:59:00	-0.388782124	-0.006372685	-0.688283052
2:59:04	-0.388816566	0.005015099	-0.688310132	2:59:08	-0.388851009	0.008424257	-0.688337213

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
2:59:12	-0.388885451	0.011833416	-0.688364293	2:59:16	-0.388919893	0.013284372	-0.688391374
2:59:20	-0.388954335	0.014082563	-0.688418454	2:59:24	-0.388988777	0.017947795	-0.688445534
2:59:28	-0.389023219	0.031014095	-0.688472615	2:59:32	-0.389057661	0.044080394	-0.688499695
2:59:36	-0.389092103	0.053830361	-0.688526776	2:59:40	-0.389136319	0.06246904	-0.688567099
2:59:44	-0.389186316	0.07084347	-0.688615255	2:59:48	-0.389236312	0.078435436	-0.68866341
2:59:52	-0.389286309	0.086027401	-0.688711566	2:59:56	-0.389336306	0.108689093	-0.688759721
3:00:00	0.110613698	0.636374003	-0.188807877	3:00:04	0.10984584	0.658977365	-0.188856032
3:00:08	0.109077982	0.667619662	-0.188904188	3:00:12	-0.391689876	0.176261958	-0.688952343
3:00:16	-0.392457733	0.182497919	-0.689000499	3:00:20	-0.393225591	0.187931767	-0.689048654
3:00:24	-0.393993449	0.1905109	-0.68909681	3:00:28	-0.394761307	0.184525811	-0.689144965
3:00:32	-0.395529165	0.178540722	-0.689193121	3:00:36	-0.396297022	0.16438181	-0.689241277
3:00:40	-0.39706488	0.147498254	-0.689289432	3:00:44	-0.397832738	0.131453725	-0.689337588
3:00:48	-0.398600596	0.117926241	-0.689385743	3:00:52	-0.399368454	0.104398757	-0.689433899
3:00:56	-0.400136311	0.091270162	-0.689482054	3:01:00	-0.400904169	0.078274588	-0.68953021
3:01:04	-0.400834458	0.069220828	-0.689578365	3:01:08	-0.400764747	0.07049479	-0.689626521
3:01:12	-0.400695036	0.071768787	-0.689674676	3:01:16	-0.400625325	0.07355583	-0.689722832
3:01:20	-0.400555614	0.075513875	-0.689770987	3:01:24	-0.400485904	0.075897079	-0.689819143
3:01:28	-0.400416193	0.07155569	-0.689867298	3:01:32	-0.400346482	0.0672143	-0.689915454
3:01:36	-0.400276771	0.055240005	-0.689963609	3:01:40	-0.40020706	0.040721395	-0.690011765
3:01:44	-0.400137349	0.025409947	-0.69005992	3:01:48	-0.400067638	0.007719983	-0.690108076
3:01:52	-0.399997927	-0.009969982	-0.690156231	3:01:56	-0.399928216	-0.022497435	-0.690204387
3:02:00	-0.399858505	-0.033304039	-0.690252542	3:02:04	-0.401225519	-0.046442855	-0.690300698
3:02:08	-0.402592534	-0.064009061	-0.690348853	3:02:12	-0.403959548	-0.081575268	-0.690397009
3:02:16	-0.405326562	-0.105593472	-0.690445164	3:02:20	-0.406693577	-0.131762351	-0.69049332
3:02:24	-0.408060591	-0.155724561	-0.690541475	3:02:28	-0.409427605	-0.173066791	-0.690589631
3:02:32	-0.41079462	-0.190409019	-0.690637786	3:02:36	-0.412161634	-0.207751244	-0.690685942
3:02:40	-0.413528648	-0.225093474	-0.690734097	3:02:44	-0.414895663	-0.241114479	-0.690782253
3:02:48	-0.416262677	-0.25317182	-0.690830408	3:02:52	-0.417629691	-0.265229161	-0.690878564
3:02:56	-0.418996706	-0.27026174	-0.690926719	3:03:00	-0.42036372	-0.272952731	-0.690974875
3:03:04	-0.420413716	-0.276562507	-0.69102303	3:03:08	-0.420463713	-0.285283806	-0.691071186
3:03:12	-0.42051371	-0.294005104	-0.691119341	3:03:16	-0.420563706	-0.285280522	-0.691167497
3:03:20	-0.420613703	-0.270740647	-0.691215652	3:03:24	-0.420663699	-0.25620077	-0.691263808
3:03:28	-0.420713696	-0.246613369	-0.691311963	3:03:32	-0.420763693	-0.241978445	-0.691360119
3:03:36	-0.420813689	-0.24308665	-0.691408274	3:03:40	-0.420863686	-0.24610923	-0.69145643
3:03:44	-0.420913682	-0.248984011	-0.691504585	3:03:48	-0.420963679	-0.251415388	-0.691552741
3:03:52	-0.421013676	-0.253846767	-0.691600896	3:03:56	-0.421063672	-0.244015686	-0.691649052
3:04:00	-0.421113669	-0.230097118	-0.691697207	3:04:04	-0.421370615	-0.214126618	-0.691745363
3:04:08	-0.421627561	-0.191630235	-0.691793518	3:04:12	-0.421884507	-0.16913385	-0.691841674
3:04:16	-0.422141453	-0.156723299	-0.691889829	3:04:20	-0.422398399	-0.147674682	-0.691937985
3:04:24	-0.422655345	-0.140764678	-0.69198614	3:04:28	-0.422912291	-0.140270502	-0.692034296
3:04:32	-0.423169237	-0.139776327	-0.692082451	3:04:36	-0.423426183	-0.154451058	-0.692130607
3:04:40	-0.423683129	-0.174182094	-0.692178762	3:04:44	-0.423940075	-0.194732514	-0.692226918
3:04:48	-0.424197022	-0.217741098	-0.692275073	3:04:52	-0.424453968	-0.240749683	-0.692323229
3:04:56	-0.424710914	-0.263353981	-0.692371384	3:05:00	-0.42496786	-0.285823516	-0.69241954
3:05:04	-0.425067095	-0.304388448	-0.692467695	3:05:08	-0.425166329	-0.311521589	-0.692515851
3:05:12	-0.425265564	-0.31865473	-0.692564007	3:05:16	-0.425364799	-0.319562272	-0.692612162
3:05:20	-0.425464034	-0.318394615	-0.692660318	3:05:24	-0.425563268	-0.316394204	-0.692708473
3:05:28	-0.425662503	-0.311895537	-0.692756629	3:05:32	-0.425761738	-0.307396867	-0.692804784
3:05:36	-0.425860973	-0.297702633	-0.69285294	3:05:40	-0.425960208	-0.282812831	-0.692901095
3:05:44	-0.426059442	-0.26792303	-0.692949251	3:05:48	-0.426158677	-0.259716446	-0.692997406
3:05:52	-0.426257912	-0.251509862	-0.693045562	3:05:56	-0.426357147	-0.252782442	-0.693093717
3:06:00	-0.426456382	-0.263534185	-0.693141873	3:06:04	-0.426787944	-0.274424416	-0.693190028
3:06:08	-0.427119506	-0.314435293	-0.693238184	3:06:12	-0.427451068	-0.35444617	-0.693286339
3:06:16	-0.427782631	-0.393189252	-0.693334495	3:06:20	-0.428114193	-0.43066452	-0.69338265
3:06:24	-0.428445755	-0.468139806	-0.693430806	3:06:28	-0.428777317	-0.483309022	-0.693478961
3:06:32	-0.42910888	-0.498478237	-0.693527117	3:06:36	-0.429440442	-0.51628766	-0.693575272
3:06:40	-0.429772004	-0.536737255	-0.693623428	3:06:44	-0.430103566	-0.55718685	-0.693671583

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
3:06:48	-0.430435129	-0.563628107	-0.693719739	3:06:52	-0.430766691	-0.570069364	-0.693767894
3:06:56	-0.431098253	-0.578935219	-0.69381605	3:07:00	-0.431429815	-0.590225671	-0.693864205
3:07:04	-0.431564285	-0.601398675	-0.693912361	3:07:08	-0.431698754	-0.599562445	-0.693960516
3:07:12	-0.431833224	-0.59772618	-0.694008672	3:07:16	-0.431967693	-0.597483301	-0.694056827
3:07:20	-0.432102163	-0.598833775	-0.694104983	3:07:24	-0.432236632	-0.600184248	-0.694153138
3:07:28	-0.432371102	-0.600156252	-0.694201294	3:07:32	-0.432505571	-0.60012822	-0.694249449
3:07:36	-0.43264004	-0.596429041	-0.694297605	3:07:40	-0.43277451	-0.589058645	-0.69434576
3:07:44	-0.432908979	-0.581688248	-0.694393916	3:07:48	-0.433043449	-0.576215016	-0.694442071
3:07:52	-0.433177918	-0.570741818	-0.694490227	3:07:56	-0.433312388	-0.564357469	-0.694538382
3:08:00	-0.433446857	-0.557062004	-0.694586538	3:08:04	-0.433604003	-0.549780038	-0.694634693
3:08:08	-0.433761149	-0.53593032	-0.694682849	3:08:12	-0.433918296	-0.522080602	-0.694731004
3:08:16	-0.434075442	-0.507530208	-0.69477916	3:08:20	-0.434232588	-0.492746262	-0.694827315
3:08:24	-0.434389734	-0.477962298	-0.694875471	3:08:28	-0.43454688	-0.455464563	-0.694923626
3:08:32	-0.434704026	-0.432966828	-0.694971782	3:08:36	-0.434861172	-0.410093974	-0.695019937
3:08:40	-0.435018318	-0.38684599	-0.695068093	3:08:44	-0.435175465	-0.363598016	-0.695116248
3:08:48	-0.435332611	-0.327931289	-0.695164404	3:08:52	-0.435489757	-0.292264561	-0.695212559
3:08:56	-0.435646903	-0.255756076	-0.695260715	3:09:00	-0.435804049	-0.218967004	-0.69530887
3:09:04	-0.435721238	-0.182034899	-0.695357026	3:09:08	-0.435638427	-0.154699656	-0.695405181
3:09:12	-0.43555616	-0.127364412	-0.695453337	3:09:16	-0.435472805	-0.100334393	-0.695501492
3:09:20	-0.435389994	-0.073609589	-0.695549648	3:09:24	-0.435307183	-0.046884785	-0.695597803
3:09:28	-0.435224372	-0.023517527	-0.695645959	3:09:32	-0.435141561	-0.00015027	-0.695694114
3:09:36	-0.43505875	0.013468536	-0.69574227	3:09:40	-0.434975939	0.017338855	-0.695790425
3:09:44	-0.434893128	0.021209173	-0.695838581	3:09:48	-0.434810317	0.010476019	-0.695886737
3:09:52	-0.434727506	-0.000257136	-0.695934892	3:09:56	-0.434644695	-0.003488043	-0.695983048
3:10:00	-0.434561884	0.000783296	-0.696031203	3:10:04	-0.435087192	0.004692127	-0.696079359
3:10:08	-0.4356125	0.006467169	-0.696127514	3:10:12	-0.436137807	0.008242229	-0.69617567
3:10:16	-0.436663115	0.006234899	-0.696223825	3:10:20	-0.437188423	0.000445216	-0.696271981
3:10:24	-0.437713731	-0.005344468	-0.696320136	3:10:28	-0.438239038	-0.007785736	-0.696368292
3:10:32	-0.438764346	-0.010227022	-0.696416447	3:10:36	-0.439289654	-0.008183413	-0.696464603
3:10:40	-0.439814962	-0.001654946	-0.696512758	3:10:44	-0.440340269	0.004873522	-0.696560914
3:10:48	-0.440865577	0.000458773	-0.696609069	3:10:52	-0.441390885	-0.003955976	-0.696657225
3:10:56	-0.441916193	-0.007549427	-0.69670538	3:11:00	-0.4424415	-0.010321581	-0.696753536
3:11:04	-0.442527183	-0.012831681	-0.696801691	3:11:08	-0.442612866	-0.024887999	-0.696849847
3:11:12	-0.442698549	-0.036944317	-0.696898002	3:11:16	-0.442784232	-0.046620591	-0.696946158
3:11:20	-0.442869915	-0.053916821	-0.696994313	3:11:24	-0.442955598	-0.060253651	-0.697042469
3:11:28	-0.443041281	-0.063712315	-0.697090624	3:11:32	-0.443126964	-0.067170962	-0.69713878
3:11:36	-0.443212647	-0.075636092	-0.697186935	3:11:40	-0.44329833	-0.089107706	-0.697235091
3:11:44	-0.443384013	-0.102579302	-0.697283246	3:11:48	-0.443469696	-0.113764386	-0.697331402
3:11:52	-0.443555379	-0.12494947	-0.697379557	3:11:56	-0.443641062	-0.138876677	-0.697427713
3:12:00	-0.443726745	-0.155546018	-0.697475868	3:12:04	-0.444198465	-0.172445469	-0.697524024
3:12:08	-0.444670184	-0.169805897	-0.697572179	3:12:12	-0.445141904	-0.167166324	-0.697620335
3:12:16	-0.445613623	-0.165110349	-0.69766849	3:12:20	-0.446085342	-0.163637972	-0.697716646
3:12:24	-0.446557062	-0.162165584	-0.697764801	3:12:28	-0.447028781	-0.166001859	-0.697812957
3:12:32	-0.447500501	-0.169838134	-0.697861112	3:12:36	-0.44797222	-0.170914626	-0.697909268
3:12:40	-0.44844394	-0.169231345	-0.697957423	3:12:44	-0.448915659	-0.167548065	-0.698005579
3:12:48	-0.449387379	-0.173435186	-0.698053734	3:12:52	-0.449859098	-0.179322315	-0.69810189
3:12:56	-0.450330817	-0.19115466	-0.698150045	3:13:00	-0.450802537	-0.20893222	-0.698198201
3:13:04	-0.450803747	-0.226429322	-0.698246356	3:13:08	-0.450804957	-0.228896557	-0.698294512
3:13:12	-0.450806167	-0.231363787	-0.698342667	3:13:16	-0.450807377	-0.236237279	-0.698390823
3:13:20	-0.450808588	-0.243517032	-0.698438978	3:13:24	-0.450809798	-0.250796785	-0.698487134
3:13:28	-0.450811008	-0.258076537	-0.698535289	3:13:32	-0.450812218	-0.273180512	-0.698583445
3:13:36	-0.450813428	-0.286873297	-0.6986316	3:13:40	-0.450814638	-0.296332512	-0.698679756
3:13:44	-0.450815848	-0.305791727	-0.698727911	3:13:48	-0.450817058	-0.318004753	-0.698776067
3:13:52	-0.450818269	-0.330217779	-0.698824222	3:13:56	-0.450819479	-0.342152557	-0.698872378
3:14:00	-0.450820689	-0.35380909	-0.698920533	3:14:04	-0.450912764	-0.365519778	-0.698968689
3:14:08	-0.451004839	-0.373730926	-0.699016844	3:14:12	-0.451096914	-0.381942073	-0.699065
3:14:16	-0.451188989	-0.394754999	-0.699113155	3:14:20	-0.451281063	-0.412169701	-0.699161311

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
3:14:24	-0.451373138	-0.429584404	-0.699209467	3:14:28	-0.451465213	-0.441886807	-0.699257622
3:14:32	-0.451557288	-0.45418921	-0.699305778	3:14:36	-0.451649363	-0.462416497	-0.699353933
3:14:40	-0.451741438	-0.466568686	-0.699402089	3:14:44	-0.451833513	-0.470720857	-0.699450244
3:14:48	-0.451925588	-0.472412155	-0.6994984	3:14:52	-0.452017663	-0.47410347	-0.699546555
3:14:56	-0.452109738	-0.47474578	-0.699594711	3:15:00	-0.952201813	-0.974339119	-1.199642866
3:15:04	-0.952272137	-0.973919494	-1.199691022	3:15:08	-0.952342461	-0.983866549	-1.199739177
3:15:12	-0.452412786	-0.493813587	-0.699787333	3:15:16	-0.45248311	-0.503760643	-0.699835488
3:15:20	-0.452553434	-0.51370768	-0.699883644	3:15:24	-0.452623758	-0.523654735	-0.699931799
3:15:28	-0.452694083	-0.519125477	-0.699979955	3:15:32	-0.452764407	-0.514596236	-0.70002811
3:15:36	-0.452834731	-0.507420126	-0.700076266	3:15:40	-0.452905056	-0.497597146	-0.700124421
3:15:44	-0.45297538	-0.487774166	-0.700172577	3:15:48	-0.453045704	-0.467279556	-0.700220732
3:15:52	-0.453116028	-0.446784929	-0.700268888	3:15:56	-0.453186353	-0.437537152	-0.700317043
3:16:00	-0.453256677	-0.439536191	-0.700365199	3:16:04	-0.453434079	-0.441599075	-0.700413354
3:16:08	-0.45361148	-0.43276509	-0.70046151	3:16:12	-0.453788882	-0.423931105	-0.700509665
3:16:16	-0.453966283	-0.411339415	-0.700557821	3:16:20	-0.454143685	-0.394989993	-0.700605976
3:16:24	-0.454321086	-0.378640571	-0.700654132	3:16:28	-0.454498488	-0.359909355	-0.700702287
3:16:32	-0.454675889	-0.341178139	-0.700750443	3:16:36	-0.454853291	-0.333264295	-0.700798598
3:16:40	-0.455030692	-0.328956236	-0.700846754	3:16:44	-0.455208094	-0.324648183	-0.700894909
3:16:48	-0.455385495	-0.314874151	-0.700943065	3:16:52	-0.455562897	-0.305100121	-0.700991122
3:16:56	-0.455740299	-0.296274594	-0.701039376	3:17:00	-0.4559177	-0.28839757	-0.701087531
3:17:04	-0.455878707	-0.280391557	-0.701135687	3:17:08	-0.455839713	-0.266253592	-0.701183842
3:17:12	-0.45580072	-0.252115628	-0.701231998	3:17:16	-0.455761726	-0.231754925	-0.701280153
3:17:20	-0.455722732	-0.205171479	-0.701328309	3:17:24	-0.455683739	-0.178588039	-0.701376464
3:17:28	-0.455644745	-0.165606901	-0.70142462	3:17:32	-0.455605752	-0.152625773	-0.701472775
3:17:36	-0.455566758	-0.143368091	-0.701520931	3:17:40	-0.455527765	-0.137833864	-0.701569086
3:17:44	-0.455488771	-0.131519588	-0.701617242	3:17:48	-0.455449778	-0.122865133	-0.701665397
3:17:52	-0.455410784	-0.114210678	-0.701713553	3:17:56	-0.455371791	-0.101048608	-0.701761708
3:18:00	-0.455332797	-0.086384017	-0.701809864	3:18:04	-0.456145227	-0.072226945	-0.701858019
3:18:08	-0.456957656	-0.061173208	-0.701906175	3:18:12	-0.457770086	-0.05011947	-0.70195433
3:18:16	-0.458582516	-0.044849067	-0.702002486	3:18:20	-0.459394945	-0.045361998	-0.702050641
3:18:24	-0.460207375	-0.045874912	-0.702098797	3:18:28	-0.461019805	-0.053203377	-0.702146952
3:18:32	-0.461832234	-0.060531843	-0.702195108	3:18:36	-0.462644664	-0.067414895	-0.702243263
3:18:40	-0.463457094	-0.073852496	-0.702291419	3:18:44	-0.464269523	-0.080290098	-0.702339574
3:18:48	-0.465081953	-0.08479728	-0.70238773	3:18:52	-0.465894383	-0.089304463	-0.702435885
3:18:56	-0.466706812	-0.093811645	-0.702484041	3:19:00	-0.467519242	-0.098318827	-0.702532197
3:19:04	-0.467721019	-0.101347505	-0.702580352	3:19:08	-0.467922795	-0.10103267	-0.702628508
3:19:12	-0.468124572	-0.100717835	-0.702676663	3:19:16	-0.468326349	-0.096819345	-0.702724819
3:19:20	-0.468528126	-0.08933718	-0.702772974	3:19:24	-0.468729902	-0.081855017	-0.70282113
3:19:28	-0.468931679	-0.071323186	-0.702869285	3:19:32	-0.469133456	-0.060791373	-0.702917441
3:19:36	-0.469335232	-0.060741446	-0.702965596	3:19:40	-0.469537009	-0.071173439	-0.703013752
3:19:44	-0.469738786	-0.081605432	-0.703061907	3:19:48	-0.469940563	-0.085714985	-0.703110063
3:19:52	-0.470142339	-0.089824538	-0.703158218	3:19:56	-0.470344116	-0.087551713	-0.703206374
3:20:00	-0.470545893	-0.083151405	-0.703254529	3:20:04	-0.47155195	-0.079230534	-0.703302685
3:20:08	-0.472558008	-0.074590566	-0.70335084	3:20:12	-0.473564066	-0.069950581	-0.703398996
3:20:16	-0.474570123	-0.071124591	-0.703447151	3:20:20	-0.475576181	-0.078112598	-0.703495307
3:20:24	-0.476582239	-0.085100605	-0.703543462	3:20:28	-0.477588297	-0.091501346	-0.703591618
3:20:32	-0.478594354	-0.097902087	-0.703639773	3:20:36	-0.479600412	-0.109267334	-0.703687929
3:20:40	-0.48060647	-0.125597105	-0.703736084	3:20:44	-0.481612528	-0.141926867	-0.70378424
3:20:48	-0.482618585	-0.150693201	-0.703832395	3:20:52	-0.483624643	-0.159459534	-0.703880551
3:20:56	-0.484630701	-0.169734783	-0.703928706	3:21:00	-0.485636758	-0.181518949	-0.703976862
3:21:04	-0.485648358	-0.192710342	-0.704025017	3:21:08	-0.485659958	-0.193274144	-0.704073173
3:21:12	-0.485671558	-0.193837938	-0.704121328	3:21:16	-0.485683158	-0.197774396	-0.704169484
3:21:20	-0.485694758	-0.205083509	-0.704217639	3:21:24	-0.485706357	-0.212392622	-0.704265795
3:21:28	-0.485717957	-0.214862888	-0.70431395	3:21:32	-0.485729557	-0.217333145	-0.704362106
3:21:36	-0.485741157	-0.216149829	-0.704410261	3:21:40	-0.485752757	-0.211312926	-0.704458417
3:21:44	-0.485764357	-0.206476028	-0.704506572	3:21:48	-0.485775956	-0.210900429	-0.704554728
3:21:52	-0.485787556	-0.21532483	-0.704602883	3:21:56	-0.485799156	-0.222374454	-0.704651039

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
3:22:00	-0.485810756	-0.232049297	-0.704699194	3:22:04	-0.485734644	-0.241671857	-0.70474735
3:22:08	-0.485658532	-0.25721236	-0.704795505	3:22:12	-0.48558242	-0.272752864	-0.704843661
3:22:16	-0.485506308	-0.286715861	-0.704891816	3:22:20	-0.485430196	-0.299101349	-0.704939972
3:22:24	-0.485354085	-0.311486838	-0.704988127	3:22:28	-0.485277973	-0.312252174	-0.705036283
3:22:32	-0.485201861	-0.313017511	-0.705084438	3:22:36	-0.485125749	-0.315773011	-0.705132594
3:22:40	-0.485049637	-0.320518676	-0.705180749	3:22:44	-0.484973525	-0.32526434	-0.705228905
3:22:48	-0.484897413	-0.326006405	-0.70527706	3:22:52	-0.484821301	-0.326748469	-0.705325216
3:22:56	-0.484745189	-0.324208647	-0.705373371	3:23:00	-0.484669077	-0.318386932	-0.705421527
3:23:04	-0.484659446	-0.312604845	-0.705469682	3:23:08	-0.484649815	-0.306822758	-0.705517838
3:23:12	-0.484640184	-0.301040672	-0.705565993	3:23:16	-0.484630552	-0.296351601	-0.705614149
3:23:20	-0.484620921	-0.292755545	-0.705662304	3:23:24	-0.48461129	-0.289159489	-0.70571046
3:23:28	-0.484601658	-0.285563434	-0.705758615	3:23:32	-0.484592027	-0.271770053	-0.705806771
3:23:36	-0.484582396	-0.255617778	-0.705854927	3:23:40	-0.484572764	-0.232388823	-0.705903082
3:23:44	-0.484563133	-0.209159868	-0.705951238	3:23:48	-0.484553502	-0.195608071	-0.705999393
3:23:52	-0.48454387	-0.182056274	-0.706047549	3:23:56	-0.484534239	-0.166837614	-0.706095704
3:24:00	-0.484524608	-0.149952084	-0.70614386	3:24:04	-0.484685567	-0.13316824	-0.706192015
3:24:08	-0.484846525	-0.117854016	-0.706240171	3:24:12	-0.485007484	-0.10253981	-0.706288326
3:24:16	-0.485168443	-0.094342801	-0.706336482	3:24:20	-0.485329401	-0.093263025	-0.706384637
3:24:24	-0.48549036	-0.092183248	-0.706432793	3:24:28	-0.485651319	-0.08433592	-0.706480948
3:24:32	-0.485812277	-0.076488609	-0.706529104	3:24:36	-0.485973236	-0.070147319	-0.706577259
3:24:40	-0.486134195	-0.065312084	-0.706625415	3:24:44	-0.486295154	-0.060476832	-0.70667357
3:24:48	-0.486456112	-0.052945609	-0.706721726	3:24:52	-0.486617071	-0.045414368	-0.706769881
3:24:56	-0.48677803	-0.035131356	-0.706818037	3:25:00	-0.486938988	-0.022096539	-0.706866192
3:25:04	-0.486985371	-0.008993443	-0.706914348	3:25:08	-0.487031754	0.002214195	-0.706962503
3:25:12	-0.487078137	0.013421833	-0.707010659	3:25:16	-0.487124519	0.023885485	-0.707058814
3:25:20	-0.487170902	0.033605223	-0.70710697	3:25:24	-0.487217285	0.043324925	-0.707155125
3:25:28	-0.487263668	0.056849044	-0.707203281	3:25:32	-0.487310051	0.070373164	-0.707251436
3:25:36	-0.487356433	0.08124075	-0.707299592	3:25:40	-0.487401973	0.089452305	-0.707346605
3:25:44	-0.487425113	0.097677212	-0.707363268	3:25:48	-0.487448252	0.102133196	-0.70737993
3:25:52	-0.487471391	0.10658918	-0.707396593	3:25:56	-0.48749453	0.114663621	-0.707413255
3:26:00	-0.487517669	0.126356518	-0.707429917	3:26:04	-0.487550326	0.138043742	-0.70744658
3:26:08	-0.487582983	0.145503464	-0.707463242	3:26:12	-0.48761564	0.152963186	-0.707479904
3:26:16	-0.487648297	0.156680667	-0.707496567	3:26:20	-0.487680954	0.156655942	-0.707513229
3:26:24	-0.487713611	0.156631217	-0.707529891	3:26:28	-0.487746268	0.149861981	-0.707546554
3:26:32	-0.487778925	0.143092745	-0.707563216	3:26:36	-0.487811582	0.132365143	-0.707597878
3:26:40	-0.487844239	0.117679209	-0.707596541	3:26:44	-0.487876896	0.102993275	-0.707613203
3:26:48	-0.487909553	0.096320431	-0.707629865	3:26:52	-0.48794221	0.089647621	-0.707646528
3:26:56	-0.487974867	0.076698685	-0.70766319	3:27:00	-0.488007525	0.057473657	-0.707679852
3:27:04	-0.488055509	0.038239492	-0.707696515	3:27:08	-0.488103493	0.016277238	-0.707713177
3:27:12	-0.488151477	-0.005685016	-0.70772984	3:27:16	-0.488199461	-0.025616108	-0.707746502
3:27:20	-0.488247445	-0.043516054	-0.707763164	3:27:24	-0.488295429	-0.061416	-0.707779827
3:27:28	-0.488343413	-0.065185015	-0.707796489	3:27:32	-0.488391397	-0.068954028	-0.707813151
3:27:36	-0.488439381	-0.069650371	-0.707829814	3:27:40	-0.488487366	-0.067274041	-0.707846476
3:27:44	-0.48853535	-0.064897694	-0.707863138	3:27:48	-0.488583334	-0.074397814	-0.707879801
3:27:52	-0.488631318	-0.083897935	-0.707896463	3:27:56	-0.488679302	-0.095932438	-0.707913125
3:28:00	-0.488727286	-0.11050129	-0.707929788	3:28:04	-0.488839348	-0.125108337	-0.70794645
3:28:08	-0.488951409	-0.141996389	-0.707963112	3:28:12	-0.489063471	-0.158884442	-0.707979775
3:28:16	-0.489175532	-0.175302529	-0.707996437	3:28:20	-0.489287594	-0.19156395	-0.708013099
3:28:24	-0.489399655	-0.20664933	-0.708029762	3:28:28	-0.489511717	-0.218206537	-0.708046424
3:28:32	-0.489623778	-0.229763744	-0.708063087	3:28:36	-0.48973584	-0.239827949	-0.708079749
3:28:40	-0.489847901	-0.24839915	-0.708096411	3:28:44	-0.489959963	-0.25697035	-0.708113074
3:28:48	-0.490072024	-0.255602631	-0.708129736	3:28:52	-0.490184086	-0.254234912	-0.708146398
3:28:56	-0.490296147	-0.253201178	-0.708163061	3:29:00	-0.490408209	-0.252501433	-0.708179723
3:29:04	-0.490448062	-0.251758646	-0.708196385	3:29:08	-0.490487915	-0.247372639	-0.708213048
3:29:12	-0.490527768	-0.242986632	-0.70822971	3:29:16	-0.490567621	-0.238336783	-0.708246372
3:29:20	-0.490607474	-0.233423093	-0.708263035	3:29:24	-0.490647327	-0.228509403	-0.708279697
3:29:28	-0.49068718	-0.239225582	-0.708296359	3:29:32	-0.490727033	-0.249941761	-0.708313022

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
3:29:36	-0.490766886	-0.263146013	-0.708329684	3:29:40	-0.490806739	-0.278838341	-0.708346346
3:29:44	-0.490846592	-0.294530668	-0.708363009	3:29:48	-0.490886445	-0.302464063	-0.708379671
3:29:52	-0.490926298	-0.310397458	-0.708396334	3:29:56	-0.490966151	-0.314412568	-0.708412996
3:30:00	0.008993996	0.185490603	-0.208429658	3:30:04	0.008778435	0.18528904	-0.208446321
3:30:08	0.008562874	0.188026702	-0.208462983	3:30:12	-0.491652687	-0.309235637	-0.708479645
3:30:16	-0.491868248	-0.316136799	-0.708496308	3:30:20	-0.49208381	-0.332676788	-0.70851297
3:30:24	-0.492299371	-0.349216774	-0.708529632	3:30:28	-0.492514932	-0.37061618	-0.708546295
3:30:32	-0.492730493	-0.392015585	-0.708562957	3:30:36	-0.492946054	-0.407898926	-0.708579619
3:30:40	-0.493161615	-0.41826622	-0.708596282	3:30:44	-0.493377176	-0.428633506	-0.708612944
3:30:48	-0.493592737	-0.42839991	-0.708629606	3:30:52	-0.493808298	-0.428166313	-0.708646269
3:30:56	-0.494023859	-0.425037186	-0.708662931	3:31:00	-0.49423942	-0.41901251	-0.708679593
3:31:04	-0.494192994	-0.412831666	-0.708696256	3:31:08	-0.494146567	-0.396509869	-0.708712918
3:31:12	-0.49410014	-0.380188082	-0.708729581	3:31:16	-0.494053714	-0.366274277	-0.708746243
3:31:20	-0.494007287	-0.354768469	-0.708762905	3:31:24	-0.49396086	-0.343262656	-0.708779568
3:31:28	-0.493914433	-0.35391282	-0.70879623	3:31:32	-0.493868007	-0.364562989	-0.708812892
3:31:36	-0.49382158	-0.373889376	-0.708829555	3:31:40	-0.493775153	-0.381891996	-0.708846217
3:31:44	-0.493728726	-0.389894607	-0.708862879	3:31:48	-0.4936823	-0.397897218	-0.708879542
3:31:52	-0.493635873	-0.405899837	-0.708896204	3:31:56	-0.493589446	-0.416275181	-0.708912866
3:32:00	-0.493543019	-0.42902325	-0.708929529	3:32:04	-0.493795807	-0.441949677	-0.708946191
3:32:08	-0.494048595	-0.453309301	-0.708962853	3:32:12	-0.494301383	-0.464668925	-0.708979516
3:32:16	-0.494554171	-0.473526266	-0.708996178	3:32:20	-0.494806959	-0.479881324	-0.709012841
3:32:24	-0.495059747	-0.486236383	-0.709029503	3:32:28	-0.495312534	-0.494542556	-0.709046165
3:32:32	-0.495565322	-0.502848748	-0.709062828	3:32:36	-0.49581811	-0.513131635	-0.70907949
3:32:40	-0.496070898	-0.525391237	-0.709096152	3:32:44	-0.496323686	-0.537650839	-0.709112815
3:32:48	-0.496576474	-0.547304145	-0.709129477	3:32:52	-0.496829262	-0.556957434	-0.709146139
3:32:56	-0.49708205	-0.564888701	-0.709162802	3:33:00	-0.497334837	-0.571097929	-0.709179464
3:33:04	-0.497405408	-0.57719854	-0.709196126	3:33:08	-0.497475978	-0.576930203	-0.709212789
3:33:12	-0.497546549	-0.576661867	-0.709229451	3:33:16	-0.497617119	-0.572710872	-0.709246113
3:33:20	-0.49768769	-0.5675323	-0.709262776	3:33:24	-0.49775826	-0.562353746	-0.709279438
3:33:28	-0.49782883	-0.549057221	-0.7092961	3:33:32	-0.497899401	-0.535760678	-0.709312763
3:33:36	-0.497969971	-0.526751557	-0.709329425	3:33:40	-0.498040542	-0.530604667	-0.709346088
3:33:44	-0.498111112	-0.534457777	-0.70936275	3:33:48	-0.498181683	-0.549519028	-0.709379412
3:33:52	-0.498252253	-0.564580279	-0.709396075	3:33:56	-0.498322823	-0.571764342	-0.709412737
3:34:00	-0.498393394	-0.571071215	-0.709429399	3:34:04	-0.498500916	-0.570400115	-0.709446062
3:34:08	-0.498608437	-0.563961669	-0.709462724	3:34:12	-0.498715959	-0.557523223	-0.709479386
3:34:16	-0.498823481	-0.549636473	-0.709496049	3:34:20	-0.498931002	-0.540301403	-0.709512711
3:34:24	-0.499038524	-0.530966333	-0.709529373	3:34:28	-0.499146046	-0.539131805	-0.709546036
3:34:32	-0.499253567	-0.547297258	-0.709562698	3:34:36	-0.499361089	-0.554878218	-0.70957936
3:34:40	-0.499468611	-0.561874665	-0.709596023	3:34:44	-0.499576132	-0.568871112	-0.709612685
3:34:48	-0.499683654	-0.567342421	-0.709629347	3:34:52	-0.499791175	-0.565813712	-0.70964601
3:34:56	-0.499898697	-0.560203207	-0.709662672	3:35:00	-0.500006219	-0.550510907	-0.709679335
3:35:04	-0.500004061	-0.540753228	-0.709695997	3:35:08	-0.500001904	-0.539565669	-0.709712659
3:35:12	-0.499999746	-0.538378109	-0.709729322	3:35:16	-0.499997589	-0.544664143	-0.709745984
3:35:20	-0.499995431	-0.55842375	-0.709762646	3:35:24	-0.499993274	-0.572183358	-0.709779309
3:35:28	-0.499991116	-0.586714718	-0.709795971	3:35:32	-0.499988958	-0.601246059	-0.709812633
3:35:36	-0.499986801	-0.612546286	-0.709829296	3:35:40	-0.499984643	-0.622769439	-0.709845958
3:35:44	-0.499982486	-0.632992592	-0.70986262	3:35:48	-0.499980328	-0.639033862	-0.709879283
3:35:52	-0.499978171	-0.645075133	-0.709895945	3:35:56	-0.499976013	-0.648035507	-0.709912607
3:36:00	-0.499973856	-0.647914949	-0.70992927	3:36:04	-0.500003653	-0.647813439	-0.709945932
3:36:08	-0.500033451	-0.656473977	-0.709962594	3:36:12	-0.500063248	-0.665134515	-0.709979257
3:36:16	-0.500093046	-0.668524408	-0.709995919	3:36:20	-0.500122844	-0.666643657	-0.710012582
3:36:24	-0.500152641	-0.664762905	-0.710029244	3:36:28	-0.500182439	-0.669147408	-0.710045906
3:36:32	-0.500212236	-0.673531912	-0.710062569	3:36:36	-0.500242034	-0.675837057	-0.710079231
3:36:40	-0.500271832	-0.676062843	-0.710095893	3:36:44	-0.500301629	-0.679159974	-0.710112556
3:36:48	-0.500331427	-0.690871174	-0.710129218	3:36:52	-0.500361224	-0.702582374	-0.71014588
3:36:56	-0.500391022	-0.714293573	-0.710162543	3:37:00	-0.50042082	-0.726004773	-0.710179205
3:37:04	-0.500469707	-0.737727352	-0.710195867	3:37:08	-0.500518595	-0.751048575	-0.71021253

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
3:37:12	-0.500567482	-0.7643698	-0.710229192	3:37:16	-0.50061637	-0.771525927	-0.710245854
3:37:20	-0.500665257	-0.772517026	-0.710262517	3:37:24	-0.500714145	-0.773508126	-0.710279179
3:37:28	-0.500763032	-0.782823694	-0.710295841	3:37:32	-0.50081192	-0.792139262	-0.710312504
3:37:36	-0.500860808	-0.798450819	-0.710329166	3:37:40	-0.500909695	-0.801758366	-0.710345829
3:37:44	-0.500958583	-0.805065911	-0.710362491	3:37:48	-0.50100747	-0.790392132	-0.710379153
3:37:52	-0.501056358	-0.775718317	-0.710395816	3:37:56	-0.501105245	-0.763366456	-0.710412478
3:38:00	-0.501154133	-0.753336476	-0.71042914	3:38:04	-0.500997381	-0.743183954	-0.710445803
3:38:08	-0.500840629	-0.733031395	-0.710462465	3:38:12	-0.500683877	-0.722878838	-0.710479127
3:38:16	-0.500527125	-0.713225397	-0.71049579	3:38:20	-0.500370373	-0.704071037	-0.710512452
3:38:24	-0.500213621	-0.694916642	-0.710529114	3:38:28	-0.50005687	-0.685762283	-0.710545777
3:38:32	-0.499900118	-0.676607924	-0.710562439	3:38:36	-0.499743366	-0.672645547	-0.710579101
3:38:40	-0.499586614	-0.670413844	-0.710595764	3:38:44	-0.499429862	-0.66818214	-0.710612426
3:38:48	-0.49927311	-0.660655099	-0.710629088	3:38:52	-0.499116358	-0.653128022	-0.710645751
3:38:56	-0.498959606	-0.651802567	-0.710662413	3:39:00	-0.498802854	-0.656678663	-0.710679076
3:39:04	-0.498811086	-0.661653139	-0.710695738	3:39:08	-0.498819319	-0.671361233	-0.7107124
3:39:12	-0.498827551	-0.681069327	-0.710729063	3:39:16	-0.498835783	-0.683007708	-0.710745725
3:39:20	-0.498844015	-0.677176378	-0.710762387	3:39:24	-0.498852247	-0.669876084	-0.71077905
3:39:28	-0.498860479	-0.658168829	-0.710795712	3:39:32	-0.498868712	-0.646461575	-0.710812374
3:39:36	-0.498876944	-0.633613898	-0.710829037	3:39:40	-0.498885176	-0.619625868	-0.710845699
3:39:44	-0.498893408	-0.605637839	-0.710862361	3:39:48	-0.49890164	-0.596649223	-0.710879024
3:39:52	-0.498909872	-0.587660572	-0.710895686	3:39:56	-0.498918105	-0.576192448	-0.710912348
3:40:00	-0.498926337	-0.562244798	-0.710929011	3:40:04	-0.498722429	-0.548170713	-0.710945673
3:40:08	-0.498518522	-0.526996519	-0.710962335	3:40:12	-0.498314614	-0.505822327	-0.710978998
3:40:16	-0.498110706	-0.48309088	-0.71099566	3:40:20	-0.497906799	-0.458802179	-0.711012323
3:40:24	-0.497702891	-0.434513461	-0.711028985	3:40:28	-0.497498983	-0.416154671	-0.711045647
3:40:32	-0.497295076	-0.397795873	-0.71106231	3:40:36	-0.497091168	-0.380220879	-0.711078972
3:40:40	-0.49688726	-0.363429678	-0.711095634	3:40:44	-0.496683353	-0.346638481	-0.711112297
3:40:48	-0.496479445	-0.318954295	-0.711128959	3:40:52	-0.496275537	-0.29127011	-0.711145621
3:40:56	-0.49607163	-0.267244344	-0.711162284	3:41:00	-0.495867722	-0.246876998	-0.711178946
3:41:04	-0.495877309	-0.226636916	-0.711195608	3:41:08	-0.495886897	-0.214248584	-0.711212271
3:41:12	-0.495896484	-0.201860249	-0.711228933	3:41:16	-0.495906072	-0.186371723	-0.711245595
3:41:20	-0.495915659	-0.167782991	-0.711262258	3:41:24	-0.495925246	-0.149194268	-0.71127892
3:41:28	-0.495934834	-0.131995818	-0.711295582	3:41:32	-0.495944421	-0.114797378	-0.711312245
3:41:36	-0.495954008	-0.091919439	-0.711328907	3:41:40	-0.495963596	-0.063362017	-0.71134557
3:41:44	-0.495973183	-0.041483252	-0.711362232	3:41:48	-0.49598277	-0.039640462	-0.711378894
3:41:52	-0.495992358	-0.03779767	-0.711395557	3:41:56	-0.496001945	-0.027894518	-0.711412219
3:42:00	-0.496011532	-0.009931024	-0.711428881	3:42:04	-0.495977885	0.008058243	-0.711445544
3:42:08	-0.495944238	0.02142286	-0.711462206	3:42:12	-0.49591059	0.034787441	-0.711478868
3:42:16	-0.495876943	0.049615834	-0.711495531	3:42:20	-0.495843295	0.065908003	-0.711512193
3:42:24	-0.495809648	0.082200172	-0.711528855	3:42:28	-0.495776001	0.09149724	-0.711545518
3:42:32	-0.495742353	0.100794308	-0.71156218	3:42:36	-0.495708706	0.110091377	-0.711578842
3:42:40	-0.495675058	0.119388445	-0.711595505	3:42:44	-0.495641411	0.128685514	-0.711612167
3:42:48	-0.495607764	0.136250098	-0.711628829	3:42:52	-0.495574116	0.143814646	-0.711645492
3:42:56	-0.495540469	0.142867628	-0.711662154	3:43:00	-0.495506821	0.133408972	-0.711678817
3:43:04	-0.495496081	0.123936698	-0.711695479	3:43:08	-0.495485341	0.104466058	-0.711712141
3:43:12	-0.4954746	0.084995418	-0.711728804	3:43:16	-0.49546386	0.068234997	-0.711745466
3:43:20	-0.49545312	0.054184864	-0.711762128	3:43:24	-0.495442379	0.040134698	-0.711778791
3:43:28	-0.495431639	0.023745416	-0.711795453	3:43:32	-0.495420899	0.007356135	-0.711812115
3:43:36	-0.495410158	-0.004634784	-0.711828778	3:43:40	-0.495399418	-0.003430596	-0.71184544
3:43:44	-0.495388678	-0.002226409	-0.711862102	3:43:48	-0.495377937	-0.003198984	-0.711878765
3:43:52	-0.495367197	-0.004171542	-0.711895427	3:43:56	-0.495356457	-0.003793964	-0.711912089
3:44:00	-0.495345716	-0.002066215	-0.711928752	3:44:04	-0.495273171	-0.001044883	-0.711945414
3:44:08	-0.495200625	-0.00225327	-0.711962076	3:44:12	-0.49512808	-0.003461656	-0.711978739
3:44:16	-0.495055534	-0.001972828	-0.711995401	3:44:20	-0.494982988	0.002213215	-0.712012064
3:44:24	-0.494910443	0.006399258	-0.712028726	3:44:28	-0.494837897	0.004793617	-0.712045388
3:44:32	-0.494765352	0.003187976	-0.712062051	3:44:36	-0.494692806	-0.003837018	-0.712078713
3:44:40	-0.494620261	-0.016281383	-0.712095375	3:44:44	-0.494547715	-0.028725767	-0.712112038

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
3:44:48	-0.494475169	-0.048564476	-0.7121287	3:44:52	-0.494402624	-0.068403186	-0.712145362
3:44:56	-0.494330078	-0.085874997	-0.712162025	3:45:00	-0.994257533	-0.600979911	-1.212178687
3:45:04	-0.994291513	-0.616148341	-1.212195349	3:45:08	-0.994325494	-0.62988984	-1.212212012
3:45:12	-0.494359474	-0.143631356	-0.712228674	3:45:16	-0.494393455	-0.154025744	-0.712245336
3:45:20	-0.494427436	-0.161073032	-0.712261999	3:45:24	-0.494461416	-0.16812032	-0.712278661
3:45:28	-0.494495397	-0.181532629	-0.712295323	3:45:32	-0.494529377	-0.194944938	-0.712311986
3:45:36	-0.494563358	-0.209664899	-0.712328648	3:45:40	-0.494597338	-0.225692527	-0.712345311
3:45:44	-0.494631319	-0.241720157	-0.712361973	3:45:48	-0.4946653	-0.264159306	-0.712378635
3:45:52	-0.49469928	-0.286598456	-0.712395298	3:45:56	-0.494733261	-0.30957065	-0.71241196
3:46:00	-0.494767241	-0.333075885	-0.712428622	3:46:04	-0.494665831	-0.356500417	-0.712445285
3:46:08	-0.49456442	-0.37152812	-0.712461947	3:46:12	-0.494463009	-0.386555818	-0.712478609
3:46:16	-0.494361598	-0.395018829	-0.712495272	3:46:20	-0.494260187	-0.396917151	-0.712511934
3:46:24	-0.494158776	-0.398815473	-0.712528596	3:46:28	-0.494057365	-0.409096097	-0.712545259
3:46:32	-0.493955954	-0.419376712	-0.712561921	3:46:36	-0.493854543	-0.432221821	-0.712578583
3:46:40	-0.493753132	-0.445921759	-0.712595246	3:46:44	-0.493651722	-0.461862546	-0.712611908
3:46:48	-0.493550311	-0.484525886	-0.71262857	3:46:52	-0.4934489	-0.507189226	-0.712645233
3:46:56	-0.493347489	-0.517493913	-0.712661895	3:47:00	-0.493246078	-0.515439926	-0.712678558
3:47:04	-0.493210041	-0.513424926	-0.71269522	3:47:08	-0.493174004	-0.513418864	-0.712711882
3:47:12	-0.493137967	-0.513412803	-0.712728545	3:47:16	-0.49310193	-0.511459748	-0.712745207
3:47:20	-0.493065893	-0.507559682	-0.712761869	3:47:24	-0.493029856	-0.503659633	-0.712778532
3:47:28	-0.492993819	-0.506936471	-0.712795194	3:47:32	-0.492957782	-0.510213309	-0.712811856
3:47:36	-0.492921745	-0.522949744	-0.712828519	3:47:40	-0.492885708	-0.545145777	-0.712845181
3:47:44	-0.492849671	-0.56734181	-0.712861843	3:47:48	-0.492813634	-0.596769675	-0.712878506
3:47:52	-0.492777597	-0.626197594	-0.712895168	3:47:56	-0.49274156	-0.649663892	-0.71291183
3:48:00	-0.492705523	-0.66716864	-0.712928493	3:48:04	-0.492879118	-0.684798346	-0.712945155
3:48:08	-0.493052714	-0.702428053	-0.712961817	3:48:12	-0.49322631	-0.72005776	-0.71297848
3:48:16	-0.493399905	-0.735510722	-0.712995142	3:48:20	-0.493573501	-0.748786939	-0.713011805
3:48:24	-0.493747097	-0.762063157	-0.713028467	3:48:28	-0.493920692	-0.765302353	-0.713045129
3:48:32	-0.494094288	-0.76854155	-0.713061792	3:48:36	-0.494267884	-0.771780711	-0.713078454
3:48:40	-0.49444148	-0.775019907	-0.713095116	3:48:44	-0.494615075	-0.778259104	-0.713111779
3:48:48	-0.494788671	-0.773604732	-0.713128441	3:48:52	-0.494962267	-0.76895036	-0.713145103
3:48:56	-0.495135862	-0.762083822	-0.713161766	3:49:00	-0.495309458	-0.75300508	-0.713178428
3:49:04	-0.495284262	-0.743807913	-0.71319509	3:49:08	-0.495259067	-0.734610675	-0.713211753
3:49:12	-0.495233871	-0.725413508	-0.713228415	3:49:16	-0.495208676	-0.714575238	-0.713245077
3:49:20	-0.49518348	-0.7020959	-0.71326174	3:49:24	-0.495158284	-0.689616562	-0.713278402
3:49:28	-0.495133089	-0.666157075	-0.713295064	3:49:32	-0.495107893	-0.642697587	-0.713311727
3:49:36	-0.495082698	-0.618017381	-0.713328389	3:49:40	-0.495057502	-0.592116455	-0.713345052
3:49:44	-0.495032306	-0.566215511	-0.713361714	3:49:48	-0.495007111	-0.550932797	-0.713378376
3:49:52	-0.494981915	-0.5356501	-0.713395039	3:49:56	-0.49495672	-0.517845526	-0.713411701
3:50:00	-0.494931524	-0.497519111	-0.713428363	3:50:04	-0.49506422	-0.477286812	-0.713445026
3:50:08	-0.495196917	-0.458380897	-0.713461688	3:50:12	-0.495329613	-0.439474992	-0.71347835
3:50:16	-0.49546231	-0.429069647	-0.713495013	3:50:20	-0.495595006	-0.427164863	-0.713511675
3:50:24	-0.495727702	-0.425260088	-0.713528337	3:50:28	-0.495860399	-0.418164254	-0.713545
3:50:32	-0.495993095	-0.411068429	-0.713561662	3:50:36	-0.496125791	-0.405808141	-0.713578324
3:50:40	-0.496258488	-0.402383409	-0.713594987	3:50:44	-0.496391184	-0.398958669	-0.713611649
3:50:48	-0.496523881	-0.396814301	-0.713628311	3:50:52	-0.496656577	-0.394669934	-0.713644974
3:50:56	-0.496789273	-0.389966313	-0.713661636	3:51:00	-0.49692197	-0.382703428	-0.713678299
3:51:04	-0.496968599	-0.375389249	-0.713694961	3:51:08	-0.497015228	-0.367459168	-0.713711623
3:51:12	-0.497061857	-0.359529091	-0.713728286	3:51:16	-0.497108485	-0.352192049	-0.713744948
3:51:20	-0.497155114	-0.345448041	-0.71376161	3:51:24	-0.497201743	-0.338704034	-0.713778273
3:51:28	-0.497248372	-0.335983691	-0.713794935	3:51:32	-0.497295001	-0.333263348	-0.713811597
3:51:36	-0.49734163	-0.330884375	-0.71382826	3:51:40	-0.497388259	-0.328846772	-0.713844922
3:51:44	-0.497434888	-0.326809169	-0.713861584	3:51:48	-0.497481517	-0.315780062	-0.713878247
3:51:52	-0.497528146	-0.304750956	-0.713894909	3:51:56	-0.497574775	-0.287357562	-0.713911571
3:52:00	-0.497621404	-0.263599881	-0.713928234	3:52:04	-0.497816434	-0.23993066	-0.713944896
3:52:08	-0.498011464	-0.20887734	-0.713961558	3:52:12	-0.498206494	-0.17782403	-0.713978221
3:52:16	-0.498401524	-0.146164597	-0.713994883	3:52:20	-0.498596554	-0.113899032	-0.714011546

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
3:52:24	-0.498791584	-0.081633485	-0.714028208	3:52:28	-0.498986614	-0.055344286	-0.71404487
3:52:32	-0.499181645	-0.029055104	-0.714061533	3:52:36	-0.499376675	-0.010881922	-0.714078195
3:52:40	-0.499571705	-0.000824776	-0.714094857	3:52:44	-0.499766735	0.009232371	-0.71411152
3:52:48	-0.499961765	0.02473669	-0.714128182	3:52:52	-0.500156795	0.040241045	-0.714144844
3:52:56	-0.500351825	0.051443464	-0.714161507	3:53:00	-0.500546855	0.058344018	-0.714178169
3:53:04	-0.500515336	0.06537958	-0.714194831	3:53:08	-0.500483816	0.063761031	-0.714211494
3:53:12	-0.500452296	0.062142518	-0.714228156	3:53:16	-0.500420776	0.061428583	-0.714244818
3:53:20	-0.500389257	0.061619264	-0.714261481	3:53:24	-0.500357737	0.061809943	-0.714278143
3:53:28	-0.500326217	0.061414175	-0.714294805	3:53:32	-0.500294697	0.061018442	-0.714311468
3:53:36	-0.500263178	0.061184925	-0.71432813	3:53:40	-0.500231658	0.063038239	-0.714344793
3:53:44	-0.500200138	0.064891553	-0.714361455	3:53:48	-0.500168618	0.065927904	-0.714378117
3:53:52	-0.500137098	0.06696429	-0.71439478	3:53:56	-0.500105579	0.062229741	-0.714411442
3:54:00	-0.500074059	0.051724258	-0.714428104	3:54:04	-0.499918594	0.041292657	-0.714444767
3:54:08	-0.49976313	0.03373446	-0.714461429	3:54:12	-0.499607665	0.026176264	-0.714478091
3:54:16	-0.499452201	0.021573296	-0.714494754	3:54:20	-0.499296736	0.019925629	-0.714511416
3:54:24	-0.499141272	0.018277962	-0.714528078	3:54:28	-0.498985808	0.017888569	-0.714544741
3:54:32	-0.498830343	0.017499141	-0.714561403	3:54:36	-0.498674879	0.019578935	-0.714578065
3:54:40	-0.498519414	0.024127952	-0.714594728	3:54:44	-0.49836395	0.028676933	-0.71461139
3:54:48	-0.498208485	0.028697407	-0.714628052	3:54:52	-0.498053021	0.028717881	-0.714644715
3:54:56	-0.497897556	0.026597957	-0.714661377	3:55:00	-0.497742092	0.022337636	-0.71467804
3:55:04	-0.497766586	0.017970044	-0.714694702	3:55:08	-0.49779108	0.01117295	-0.714711364
3:55:12	-0.497815575	0.004375858	-0.714728027	3:55:16	-0.497840069	-0.012578222	-0.714744689
3:55:20	-0.497864563	-0.039689234	-0.714761351	3:55:24	-0.497889058	-0.066800264	-0.714778014
3:55:28	-0.497913552	-0.093328719	-0.714794676	3:55:32	-0.497938046	-0.119857191	-0.714811338
3:55:36	-0.497962541	-0.144017505	-0.714828001	3:55:40	-0.497987035	-0.165809685	-0.714844663
3:55:44	-0.498011529	-0.187601857	-0.714861325	3:55:48	-0.498036023	-0.197341459	-0.714877988
3:55:52	-0.498060518	-0.207081062	-0.71489465	3:55:56	-0.498085012	-0.219060092	-0.714911312
3:56:00	-0.498109506	-0.23327855	-0.714927975	3:56:04	-0.49821575	-0.247545736	-0.714944637
3:56:08	-0.498321993	-0.258301454	-0.714961299	3:56:12	-0.498428236	-0.26905717	-0.714977962
3:56:16	-0.49853448	-0.277094308	-0.714994624	3:56:20	-0.498640723	-0.282412866	-0.715011287
3:56:24	-0.498746966	-0.287731423	-0.715027949	3:56:28	-0.498853209	-0.288073195	-0.715044611
3:56:32	-0.498959453	-0.288414967	-0.715061274	3:56:36	-0.499065696	-0.278263586	-0.715077936
3:56:40	-0.499171939	-0.257619053	-0.715094598	3:56:44	-0.499278182	-0.236974518	-0.715111261
3:56:48	-0.499384426	-0.229589392	-0.715127923	3:56:52	-0.499490669	-0.222204267	-0.715144585
3:56:56	-0.499596912	-0.213929441	-0.715161248	3:57:00	-0.499703156	-0.204764905	-0.71517791
3:57:04	-0.499708677	-0.19554034	-0.715194572	3:57:08	-0.499714199	-0.186315774	-0.715211235
3:57:12	-0.499719721	-0.1770912	-0.715227897	3:57:16	-0.499725243	-0.163979034	-0.715244559
3:57:20	-0.499730765	-0.146979267	-0.715261222	3:57:24	-0.499736286	-0.129979499	-0.715277884
3:57:28	-0.499741808	-0.120391664	-0.715294547	3:57:32	-0.49974733	-0.11080381	-0.715311209
3:57:36	-0.499752852	-0.110760807	-0.715327871	3:57:40	-0.499758374	-0.120262618	-0.715344534
3:57:44	-0.499763895	-0.12976443	-0.715361196	3:57:48	-0.499769417	-0.14234513	-0.715377858
3:57:52	-0.499774939	-0.154925822	-0.715394521	3:57:56	-0.499780461	-0.166710212	-0.715411183
3:58:00	-0.499785983	-0.177698289	-0.715427845	3:58:04	-0.499755398	-0.188664844	-0.715444508
3:58:08	-0.499724813	-0.198421498	-0.71546117	3:58:12	-0.499694229	-0.208178152	-0.715477832
3:58:16	-0.499663644	-0.217389608	-0.715494495	3:58:20	-0.499633059	-0.226055865	-0.715511157
3:58:24	-0.499602475	-0.234722122	-0.715527819	3:58:28	-0.49957189	-0.246609741	-0.715544482
3:58:32	-0.499541305	-0.25849736	-0.715561144	3:58:36	-0.49951072	-0.263485848	-0.715577806
3:58:40	-0.499480136	-0.261575208	-0.715594469	3:58:44	-0.499449551	-0.259664567	-0.715611131
3:58:48	-0.499418966	-0.272300805	-0.715627794	3:58:52	-0.499388382	-0.284937043	-0.715644456
3:58:56	-0.499357797	-0.296395492	-0.715661118	3:59:00	-0.499327212	-0.306676155	-0.715677781
3:59:04	-0.499408172	-0.317023308	-0.715694443	3:59:08	-0.499489133	-0.312378148	-0.715711105
3:59:12	-0.499570093	-0.30773299	-0.715727768	3:59:16	-0.499651053	-0.305218899	-0.71574443
3:59:20	-0.499732013	-0.304835876	-0.715761092	3:59:24	-0.499812973	-0.304452853	-0.715777755
3:59:28	-0.499893933	-0.299478184	-0.715794417	3:59:32	-0.499974893	-0.294503515	-0.715811079
3:59:36	-0.500055854	-0.282425169	-0.715827742	3:59:40	-0.500136814	-0.263243146	-0.715844404
3:59:44	-0.500217774	-0.244061124	-0.715861066	3:59:48	-0.500298734	-0.225558339	-0.715877729
3:59:52	-0.500379694	-0.207055554	-0.715894391	3:59:56	-0.500460654	-0.189299505	-0.715911053

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
4:00:00	-0.000541614	0.287620717	-0.215927716	4:00:04	-0.000564921	0.278902315	-0.215944378
4:00:08	-0.000588227	0.282682671	-0.215961041	4:00:12	-0.500611533	-0.213536975	-0.715977703
4:00:16	-0.50063484	-0.209756611	-0.715994365	4:00:20	-0.500658146	-0.205976256	-0.716011028
4:00:24	-0.500681452	-0.202195902	-0.71602769	4:00:28	-0.500704758	-0.20904177	-0.716044352
4:00:32	-0.500728065	-0.21588763	-0.716061015	4:00:36	-0.500751371	-0.230819217	-0.716077677
4:00:40	-0.500774677	-0.248446044	-0.716094339	4:00:44	-0.500797984	-0.266072873	-0.716111002
4:00:48	-0.50082129	-0.27938486	-0.716127664	4:00:52	-0.500844596	-0.292696848	-0.716144326
4:00:56	-0.500867902	-0.301548068	-0.716160989	4:01:00	-0.500891209	-0.305938518	-0.716177651
4:01:04	-0.500940096	-0.310344217	-0.716194313	4:01:08	-0.500988984	-0.301995314	-0.716210976
4:01:12	-0.501037871	-0.293646411	-0.716227638	4:01:16	-0.501086759	-0.289072039	-0.7162443
4:01:20	-0.501135646	-0.288272201	-0.716260963	4:01:24	-0.501184534	-0.287472361	-0.716277625
4:01:28	-0.501233422	-0.294316882	-0.716294288	4:01:32	-0.501282309	-0.301161403	-0.71631095
4:01:36	-0.501331197	-0.308931688	-0.716327612	4:01:40	-0.501380084	-0.317010562	-0.716344275
4:01:44	-0.501428972	-0.325089436	-0.716360937	4:01:48	-0.501477859	-0.338180781	-0.716377599
4:01:52	-0.501526747	-0.351272126	-0.716394262	4:01:56	-0.501575634	-0.36018821	-0.716410924
4:02:00	-0.501624522	-0.367712546	-0.716427586	4:02:04	-0.501660407	-0.37510991	-0.716444249
4:02:08	-0.501296292	-0.380052959	-0.716460911	4:02:12	-0.501132177	-0.384996009	-0.716477573
4:02:16	-0.500968062	-0.398818897	-0.716494236	4:02:20	-0.500803947	-0.421521631	-0.716510898
4:02:24	-0.500639832	-0.444224355	-0.71652756	4:02:28	-0.500475717	-0.468890373	-0.716544223
4:02:32	-0.500311602	-0.4935564	-0.716560885	4:02:36	-0.500147486	-0.519736441	-0.716577547
4:02:40	-0.499983371	-0.547430497	-0.71659421	4:02:44	-0.499819256	-0.574875526	-0.716610872
4:02:48	-0.499655141	-0.601573444	-0.716627535	4:02:52	-0.499491026	-0.628271362	-0.716644197
4:02:56	-0.499326911	-0.657034888	-0.716660859	4:03:00	-0.499162796	-0.687864023	-0.716677522
4:03:04	-0.499191808	-0.718808277	-0.716694184	4:03:08	-0.499220819	-0.72730143	-0.716710846
4:03:12	-0.499249831	-0.735794583	-0.716727509	4:03:16	-0.499278843	-0.737339854	-0.716744171
4:03:20	-0.499307854	-0.731937172	-0.716760833	4:03:24	-0.499336866	-0.72653449	-0.716777496
4:03:28	-0.499365877	-0.713334063	-0.716794158	4:03:32	-0.499394889	-0.692335856	-0.71681082
4:03:36	-0.4994239	-0.664947365	-0.716827483	4:03:40	-0.499452912	-0.631168627	-0.716844145
4:03:44	-0.499481924	-0.597389853	-0.716860807	4:03:48	-0.499510935	-0.55694928	-0.71687747
4:03:52	-0.499539947	-0.516508725	-0.716894132	4:03:56	-0.499568958	-0.476433999	-0.716910794
4:04:00	-0.49959797	-0.436725118	-0.716927457	4:04:04	-0.499614469	-0.397008779	-0.716944119
4:04:08	-0.499630968	-0.373467184	-0.716960782	4:04:12	-0.499647466	-0.349925598	-0.716977444
4:04:16	-0.499663965	-0.335247466	-0.716994106	4:04:20	-0.499680464	-0.329432796	-0.717010769
4:04:24	-0.499696963	-0.323618127	-0.717027431	4:04:28	-0.499713461	-0.316572721	-0.717044093
4:04:32	-0.49972996	-0.309527317	-0.717060756	4:04:36	-0.499746459	-0.298762799	-0.717077418
4:04:40	-0.499762958	-0.284279167	-0.71709408	4:04:44	-0.499779456	-0.269795536	-0.717110743
4:04:48	-0.499795955	-0.263684667	-0.717127405	4:04:52	-0.499812454	-0.257573795	-0.717144067
4:04:56	-0.499828953	-0.249819331	-0.71716073	4:05:00	-0.499845451	-0.240421277	-0.717177392
4:05:04	-0.499861815	-0.231023138	-0.717194054	4:05:08	-0.499878178	-0.213438091	-0.717210717
4:05:12	-0.499894541	-0.195853053	-0.717227379	4:05:16	-0.499910904	-0.183461215	-0.717244041
4:05:20	-0.499927268	-0.172800449	-0.717260704	4:05:24	-0.499943631	-0.162139684	-0.717277366
4:05:28	-0.499959994	-0.147706388	-0.717294029	4:05:32	-0.499976357	-0.133273119	-0.717310691
4:05:36	-0.499992721	-0.121511323	-0.717327353	4:05:40	-0.500009084	-0.11242102	-0.717344016
4:05:44	-0.500025447	-0.103330734	-0.717360678	4:05:48	-0.50004181	-0.097580923	-0.71737734
4:05:52	-0.500058174	-0.091831112	-0.717394003	4:05:56	-0.500074537	-0.086972875	-0.717410665
4:06:00	-0.5000909	-0.082411842	-0.717427327	4:06:04	-0.500083317	-0.077836535	-0.71744399
4:06:08	-0.500075735	-0.070248086	-0.717460652	4:06:12	-0.500068152	-0.062659619	-0.717477314
4:06:16	-0.500060569	-0.05150082	-0.717493977	4:06:20	-0.500052986	-0.036771654	-0.717510639
4:06:24	-0.500045403	-0.022042505	-0.717527301	4:06:28	-0.500037821	-0.005139809	-0.717543964
4:06:32	-0.500030238	0.011762887	-0.717560626	4:06:36	-0.500022655	0.021191865	-0.717577288
4:06:40	-0.500015072	0.023147056	-0.717593951	4:06:44	-0.50000749	0.025102283	-0.717610613
4:06:48	-0.499999907	0.015426106	-0.717627276	4:06:52	-0.499992324	0.005749894	-0.717643938
4:06:56	-0.499984741	-0.008861869	-0.7176606	4:07:00	-0.499977159	-0.028409198	-0.717677263
4:07:04	-0.500000298	-0.04797484	-0.717693925	4:07:08	-0.500023437	-0.060242653	-0.717710587
4:07:12	-0.500046576	-0.072510449	-0.71772725	4:07:16	-0.500069715	-0.083084345	-0.717743912
4:07:20	-0.500092854	-0.091964341	-0.717760574	4:07:24	-0.500115993	-0.100844337	-0.717777237
4:07:28	-0.500139133	-0.11243933	-0.717793899	4:07:32	-0.500162272	-0.124034341	-0.717810561

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
4:07:36	-0.500185411	-0.140779162	-0.717827224	4:07:40	-0.50020855	-0.162673818	-0.717843886
4:07:44	-0.500231689	-0.184568466	-0.717860548	4:07:48	-0.500254828	-0.207799464	-0.717877211
4:07:52	-0.500277967	-0.231030457	-0.717893873	4:07:56	-0.500301107	-0.256073183	-0.717910535
4:08:00	-0.500324246	-0.282927642	-0.717927198	4:08:04	-0.500259519	-0.309729724	-0.71794386
4:08:08	-0.500194793	-0.337981638	-0.717960523	4:08:12	-0.500130067	-0.366233549	-0.717977185
4:08:16	-0.500065341	-0.386931463	-0.717993847	4:08:20	-0.500000615	-0.405111374	-0.71801051
4:08:24	-0.499935889	-0.423291285	-0.718027172	4:08:28	-0.499871162	-0.433034285	-0.718043834
4:08:32	-0.499806436	-0.442777294	-0.718060497	4:08:36	-0.49974171	-0.452960602	-0.718077159
4:08:40	-0.499676984	-0.463584198	-0.718093821	4:08:44	-0.499612258	-0.474207795	-0.718110484
4:08:48	-0.499547531	-0.503893628	-0.718127146	4:08:52	-0.499482805	-0.533579478	-0.718143808
4:08:56	-0.499418079	-0.545951104	-0.718160471	4:09:00	-0.499353353	-0.552551351	-0.718177133
4:09:04	-0.499372427	-0.559201532	-0.718193795	4:09:08	-0.4993915	-0.586708735	-0.718210458
4:09:12	-0.499410574	-0.614215938	-0.71822712	4:09:16	-0.499429647	-0.634079575	-0.718243782
4:09:20	-0.499448721	-0.64629963	-0.718260445	4:09:24	-0.499467795	-0.658519684	-0.718277107
4:09:28	-0.499486868	-0.670739739	-0.71829377	4:09:32	-0.499505942	-0.682959794	-0.718310432
4:09:36	-0.499525015	-0.687513207	-0.718327094	4:09:40	-0.499544089	-0.684400014	-0.718343757
4:09:44	-0.499563163	-0.68128682	-0.718360419	4:09:48	-0.499582236	-0.666521049	-0.718377081
4:09:52	-0.49960131	-0.651755242	-0.718393744	4:09:56	-0.499620383	-0.643219231	-0.718410406
4:10:00	-0.499639457	-0.636759772	-0.718427068	4:10:04	-0.499592705	-0.630261076	-0.718443731
4:10:08	-0.499545953	-0.616113751	-0.718460393	4:10:12	-0.499499201	-0.601966426	-0.718477055
4:10:16	-0.499452449	-0.586720532	-0.718493718	4:10:20	-0.499405697	-0.570376052	-0.71851038
4:10:24	-0.499358945	-0.554031553	-0.718527042	4:10:28	-0.499312193	-0.54000652	-0.718543705
4:10:32	-0.499265441	-0.525981471	-0.718560367	4:10:36	-0.499218689	-0.509648519	-0.718577029
4:10:40	-0.499171937	-0.491007648	-0.718593692	4:10:44	-0.499125185	-0.472366777	-0.718610354
4:10:48	-0.499078433	-0.446398713	-0.718627017	4:10:52	-0.499011567	-0.42041865	-0.718616425
4:10:56	-0.498937298	-0.39489683	-0.718595805	4:11:00	-0.49886303	-0.36952923	-0.718575185
4:11:04	-0.498890273	-0.344222135	-0.718554565	4:11:08	-0.498917517	-0.316252408	-0.718533945
4:11:12	-0.49894476	-0.28828268	-0.718513324	4:11:16	-0.498972004	-0.276062798	-0.718492704
4:11:20	-0.498999247	-0.269092864	-0.718472084	4:11:24	-0.499026491	-0.26212293	-0.718451464
4:11:28	-0.499053734	-0.248838706	-0.718430844	4:11:32	-0.499080978	-0.235554481	-0.718410223
4:11:36	-0.499108221	-0.218093891	-0.718389603	4:11:40	-0.499135465	-0.196456939	-0.718368983
4:11:44	-0.499162708	-0.174819987	-0.718348363	4:11:48	-0.499189952	-0.148555588	-0.718327743
4:11:52	-0.499217195	-0.122291188	-0.718307123	4:11:56	-0.499244438	-0.099491599	-0.718286502
4:12:00	-0.499271682	-0.080156819	-0.718265882	4:12:04	-0.499370294	-0.060864581	-0.718245262
4:12:08	-0.499468905	-0.045242974	-0.718224642	4:12:12	-0.499567517	-0.029621367	-0.718204022
4:12:16	-0.499666129	-0.018596946	-0.718183401	4:12:20	-0.499764741	-0.012169745	-0.718162781
4:12:24	-0.499863353	-0.005742526	-0.718142161	4:12:28	-0.499961964	0.005270046	-0.718121541
4:12:32	-0.500060576	0.016282583	-0.718100921	4:12:36	-0.500159188	0.027295155	-0.7180803
4:12:40	-0.5002578	0.038307692	-0.71805968	4:12:44	-0.500356411	0.047808168	-0.71803906
4:12:48	-0.500455023	0.052772392	-0.71801844	4:12:52	-0.500553635	0.057736581	-0.71799782
4:12:56	-0.500652247	0.061987517	-0.717977199	4:13:00	-0.500750858	0.0655252	-0.717956579
4:13:04	-0.50069905	0.069152547	-0.717935959	4:13:08	-0.500647241	0.072779893	-0.717915339
4:13:12	-0.500595432	0.076407239	-0.717894719	4:13:16	-0.500543624	0.086441852	-0.717874098
4:13:20	-0.500491815	0.102883731	-0.717853478	4:13:24	-0.500440006	0.119325645	-0.717832858
4:13:28	-0.500388198	0.134425472	-0.717812238	4:13:32	-0.500336389	0.149525263	-0.717791618
4:13:36	-0.50028458	0.157035831	-0.717770997	4:13:40	-0.500232772	0.156957141	-0.717750377
4:13:44	-0.500180963	0.15687845	-0.717729757	4:13:48	-0.500129155	0.14396963	-0.717709137
4:13:52	-0.500077346	0.13106081	-0.717688517	4:13:56	-0.500025537	0.115196902	-0.717667897
4:14:00	-0.499973729	0.096377872	-0.717647276	4:14:04	-0.499979614	0.077524451	-0.717626656
4:14:08	-0.4999855	0.060350576	-0.717606036	4:14:12	-0.499991386	0.043176666	-0.717585416
4:14:16	-0.499997272	0.035116154	-0.717564796	4:14:20	-0.500003158	0.036169041	-0.717544175
4:14:24	-0.500009044	0.037221893	-0.717523555	4:14:28	-0.50001493	0.026288474	-0.717502935
4:14:32	-0.500020815	0.015355055	-0.717482315	4:14:36	-0.500026701	0.009674409	-0.717461695
4:14:40	-0.500032587	0.009246502	-0.717441074	4:14:44	-0.500038473	0.008818595	-0.717420454
4:14:48	-0.500044359	0.009854037	-0.717399834	4:14:52	-0.500050245	0.010889515	-0.717379214
4:14:56	-0.500056131	0.010347914	-0.717358594	4:15:00	-1.000062016	-0.491770695	-1.217337973
4:15:04	-1.000040022	-0.493872721	-1.217317353	4:15:08	-1.000018027	-0.50439447	-1.217296733

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
4:15:12	-0.499996032	-0.014916201	-0.717276113	4:15:16	-0.499974038	-0.02543795	-0.717255493
4:15:20	-0.499952043	-0.035959681	-0.717234872	4:15:24	-0.499930048	-0.046481429	-0.717214252
4:15:28	-0.499908053	-0.059358529	-0.717193632	4:15:32	-0.499886059	-0.072235628	-0.717173012
4:15:36	-0.499864064	-0.084830607	-0.717152392	4:15:40	-0.499842069	-0.097143446	-0.717131772
4:15:44	-0.499820075	-0.109456285	-0.717111151	4:15:48	-0.49979808	-0.136824265	-0.717090531
4:15:52	-0.499776085	-0.164192228	-0.717069911	4:15:56	-0.499754091	-0.19012864	-0.717049291
4:16:00	-0.499732096	-0.215587865	-0.717028671	4:16:04	-0.499888407	-0.24115338	-0.71700805
4:16:08	-0.500044717	-0.264654272	-0.71698743	4:16:12	-0.500201028	-0.288155166	-0.71696681
4:16:16	-0.500357339	-0.307589391	-0.71694619	4:16:20	-0.50051365	-0.322956951	-0.71692557
4:16:24	-0.500669961	-0.338324509	-0.716904949	4:16:28	-0.500826271	-0.339002516	-0.716884329
4:16:32	-0.500982582	-0.339680518	-0.716863709	4:16:36	-0.501138893	-0.344979411	-0.716843089
4:16:40	-0.501295204	-0.354899198	-0.716822469	4:16:44	-0.501451514	-0.364818984	-0.716801848
4:16:48	-0.501607825	-0.380647914	-0.716781228	4:16:52	-0.501764136	-0.396476831	-0.716760608
4:16:56	-0.501920447	-0.409789253	-0.716739988	4:17:00	-0.502076758	-0.420585164	-0.716719368
4:17:04	-0.502036694	-0.431264017	-0.716698747	4:17:08	-0.50199663	-0.451132819	-0.716678127
4:17:12	-0.501956566	-0.471001621	-0.716657507	4:17:16	-0.501916503	-0.482998332	-0.716636887
4:17:20	-0.501876439	-0.487122935	-0.716616267	4:17:24	-0.501836375	-0.491247537	-0.716595647
4:17:28	-0.501796311	-0.503993119	-0.716575026	4:17:32	-0.501756248	-0.516738701	-0.716554406
4:17:36	-0.501716184	-0.53448853	-0.716533786	4:17:40	-0.50167612	-0.557242567	-0.716513166
4:17:44	-0.501636056	-0.579996623	-0.716492546	4:17:48	-0.501595992	-0.59954749	-0.716471925
4:17:52	-0.501555929	-0.619098356	-0.716451305	4:17:56	-0.501515865	-0.636788547	-0.716430685
4:18:00	-0.501475801	-0.652618099	-0.716410065	4:18:04	-0.501443665	-0.668452378	-0.716389445
4:18:08	-0.501411529	-0.677595687	-0.716368824	4:18:12	-0.501379393	-0.68673896	-0.716348204
4:18:16	-0.501347257	-0.701070096	-0.716327584	4:18:20	-0.501315121	-0.720589057	-0.716306964
4:18:24	-0.501282985	-0.740108018	-0.716286344	4:18:28	-0.501250849	-0.727250845	-0.716265723
4:18:32	-0.501218713	-0.714393672	-0.716245103	4:18:36	-0.501186577	-0.715554128	-0.716224483
4:18:40	-0.501154441	-0.730732213	-0.716203863	4:18:44	-0.501122306	-0.745910334	-0.716183243
4:18:48	-0.50109017	-0.750976644	-0.716162622	4:18:52	-0.501058034	-0.756042954	-0.716142002
4:18:56	-0.501025898	-0.75942048	-0.716121382	4:19:00	-0.500993762	-0.762235079	-0.716100762
4:19:04	-0.500979767	-0.765071376	-0.716080142	4:19:08	-0.501002173	-0.756079259	-0.716059522
4:19:12	-0.501006378	-0.747087105	-0.716038901	4:19:16	-0.501010583	-0.733547366	-0.716018281
4:19:20	-0.501014789	-0.715459971	-0.715997661	4:19:24	-0.501018994	-0.697372574	-0.715977041
4:19:28	-0.5010232	-0.671655416	-0.715956421	4:19:32	-0.501027405	-0.645938293	-0.7159358
4:19:36	-0.501031611	-0.626199313	-0.71591518	4:19:40	-0.501035816	-0.612438509	-0.71589456
4:19:44	-0.501040021	-0.598677706	-0.71587394	4:19:48	-0.501044227	-0.582697151	-0.71585332
4:19:52	-0.501048432	-0.566716595	-0.715832699	4:19:56	-0.501052638	-0.547059669	-0.715812079
4:20:00	-0.501056843	-0.5232726375	-0.715791459	4:20:04	-0.500629469	-0.500135839	-0.715770839
4:20:08	-0.500202095	-0.473329981	-0.715750219	4:20:12	-0.499774721	-0.446524142	-0.715729598
4:20:16	-0.499347347	-0.426007176	-0.715708978	4:20:20	-0.498919973	-0.411779092	-0.715688358
4:20:24	-0.498492599	-0.397551017	-0.715667738	4:20:28	-0.498065225	-0.395236652	-0.715647118
4:20:32	-0.49763785	-0.392922289	-0.715626497	4:20:36	-0.497210476	-0.391667216	-0.715605877
4:20:40	-0.496783102	-0.391471452	-0.715585257	4:20:44	-0.496355728	-0.391275689	-0.715564637
4:20:48	-0.495928354	-0.383814429	-0.715544017	4:20:52	-0.49550098	-0.376353177	-0.715523396
4:20:56	-0.495073606	-0.368891922	-0.715502776	4:21:00	-0.494646232	-0.361430666	-0.715482156
4:21:04	-0.494641854	-0.354221552	-0.715461536	4:21:08	-0.494637477	-0.34214439	-0.715440916
4:21:12	-0.4946331	-0.330067226	-0.715420296	4:21:16	-0.494628722	-0.319986268	-0.715399675
4:21:20	-0.494624345	-0.311901515	-0.715379055	4:21:24	-0.494619968	-0.303816761	-0.715358435
4:21:28	-0.49461559	-0.305471691	-0.715337815	4:21:32	-0.494611213	-0.307126619	-0.715317195
4:21:36	-0.494606835	-0.308781549	-0.715296574	4:21:40	-0.494602458	-0.310436477	-0.715275954
4:21:44	-0.494598081	-0.312091407	-0.715255334	4:21:48	-0.494593703	-0.318762983	-0.715234714
4:21:52	-0.494589326	-0.325434561	-0.715214094	4:21:56	-0.494584949	-0.331075474	-0.715193473
4:22:00	-0.494580571	-0.335685723	-0.715172853	4:22:04	-0.494526246	-0.340266199	-0.715152233
4:22:08	-0.494471922	-0.340905922	-0.715131613	4:22:12	-0.494417597	-0.341545645	-0.715110993
4:22:16	-0.494363272	-0.342561158	-0.715090372	4:22:20	-0.494308947	-0.343952453	-0.715069752
4:22:24	-0.494254623	-0.345343747	-0.715049132	4:22:28	-0.494200298	-0.343765689	-0.715028512
4:22:32	-0.494145973	-0.342187632	-0.715007892	4:22:36	-0.494091648	-0.340609574	-0.714987271
4:22:40	-0.494037324	-0.339031516	-0.714966651	4:22:44	-0.493982999	-0.337453458	-0.714946031

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
4:22:48	-0.493928674	-0.328704205	-0.714925411	4:22:52	-0.493874349	-0.319954952	-0.714904791
4:22:56	-0.493820024	-0.318907675	-0.714884171	4:23:00	-0.4937657	-0.325562373	-0.71486355
4:23:04	-0.493767646	-0.332250616	-0.71484293	4:23:08	-0.493769593	-0.329865588	-0.71482231
4:23:12	-0.49377154	-0.32748056	-0.71480169	4:23:16	-0.493773487	-0.326389094	-0.71478107
4:23:20	-0.493775434	-0.326591189	-0.714760449	4:23:24	-0.49377738	-0.326793284	-0.714739829
4:23:28	-0.493779327	-0.3257645	-0.714719209	4:23:32	-0.493781274	-0.324735718	-0.714698589
4:23:36	-0.493783221	-0.326067506	-0.714677969	4:23:40	-0.493785168	-0.329759863	-0.714657348
4:23:44	-0.493787114	-0.33345222	-0.714636728	4:23:48	-0.493789061	-0.347971788	-0.714616108
4:23:52	-0.493791008	-0.362491356	-0.714595488	4:23:56	-0.493792955	-0.372450507	-0.714574868
4:24:00	-0.493794902	-0.377849232	-0.714554247	4:24:04	-0.493133289	-0.382852429	-0.714533627
4:24:08	-0.492471677	-0.37876001	-0.714513007	4:24:12	-0.491810065	-0.37466759	-0.714492387
4:24:16	-0.491148452	-0.375637276	-0.714471767	4:24:20	-0.49048684	-0.381669058	-0.714451146
4:24:24	-0.489825228	-0.38770085	-0.714430526	4:24:28	-0.489163615	-0.396519905	-0.714409906
4:24:32	-0.488502003	-0.40533896	-0.714389286	4:24:36	-0.48784039	-0.413670232	-0.714368666
4:24:40	-0.487178778	-0.421513711	-0.714348046	4:24:44	-0.486517166	-0.4293572	-0.714327425
4:24:48	-0.485855553	-0.424616484	-0.714306805	4:24:52	-0.485193941	-0.419875768	-0.714286185
4:24:56	-0.484532329	-0.414178166	-0.714265565	4:25:00	-0.483870716	-0.407523659	-0.714244945
4:25:04	-0.483895249	-0.401278153	-0.714224324	4:25:08	-0.483919782	-0.389607689	-0.714203704
4:25:12	-0.483944316	-0.377937233	-0.714183084	4:25:16	-0.483968849	-0.363565974	-0.714162464
4:25:20	-0.483993382	-0.346493916	-0.714141844	4:25:24	-0.484017915	-0.329421859	-0.714121223
4:25:28	-0.484042448	-0.332407736	-0.714100603	4:25:32	-0.484066981	-0.335393608	-0.714079983
4:25:36	-0.484091514	-0.332069245	-0.714059363	4:25:40	-0.484116048	-0.322434645	-0.714038743
4:25:44	-0.484140581	-0.312800042	-0.714018122	4:25:48	-0.484165114	-0.29732522	-0.713997502
4:25:52	-0.484189647	-0.281850397	-0.713976882	4:25:56	-0.48421418	-0.267440714	-0.713956262
4:26:00	-0.484238713	-0.254096166	-0.713935642	4:26:04	-0.483819836	-0.24048731	-0.713915021
4:26:08	-0.483400959	-0.249078454	-0.713894401	4:26:12	-0.482982082	-0.257669599	-0.713873781
4:26:16	-0.482563205	-0.268671176	-0.713853161	4:26:20	-0.482144328	-0.282083183	-0.713832541
4:26:24	-0.48172545	-0.295495191	-0.71381192	4:26:28	-0.481306573	-0.288583479	-0.7137913
4:26:32	-0.480887696	-0.281671766	-0.71377068	4:26:36	-0.480468819	-0.272732899	-0.71375006
4:26:40	-0.480049942	-0.261766878	-0.71372944	4:26:44	-0.479631065	-0.250800857	-0.71370882
4:26:48	-0.479212188	-0.244672385	-0.713688199	4:26:52	-0.478793311	-0.23854391	-0.713667579
4:26:56	-0.478374434	-0.237870021	-0.713646959	4:27:00	-0.477955556	-0.239014321	-0.713626339
4:27:04	-0.477938982	-0.240398434	-0.713605719	4:27:08	-0.477922408	-0.239904613	-0.713585098
4:27:12	-0.477905834	-0.239410792	-0.713564478	4:27:16	-0.47788926	-0.240774364	-0.713543858
4:27:20	-0.477872687	-0.242757071	-0.713523238	4:27:24	-0.477856113	-0.244739778	-0.713502618
4:27:28	-0.477839539	-0.232496205	-0.713481997	4:27:32	-0.477822965	-0.220252632	-0.713461377
4:27:36	-0.477806391	-0.217800537	-0.713440757	4:27:40	-0.477789817	-0.225139911	-0.713420137
4:27:44	-0.477773243	-0.232479284	-0.713399517	4:27:48	-0.477756669	-0.243868428	-0.713378896
4:27:52	-0.477740095	-0.255257567	-0.713358276	4:27:56	-0.477723521	-0.275377095	-0.713337656
4:28:00	-0.477706947	-0.304227006	-0.713317036	4:28:04	-0.477449268	-0.330089306	-0.713296416
4:28:08	-0.47719159	-0.347419919	-0.713275795	4:28:12	-0.476933911	-0.364750527	-0.713255175
4:28:16	-0.476676233	-0.373528844	-0.713234555	4:28:20	-0.476418554	-0.373754868	-0.713213935
4:28:24	-0.476160876	-0.373980884	-0.713193315	4:28:28	-0.475903197	-0.37873332	-0.713172695
4:28:32	-0.475645519	-0.383485755	-0.713152074	4:28:36	-0.47538784	-0.380893996	-0.713131454
4:28:40	-0.475130162	-0.370958033	-0.713110834	4:28:44	-0.474872483	-0.361022071	-0.713090214
4:28:48	-0.474614805	-0.351086113	-0.713069594	4:28:52	-0.474357126	-0.34115015	-0.713048973
4:28:56	-0.474099448	-0.328834388	-0.713028353	4:29:00	-0.473841769	-0.315725361	-0.713007733
4:29:04	-0.473816612	-0.302754937	-0.712987113	4:29:08	-0.473791456	-0.293485691	-0.712966493
4:29:12	-0.473766299	-0.284216447	-0.712945872	4:29:16	-0.473741142	-0.272836235	-0.712925252
4:29:20	-0.473715985	-0.259345055	-0.712904632	4:29:24	-0.473690828	-0.245853876	-0.712884012
4:29:28	-0.473665672	-0.241605994	-0.712863392	4:29:32	-0.473640515	-0.237358104	-0.712842771
4:29:36	-0.473615358	-0.234172745	-0.712822151	4:29:40	-0.473590201	-0.232049901	-0.712801531
4:29:44	-0.473565044	-0.229927057	-0.712780911	4:29:48	-0.473539888	-0.231507451	-0.712760291
4:29:52	-0.473514731	-0.233087846	-0.71273967	4:29:56	-0.473489574	-0.234668241	-0.71271905
4:30:00	0.026535583	0.263751365	-0.21269843	4:30:04	0.026228133	0.261972709	-0.21267781
4:30:08	0.025920684	0.262726234	-0.21265719	4:30:12	-0.474386766	-0.236520242	-0.71263657
4:30:16	-0.474694215	-0.23202929	-0.712615949	4:30:20	-0.475001664	-0.223800903	-0.712595329

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
4:30:24	-0.475309114	-0.21557252	-0.712574709	4:30:28	-0.475616563	-0.215310243	-0.712554089
4:30:32	-0.475924013	-0.215047965	-0.712533469	4:30:36	-0.476231462	-0.218479694	-0.712512848
4:30:40	-0.476538912	-0.225605418	-0.712492228	4:30:44	-0.476846361	-0.233866419	-0.712471608
4:30:48	-0.477153811	-0.245533237	-0.712450988	4:30:52	-0.47746126	-0.25720005	-0.712430368
4:30:56	-0.47776871	-0.267170934	-0.712409747	4:31:00	-0.478076159	-0.275445884	-0.712389127
4:31:04	-0.478053713	-0.283524189	-0.712368507	4:31:08	-0.478031266	-0.298202561	-0.712347887
4:31:12	-0.47800882	-0.312880935	-0.712327267	4:31:16	-0.477986373	-0.329217712	-0.712306646
4:31:20	-0.477963927	-0.347212899	-0.712286026	4:31:24	-0.47794148	-0.365208083	-0.712265406
4:31:28	-0.477919034	-0.379315944	-0.712244786	4:31:32	-0.477896588	-0.393423806	-0.712224166
4:31:36	-0.477874141	-0.406248692	-0.712203545	4:31:40	-0.477851695	-0.417790603	-0.712182925
4:31:44	-0.477829248	-0.429332504	-0.712162305	4:31:48	-0.477806802	-0.431866183	-0.712141685
4:31:52	-0.477784355	-0.434399853	-0.712121065	4:31:56	-0.477761909	-0.436933523	-0.712100444
4:32:00	-0.477739463	-0.43946721	-0.712079824	4:32:04	-0.479244561	-0.442911426	-0.712059204
4:32:08	-0.480749659	-0.446355642	-0.712038584	4:32:12	-0.482254758	-0.449799857	-0.712017964
4:32:16	-0.483759856	-0.449634996	-0.711997344	4:32:20	-0.485264955	-0.445861039	-0.711976723
4:32:24	-0.486770053	-0.442087083	-0.711956103	4:32:28	-0.488275152	-0.431119418	-0.711935483
4:32:32	-0.48978025	-0.420151761	-0.711914863	4:32:36	-0.491285348	-0.41342389	-0.711894243
4:32:40	-0.492790447	-0.410935823	-0.711873622	4:32:44	-0.494295545	-0.408447747	-0.711853002
4:32:48	-0.495800644	-0.399102932	-0.711832382	4:32:52	-0.497305742	-0.389758116	-0.711811762
4:32:56	-0.498810841	-0.385177358	-0.711791142	4:33:00	-0.500315939	-0.385360676	-0.711770521
4:33:04	-0.500301624	-0.382244679	-0.711749901	4:33:08	-0.500287308	-0.371947834	-0.711729281
4:33:12	-0.500272993	-0.361650984	-0.711708661	4:33:16	-0.500258678	-0.352924508	-0.711688041
4:33:20	-0.500244362	-0.3457684	-0.71166742	4:33:24	-0.500230047	-0.338612292	-0.7116468
4:33:28	-0.500215732	-0.343411283	-0.71162618	4:33:32	-0.500201416	-0.348210273	-0.71160556
4:33:36	-0.500187101	-0.349693251	-0.71158494	4:33:40	-0.500172786	-0.347860225	-0.711564319
4:33:44	-0.50015847	-0.3460272	-0.711543699	4:33:48	-0.500144155	-0.349474127	-0.711523079
4:33:52	-0.500129839	-0.352921055	-0.711502459	4:33:56	-0.500115524	-0.349930113	-0.711481839
4:34:00	-0.500101209	-0.3405013	-0.711461219	4:34:04	-0.500231974	-0.331158968	-0.711440598
4:34:08	-0.50036274	-0.33285482	-0.711419978	4:34:12	-0.500493506	-0.334550672	-0.711399358
4:34:16	-0.500624271	-0.330178863	-0.711378738	4:34:20	-0.500755037	-0.319739394	-0.711358118
4:34:24	-0.500885803	-0.309299924	-0.711337497	4:34:28	-0.501016568	-0.290860412	-0.711316877
4:34:32	-0.501147334	-0.272420901	-0.711296257	4:34:36	-0.5012781	-0.256914377	-0.711275637
4:34:40	-0.501408865	-0.244340845	-0.711255017	4:34:44	-0.501539631	-0.231767313	-0.711234396
4:34:48	-0.501670397	-0.230307348	-0.711213776	4:34:52	-0.501801162	-0.228847383	-0.711193156
4:34:56	-0.501931928	-0.228957107	-0.711172536	4:35:00	-0.502062694	-0.230636524	-0.711151916
4:35:04	-0.50206464	-0.232083203	-0.711131295	4:35:08	-0.502066587	-0.233062026	-0.711110675
4:35:12	-0.502068534	-0.234040854	-0.711090055	4:35:16	-0.502070481	-0.235019677	-0.711069435
4:35:20	-0.502072428	-0.227560848	-0.711048815	4:35:24	-0.502074374	-0.220102024	-0.711028194
4:35:28	-0.502076321	-0.218472562	-0.711007574	4:35:32	-0.502078268	-0.216843092	-0.710986954
4:35:36	-0.502080215	-0.218427869	-0.710966334	4:35:40	-0.502082162	-0.221084071	-0.710945714
4:35:44	-0.502084108	-0.224714471	-0.710925094	4:35:48	-0.502086055	-0.23126752	-0.710904473
4:35:52	-0.502088002	-0.23782056	-0.710883853	4:35:56	-0.502089949	-0.247353243	-0.710863233
4:36:00	-0.502091896	-0.257879141	-0.710842613	4:36:04	-0.502140027	-0.265323702	-0.710821993
4:36:08	-0.502188158	-0.26344167	-0.710801372	4:36:12	-0.50223629	-0.261559638	-0.710780752
4:36:16	-0.502284421	-0.263919406	-0.710760132	4:36:20	-0.502332552	-0.267693107	-0.710739512
4:36:24	-0.502380684	-0.270603484	-0.710718892	4:36:28	-0.502428815	-0.270923898	-0.710698271
4:36:32	-0.502476946	-0.271244309	-0.710677651	4:36:36	-0.502525077	-0.268477339	-0.710657031
4:36:40	-0.502573209	-0.26468124	-0.710636411	4:36:44	-0.50262134	-0.258702717	-0.710615791
4:36:48	-0.502669471	-0.246176906	-0.71059517	4:36:52	-0.502717603	-0.233651094	-0.71057455
4:36:56	-0.502765734	-0.223375991	-0.71055393	4:37:00	-0.502813865	-0.213851126	-0.71053331
4:37:04	-0.502799098	-0.206796576	-0.71051269	4:37:08	-0.502784331	-0.207265458	-0.710492069
4:37:12	-0.502769564	-0.207734339	-0.710471449	4:37:16	-0.502754797	-0.199006621	-0.710450829
4:37:20	-0.50274003	-0.187213372	-0.710430209	4:37:24	-0.502725263	-0.181173018	-0.710409589
4:37:28	-0.502710496	-0.192391321	-0.710388968	4:37:32	-0.502695729	-0.203609624	-0.710368348
4:37:36	-0.502680962	-0.215938141	-0.710347728	4:37:40	-0.502666195	-0.228636732	-0.710327108
4:37:44	-0.502651428	-0.247616713	-0.710306488	4:37:48	-0.50263666	-0.285440858	-0.710285868
4:37:52	-0.502621893	-0.323265005	-0.710265247	4:37:56	-0.502607126	-0.350041463	-0.710244627

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
4:38:00	-0.502592359	-0.376817915	-0.710224007	4:38:04	-0.502480986	-0.403075556	-0.710203387
4:38:08	-0.502369613	-0.427949495	-0.710182767	4:38:12	-0.502258239	-0.452823435	-0.710162146
4:38:16	-0.502146866	-0.456517391	-0.710141526	4:38:20	-0.502035493	-0.453151369	-0.710120906
4:38:24	-0.501924119	-0.449785348	-0.710100286	4:38:28	-0.501812746	-0.446419317	-0.710079666
4:38:32	-0.501701373	-0.443053295	-0.710059045	4:38:36	-0.501589999	-0.444458705	-0.710038425
4:38:40	-0.501478626	-0.447454596	-0.710017805	4:38:44	-0.501367253	-0.451771684	-0.709997185
4:38:48	-0.501255879	-0.460052326	-0.709976565	4:38:52	-0.501144506	-0.468332967	-0.709955944
4:38:56	-0.501033133	-0.469394443	-0.709935324	4:39:00	-0.500921759	-0.468049494	-0.709914704
4:39:04	-0.50091693	-0.46928931	-0.709894084	4:39:08	-0.500912101	-0.478092856	-0.709873464
4:39:12	-0.500907272	-0.486896402	-0.709852843	4:39:16	-0.500902443	-0.491048545	-0.709832223
4:39:20	-0.500897614	-0.493650203	-0.709811603	4:39:24	-0.500892785	-0.491701699	-0.709790983
4:39:28	-0.500887956	-0.485203068	-0.709770363	4:39:32	-0.500883127	-0.478704419	-0.709749743
4:39:36	-0.500878298	-0.46888887	-0.709729122	4:39:40	-0.500873468	-0.457967681	-0.709708502
4:39:44	-0.500868639	-0.447560096	-0.709687882	4:39:48	-0.50086381	-0.437666089	-0.709667262
4:39:52	-0.500858981	-0.427772081	-0.709646642	4:39:56	-0.500854152	-0.41022775	-0.709626021
4:40:00	-0.500849323	-0.390133304	-0.709605401	4:40:04	-0.500791145	-0.381365488	-0.709584781
4:40:08	-0.500732967	-0.383956085	-0.709564161	4:40:12	-0.500674789	-0.386546692	-0.709543541
4:40:16	-0.500616611	-0.394384859	-0.70952292	4:40:20	-0.500558433	-0.403972226	-0.7095023
4:40:24	-0.500500255	-0.404679135	-0.70948168	4:40:28	-0.500442077	-0.396505593	-0.70946106
4:40:32	-0.500383899	-0.388332051	-0.70944044	4:40:36	-0.500325721	-0.37159054	-0.709419819
4:40:40	-0.500267543	-0.351993042	-0.709399199	4:40:44	-0.500209365	-0.331897888	-0.709378579
4:40:48	-0.500151187	-0.310309775	-0.709357959	4:40:52	-0.500093009	-0.288721664	-0.709337339
4:40:56	-0.500034831	-0.27288912	-0.709316718	4:41:00	-0.499976653	-0.258975099	-0.709296098
4:41:04	-0.499974986	-0.245810852	-0.709275478	4:41:08	-0.499973319	-0.234794867	-0.709254858
4:41:12	-0.499971652	-0.223778884	-0.709234238	4:41:16	-0.499969985	-0.215041614	-0.709213618
4:41:20	-0.499968318	-0.207063904	-0.709192997	4:41:24	-0.499966651	-0.200537154	-0.709172377
4:41:28	-0.499964984	-0.198363235	-0.709151757	4:41:32	-0.499963317	-0.196189316	-0.709131137
4:41:36	-0.49996165	-0.181702282	-0.709110517	4:41:40	-0.499959983	-0.163110874	-0.709089896
4:41:44	-0.499958316	-0.150291928	-0.709069276	4:41:48	-0.499956649	-0.154790378	-0.709048656
4:41:52	-0.499954982	-0.159288828	-0.709028036	4:41:56	-0.499953315	-0.166331752	-0.709007416
4:42:00	-0.499951648	-0.174222843	-0.708986795	4:42:04	-0.499858999	-0.183692064	-0.708966175
4:42:08	-0.499766349	-0.198058383	-0.708945555	4:42:12	-0.4996737	-0.21242471	-0.708924935
4:42:16	-0.499581051	-0.222337311	-0.708904315	4:42:20	-0.499488402	-0.230765325	-0.708883694
4:42:24	-0.499395752	-0.238645555	-0.708863074	4:42:28	-0.499303103	-0.244882426	-0.708842454
4:42:32	-0.499210454	-0.251119296	-0.708821834	4:42:36	-0.499117805	-0.259337119	-0.708801214
4:42:40	-0.499025155	-0.268215261	-0.708780593	4:42:44	-0.498932506	-0.278137701	-0.708759973
4:42:48	-0.498839857	-0.291193042	-0.708739353	4:42:52	-0.498747208	-0.304248382	-0.708718733
4:42:56	-0.498654558	-0.312623564	-0.708698113	4:43:00	-0.498561909	-0.319438693	-0.708677493
4:43:04	-0.498544883	-0.326468769	-0.708656872	4:43:08	-0.498527858	-0.334008445	-0.708636252
4:43:12	-0.498510832	-0.341548126	-0.708615632	4:43:16	-0.498493806	-0.34984163	-0.708595012
4:43:20	-0.498476781	-0.358386411	-0.708574392	4:43:24	-0.498459755	-0.366490348	-0.708553771
4:43:28	-0.498442729	-0.373271743	-0.708533151	4:43:32	-0.498425703	-0.380053146	-0.708512531
4:43:36	-0.498408678	-0.388491037	-0.708491911	4:43:40	-0.498391652	-0.397481082	-0.708471291
4:43:44	-0.498374626	-0.405714004	-0.70845067	4:43:48	-0.498357601	-0.41167554	-0.70843005
4:43:52	-0.498340575	-0.417637067	-0.70840943	4:43:56	-0.498323549	-0.408527811	-0.70838881
4:44:00	-0.498306523	-0.399418546	-0.70836819	4:44:04	-0.498149666	-0.388501439	-0.708347569
4:44:08	-0.497992808	-0.372410806	-0.708326949	4:44:12	-0.49783595	-0.356320178	-0.708306329
4:44:16	-0.497679093	-0.344496888	-0.708285709	4:44:20	-0.497522235	-0.33409605	-0.708265089
4:44:24	-0.497365377	-0.325722442	-0.708244468	4:44:28	-0.49720852	-0.323430524	-0.708223848
4:44:32	-0.497051662	-0.321138606	-0.708203228	4:44:36	-0.496894804	-0.31538409	-0.708182608
4:44:40	-0.496737947	-0.308475374	-0.708161988	4:44:44	-0.496581089	-0.302094981	-0.708141367
4:44:48	-0.496424231	-0.297299562	-0.708120747	4:44:52	-0.496267374	-0.292504143	-0.708100127
4:44:56	-0.496110516	-0.281670675	-0.708079507	4:45:00	-0.995953658	-0.768824524	-1.208058887
4:45:04	-0.995975481	-0.757949276	-1.208038267	4:45:08	-0.995997304	-0.752667203	-1.208017646
4:45:12	-0.496019127	-0.247385131	-0.707997026	4:45:16	-0.49604095	-0.241142295	-0.707976406
4:45:20	-0.49602772	-0.23457921	-0.707955786	4:45:24	-0.496084595	-0.229042045	-0.707935166
4:45:28	-0.496106418	-0.226582633	-0.707914545	4:45:32	-0.496128241	-0.224123221	-0.707893925

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
4:45:36	-0.496150063	-0.220591612	-0.707873305	4:45:40	-0.496171886	-0.215987814	-0.707852685
4:45:44	-0.496193709	-0.211384016	-0.707832065	4:45:48	-0.496215532	-0.212322085	-0.707811444
4:45:52	-0.496237354	-0.213260146	-0.707790824	4:45:56	-0.496259177	-0.209998142	-0.707770204
4:46:00	-0.496281	-0.202536066	-0.707749584	4:46:04	-0.496352178	-0.195103409	-0.707728964
4:46:08	-0.496423357	-0.186202163	-0.707708343	4:46:12	-0.496494535	-0.177300917	-0.707687723
4:46:16	-0.496565714	-0.173566089	-0.707667103	4:46:20	-0.496636892	-0.174997673	-0.707646483
4:46:24	-0.49670807	-0.176429256	-0.707625863	4:46:28	-0.496779249	-0.193101685	-0.707605242
4:46:32	-0.496850427	-0.209774113	-0.707584622	4:46:36	-0.496921606	-0.227358692	-0.707564002
4:46:40	-0.496992784	-0.245855417	-0.707543382	4:46:44	-0.497063962	-0.264352145	-0.707522762
4:46:48	-0.497135141	-0.285468183	-0.707502142	4:46:52	-0.497206319	-0.306584222	-0.707481521
4:46:56	-0.497277498	-0.321533874	-0.707460901	4:47:00	-0.497348676	-0.330317139	-0.707440281
4:47:04	-0.49734204	-0.339054021	-0.707419661	4:47:08	-0.497335404	-0.337930805	-0.707399041
4:47:12	-0.497328768	-0.336807589	-0.70737842	4:47:16	-0.497322132	-0.337400563	-0.7073578
4:47:20	-0.497300573	-0.339700841	-0.707316961	4:47:24	-0.497259056	-0.341989217	-0.707249079
4:47:28	-0.497217538	-0.34803413	-0.707181197	4:47:32	-0.49717602	-0.354079043	-0.707113315
4:47:36	-0.497134502	-0.354412432	-0.707045433	4:47:40	-0.497092984	-0.349034295	-0.70697755
4:47:44	-0.497051466	-0.343656158	-0.706909668	4:47:48	-0.497009949	-0.338278022	-0.706841786
4:47:52	-0.496968431	-0.332899882	-0.706773904	4:47:56	-0.496926913	-0.322891671	-0.706706022
4:48:00	-0.496885395	-0.308253382	-0.70663814	4:48:04	-0.496799337	-0.293588545	-0.706570258
4:48:08	-0.496713279	-0.291809979	-0.706502376	4:48:12	-0.496627221	-0.290031412	-0.706434493
4:48:16	-0.496541163	-0.2865712	-0.706366611	4:48:20	-0.496455105	-0.281429341	-0.706298729
4:48:24	-0.496369047	-0.276287482	-0.706230847	4:48:28	-0.496282988	-0.271145625	-0.706162965
4:48:32	-0.49619693	-0.266003767	-0.706095083	4:48:36	-0.496110872	-0.258926771	-0.706027201
4:48:40	-0.496024814	-0.249914635	-0.705959318	4:48:44	-0.495938756	-0.240902502	-0.705891436
4:48:48	-0.495852698	-0.246721532	-0.705823554	4:48:52	-0.49576664	-0.252540567	-0.705755672
4:48:56	-0.495680582	-0.253745922	-0.70568779	4:49:00	-0.495594524	-0.250337601	-0.705619908
4:49:04	-0.495550747	-0.246954484	-0.705552026	4:49:08	-0.495506971	-0.233380646	-0.705484144
4:49:12	-0.495463194	-0.219806812	-0.705416261	4:49:16	-0.495419418	-0.215292332	-0.705348379
4:49:20	-0.495375641	-0.213797647	-0.705280497	4:49:24	-0.495331865	-0.212302963	-0.705212615
4:49:28	-0.495288088	-0.211980811	-0.705144733	4:49:32	-0.495244312	-0.211658658	-0.705076851
4:49:36	-0.495200536	-0.211924172	-0.705008969	4:49:40	-0.495156759	-0.212777368	-0.704941087
4:49:44	-0.495112983	-0.213630555	-0.704873204	4:49:48	-0.495069206	-0.211733588	-0.704805322
4:49:52	-0.49502543	-0.209836613	-0.70473744	4:49:56	-0.494981653	-0.20097027	-0.704669558
4:50:00	-0.494937877	-0.185134541	-0.704601676	4:50:04	-0.495000613	-0.169362311	-0.704533794
4:50:08	-0.495063349	-0.157908449	-0.704465912	4:50:12	-0.495126085	-0.146454588	-0.70439803
4:50:16	-0.495188821	-0.134074483	-0.704330147	4:50:20	-0.495251557	-0.120768136	-0.704262265
4:50:24	-0.495314293	-0.107461789	-0.704194383	4:50:28	-0.49537703	-0.103379018	-0.704126501
4:50:32	-0.495439766	-0.099296247	-0.704058619	4:50:36	-0.495502502	-0.091983178	-0.703990737
4:50:40	-0.495565238	-0.081439792	-0.703922855	4:50:44	-0.495627974	-0.070896407	-0.703854973
4:50:48	-0.49569071	-0.052999342	-0.70378709	4:50:52	-0.495753446	-0.035102258	-0.703719208
4:50:56	-0.495816182	-0.014638672	-0.703651326	4:51:00	-0.495878918	0.008391451	-0.703583444
4:51:04	-0.495836949	0.03148397	-0.703515562	4:51:08	-0.495794979	0.043968048	-0.70344768
4:51:12	-0.49575301	0.056452127	-0.703379798	4:51:16	-0.49571104	0.062752561	-0.703311916
4:51:20	-0.495669071	0.062869351	-0.703244033	4:51:24	-0.495627101	0.062986141	-0.703176151
4:51:28	-0.495585131	0.066561114	-0.703108269	4:51:32	-0.495543162	0.070136052	-0.703040387
4:51:36	-0.495501192	0.071203821	-0.702972505	4:51:40	-0.495459223	0.069764424	-0.702904623
4:51:44	-0.495417253	0.068325025	-0.702836741	4:51:48	-0.495375284	0.063507101	-0.702768858
4:51:52	-0.495333314	0.058689141	-0.702700976	4:51:56	-0.495291345	0.046546651	-0.702633094
4:52:00	-0.495249375	0.027079598	-0.702565212	4:52:04	-0.495248833	0.00758785	-0.70249733
4:52:08	-0.495248291	-0.027283778	-0.702429448	4:52:12	-0.49524775	-0.062155406	-0.702361566
4:52:16	-0.495247208	-0.089615423	-0.702293684	4:52:20	-0.495246666	-0.114604884	-0.702225801
4:52:24	-0.495246125	-0.139594363	-0.702157919	4:52:28	-0.495245583	-0.167815607	-0.702090037
4:52:32	-0.495245041	-0.196036849	-0.702022155	4:52:36	-0.495244499	-0.216892011	-0.701954273
4:52:40	-0.495243958	-0.230381093	-0.701886391	4:52:44	-0.495243416	-0.243870175	-0.701818509
4:52:48	-0.495242874	-0.259853274	-0.701750627	4:52:52	-0.495242332	-0.275836374	-0.701682744
4:52:56	-0.495241791	-0.290101956	-0.701614862	4:53:00	-0.495241249	-0.303795033	-0.70154698
4:53:04	-0.495179855	-0.317451837	-0.701479098	4:53:08	-0.495118461	-0.334624328	-0.701411216

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
4:53:12	-0.495057068	-0.351796821	-0.701343334	4:53:16	-0.494995674	-0.35986411	-0.701275452
4:53:20	-0.49493428	-0.358826192	-0.70120757	4:53:24	-0.494872886	-0.357788276	-0.701139687
4:53:28	-0.494811492	-0.3550861	-0.701071805	4:53:32	-0.494750098	-0.34739115	-0.701003923
4:53:36	-0.494688705	-0.342817862	-0.700936041	4:53:40	-0.494627311	-0.341366232	-0.700868159
4:53:44	-0.494565917	-0.339914602	-0.700800277	4:53:48	-0.494504523	-0.331052133	-0.700732395
4:53:52	-0.494443129	-0.322189665	-0.700664513	4:53:56	-0.494381736	-0.314059624	-0.70059663
4:54:00	-0.494320342	-0.30666201	-0.700528748	4:54:04	-0.494265728	-0.299268437	-0.700460866
4:54:08	-0.494211115	-0.299919518	-0.700392984	4:54:12	-0.494156502	-0.300570597	-0.700325102
4:54:16	-0.494101888	-0.305222467	-0.70025722	4:54:20	-0.494047275	-0.313875128	-0.700189338
4:54:24	-0.493992661	-0.322527788	-0.700121456	4:54:28	-0.493938048	-0.339796497	-0.700053573
4:54:32	-0.493883435	-0.357065208	-0.699985691	4:54:36	-0.493828821	-0.377023221	-0.699917809
4:54:40	-0.493774208	-0.397877675	-0.699849927	4:54:44	-0.493719594	-0.418732121	-0.699782045
4:54:48	-0.493664981	-0.433353927	-0.699714163	4:54:52	-0.493610368	-0.447975742	-0.699646281
4:54:56	-0.493555754	-0.458811864	-0.699578398	4:55:00	-0.493501141	-0.465862292	-0.699510516
4:55:04	-0.493426647	-0.47290087	-0.699442634	4:55:08	-0.493352153	-0.483625499	-0.699374752
4:55:12	-0.493277659	-0.494350128	-0.69930687	4:55:16	-0.493203165	-0.510874826	-0.699238988
4:55:20	-0.493128671	-0.533199574	-0.699171106	4:55:24	-0.493054178	-0.555524341	-0.699103224
4:55:28	-0.492979684	-0.579006655	-0.699035341	4:55:32	-0.49290519	-0.602488952	-0.698967459
4:55:36	-0.492830696	-0.619260756	-0.698899577	4:55:40	-0.492756202	-0.633795772	-0.698831695
4:55:44	-0.492681708	-0.645623305	-0.698763813	4:55:48	-0.492607214	-0.649328567	-0.698695931
4:55:52	-0.49253272	-0.653033865	-0.698628049	4:55:56	-0.492458227	-0.659995077	-0.698560167
4:56:00	-0.492383733	-0.668041571	-0.698492284	4:56:04	-0.49244749	-0.67448471	-0.698424402
4:56:08	-0.492511247	-0.675870416	-0.69835652	4:56:12	-0.492575004	-0.677256122	-0.698288638
4:56:16	-0.492638761	-0.680906259	-0.698220756	4:56:20	-0.492702518	-0.685311218	-0.698152874
4:56:24	-0.492766275	-0.692275644	-0.698084992	4:56:28	-0.492830032	-0.706918579	-0.69801711
4:56:32	-0.492893789	-0.721561514	-0.697949227	4:56:36	-0.492957546	-0.725592242	-0.697881345
4:56:40	-0.493021303	-0.726085556	-0.697813463	4:56:44	-0.49308506	-0.725030747	-0.697745581
4:56:48	-0.493148817	-0.719331392	-0.697677699	4:56:52	-0.493212574	-0.713632073	-0.697609817
4:56:56	-0.493276331	-0.701705373	-0.697541935	4:57:00	-0.493340088	-0.687702867	-0.697474053
4:57:04	-0.493278242	-0.669821572	-0.69740617	4:57:08	-0.493216397	-0.640528587	-0.697338288
4:57:12	-0.493154551	-0.611235602	-0.697270406	4:57:16	-0.493092706	-0.580752062	-0.697202524
4:57:20	-0.49303086	-0.549871641	-0.697134642	4:57:24	-0.492969015	-0.525746657	-0.69706676
4:57:28	-0.492907169	-0.508377091	-0.696998878	4:57:32	-0.492845324	-0.491007526	-0.696930996
4:57:36	-0.492783478	-0.461896504	-0.696863113	4:57:40	-0.492721633	-0.428871679	-0.696795231
4:57:44	-0.492659787	-0.398925291	-0.696727349	4:57:48	-0.492597942	-0.378214229	-0.696659467
4:57:52	-0.492536096	-0.357503172	-0.696591585	4:57:56	-0.49247425	-0.342376222	-0.696523703
4:58:00	-0.492412405	-0.327249271	-0.696455821	4:58:04	-0.492277777	-0.311406609	-0.696387938
4:58:08	-0.49214315	-0.29354696	-0.696320056	4:58:12	-0.492008522	-0.275687313	-0.696252174
4:58:16	-0.491873894	-0.258209352	-0.696184292	4:58:20	-0.491739266	-0.240858619	-0.69611641
4:58:24	-0.491604639	-0.225642878	-0.696048528	4:58:28	-0.491470011	-0.216832113	-0.695980646
4:58:32	-0.491335383	-0.208021347	-0.695912764	4:58:36	-0.491200756	-0.193705922	-0.695844881
4:58:40	-0.491066128	-0.177555607	-0.695776999	4:58:44	-0.4909315	-0.158068645	-0.695709117
4:58:48	-0.490796872	-0.128571719	-0.695641235	4:58:52	-0.490662245	-0.099074792	-0.695573353
4:58:56	-0.490527617	-0.081089481	-0.695505471	4:59:00	-0.490392989	-0.066941346	-0.695437589
4:59:04	-0.490337468	-0.055499936	-0.695369707	4:59:08	-0.490281946	-0.052037152	-0.695301824
4:59:12	-0.490226425	-0.048574368	-0.695233942	4:59:16	-0.490170904	-0.047069787	-0.69516606
4:59:20	-0.490115382	-0.046217969	-0.695098178	4:59:24	-0.490059861	-0.042299112	-0.695030296
4:59:28	-0.49000434	-0.029179186	-0.694962414	4:59:32	-0.489948818	-0.016059261	-0.694894532
4:59:36	-0.489893297	-0.006255668	-0.69482665	4:59:40	-0.489837776	0.002442463	-0.694758767
4:59:44	-0.489782254	0.01087979	-0.694690885	4:59:48	-0.489726733	0.018534654	-0.694623003
4:59:52	-0.489671211	0.026189517	-0.694555121	4:59:56	-0.48961569	0.048914107	-0.694487239
5:00:00	0.010439831	0.576661914	-0.194419357	5:00:04	0.010567006	0.599798791	-0.194351475
5:00:08	0.01069418	0.608974602	-0.194283593	5:00:12	-0.489178646	0.118150413	-0.69421571
5:00:16	-0.489051472	0.124919889	-0.694147828	5:00:20	-0.488924298	0.130887252	-0.694079946
5:00:24	-0.488797123	0.133999899	-0.694012064	5:00:28	-0.488669949	0.128548325	-0.693944182
5:00:32	-0.488542775	0.123096751	-0.6938763	5:00:36	-0.488415601	0.109471353	-0.693808418
5:00:40	-0.488288426	0.093121312	-0.693740536	5:00:44	-0.488161252	0.077610298	-0.693672653

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
5:00:48	-0.488034078	0.064616329	-0.693604771	5:00:52	-0.487906904	0.05162236	-0.693536889
5:00:56	-0.48777973	0.039027279	-0.693469007	5:01:00	-0.487652555	0.02656522	-0.693401125
5:01:04	-0.48761962	0.017489538	-0.693333243	5:01:08	-0.487586685	0.018741578	-0.693265361
5:01:12	-0.48755375	0.019993655	-0.693197479	5:01:16	-0.487520815	0.021758775	-0.693129596
5:01:20	-0.48748788	0.023694899	-0.693061714	5:01:24	-0.487454945	0.024056181	-0.692993832
5:01:28	-0.48742201	0.019692871	-0.69292595	5:01:32	-0.487389075	0.01532956	-0.692858068
5:01:36	-0.48735614	0.003333343	-0.692790186	5:01:40	-0.487323205	-0.011207188	-0.692722304
5:01:44	-0.48729027	-0.026540558	-0.692654421	5:01:48	-0.487257335	-0.044252444	-0.692586539
5:01:52	-0.4872244	-0.06196433	-0.692518657	5:01:56	-0.487191465	-0.074513705	-0.692450775
5:02:00	-0.48715853	-0.08534223	-0.692382893	5:02:04	-0.487036383	-0.097593381	-0.692315011
5:02:08	-0.486914237	-0.114271921	-0.692247129	5:02:12	-0.48679209	-0.130950462	-0.692179247
5:02:16	-0.486669944	-0.154081001	-0.692111364	5:02:20	-0.486547797	-0.179362214	-0.692043482
5:02:24	-0.486425651	-0.202436759	-0.6919756	5:02:28	-0.486303504	-0.218891322	-0.691907718
5:02:32	-0.486181358	-0.235345885	-0.691839836	5:02:36	-0.486059211	-0.251800445	-0.691771954
5:02:40	-0.485937065	-0.268255008	-0.691704072	5:02:44	-0.485814918	-0.283388347	-0.69163619
5:02:48	-0.485692772	-0.294558023	-0.691568307	5:02:52	-0.485570625	-0.305727698	-0.691500425
5:02:56	-0.485448479	-0.309872612	-0.691432543	5:03:00	-0.485326332	-0.311675937	-0.691364661
5:03:04	-0.485222024	-0.315193735	-0.691296779	5:03:08	-0.485117716	-0.323823055	-0.691228897
5:03:12	-0.485013409	-0.332452375	-0.691161015	5:03:16	-0.484909101	-0.323635815	-0.6911093133
5:03:20	-0.484804793	-0.30900396	-0.69102525	5:03:24	-0.484700485	-0.294372105	-0.690957368
5:03:28	-0.484596177	-0.284692726	-0.690889486	5:03:32	-0.484491869	-0.279965824	-0.690821604
5:03:36	-0.484387562	-0.280982049	-0.690753722	5:03:40	-0.484283254	-0.283912651	-0.69068584
5:03:44	-0.484178946	-0.286695453	-0.690617958	5:03:48	-0.484074638	-0.289034853	-0.690550076
5:03:52	-0.48397033	-0.291374253	-0.690482193	5:03:56	-0.483866022	-0.281451193	-0.690414311
5:04:00	-0.483761715	-0.267440647	-0.690346429	5:04:04	-0.483940721	-0.251423689	-0.690278547
5:04:08	-0.484119727	-0.228880846	-0.690210665	5:04:12	-0.484298733	-0.206338002	-0.690142783
5:04:16	-0.484477739	-0.193880992	-0.690074901	5:04:20	-0.484656745	-0.184785916	-0.690007019
5:04:24	-0.484835751	-0.177829454	-0.689939136	5:04:28	-0.485014757	-0.177288819	-0.689871254
5:04:32	-0.485193763	-0.176748186	-0.689803372	5:04:36	-0.485372769	-0.191376457	-0.68973549
5:04:40	-0.485551775	-0.211061034	-0.689667608	5:04:44	-0.485730781	-0.231564995	-0.689599726
5:04:48	-0.485909787	-0.25452712	-0.689531844	5:04:52	-0.486088793	-0.277489247	-0.689463961
5:04:56	-0.486267799	-0.300047086	-0.689396079	5:05:00	-0.486446805	-0.322470162	-0.689328197
5:05:04	-0.48637999	-0.340936114	-0.689260315	5:05:08	-0.486313176	-0.347970276	-0.689192433
5:05:12	-0.486246361	-0.355004438	-0.689124551	5:05:16	-0.486179547	-0.355813	-0.689056669
5:05:20	-0.486112732	-0.354546364	-0.688988787	5:05:24	-0.486045918	-0.352446973	-0.688920904
5:05:28	-0.485979103	-0.347849327	-0.688853022	5:05:32	-0.485912289	-0.343251677	-0.68878514
5:05:36	-0.485845474	-0.333458465	-0.688717258	5:05:40	-0.485778659	-0.318469682	-0.688649376
5:05:44	-0.485711845	-0.303480902	-0.688581494	5:05:48	-0.48564503	-0.295175339	-0.688513612
5:05:52	-0.485578216	-0.286869776	-0.68844573	5:05:56	-0.485511401	-0.288043377	-0.688377847
5:06:00	-0.485444587	-0.29869614	-0.688309965	5:06:04	-0.485449163	-0.309391459	-0.688242083
5:06:08	-0.485453739	-0.349207425	-0.688174201	5:06:12	-0.485458316	-0.389023391	-0.688106319
5:06:16	-0.485462892	-0.427571562	-0.688038437	5:06:20	-0.485467468	-0.464851919	-0.687970555
5:06:24	-0.485472045	-0.502132294	-0.687902673	5:06:28	-0.485476621	-0.517106598	-0.68783479
5:06:32	-0.485481197	-0.532080902	-0.687766908	5:06:36	-0.485485774	-0.549695414	-0.687699026
5:06:40	-0.48549035	-0.569950097	-0.687631144	5:06:44	-0.485494926	-0.590204781	-0.687563262
5:06:48	-0.485499503	-0.596451127	-0.68749538	5:06:52	-0.485504079	-0.602697473	-0.687427498
5:06:56	-0.485508655	-0.611368416	-0.687359616	5:07:00	-0.485513232	-0.622463957	-0.687291733
5:07:04	-0.48545771	-0.63352371	-0.687223851	5:07:08	-0.485402189	-0.63157423	-0.687155969
5:07:12	-0.485346668	-0.629624714	-0.687088087	5:07:16	-0.485291146	-0.629268585	-0.687020205
5:07:20	-0.485235625	-0.630505808	-0.686952323	5:07:24	-0.485180104	-0.631743031	-0.686884441
5:07:28	-0.485124582	-0.631601784	-0.686816559	5:07:32	-0.485069061	-0.631460501	-0.686748676
5:07:36	-0.485013539	-0.627648072	-0.686680794	5:07:40	-0.484958018	-0.620164425	-0.686612912
5:07:44	-0.484902497	-0.612680778	-0.68654503	5:07:48	-0.484846975	-0.607094295	-0.686477148
5:07:52	-0.484791454	-0.601507847	-0.686409266	5:07:56	-0.484735933	-0.595010247	-0.686341384
5:08:00	-0.484680411	-0.587601531	-0.686273501	5:08:04	-0.484661082	-0.580214371	-0.686205619
5:08:08	-0.484641753	-0.566259459	-0.686137737	5:08:12	-0.484622424	-0.552304547	-0.686069855
5:08:16	-0.484603095	-0.537648959	-0.686001973	5:08:20	-0.484583766	-0.522759819	-0.685934091

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
5:08:24	-0.484564437	-0.507870661	-0.685866209	5:08:28	-0.484545108	-0.485267732	-0.685798327
5:08:32	-0.484525779	-0.462664802	-0.685730444	5:08:36	-0.48450645	-0.439686754	-0.685662562
5:08:40	-0.484487121	-0.416333577	-0.68559468	5:08:44	-0.484467792	-0.392980408	-0.685526798
5:08:48	-0.484448463	-0.357208488	-0.685458916	5:08:52	-0.484429134	-0.321436564	-0.685391034
5:08:56	-0.484409805	-0.284822885	-0.685323152	5:09:00	-0.484390476	-0.247928619	-0.68525527
5:09:04	-0.484314627	-0.211000665	-0.685187387	5:09:08	-0.484238778	-0.183669571	-0.685119505
5:09:12	-0.484162929	-0.156338478	-0.685051623	5:09:16	-0.484087079	-0.129312608	-0.684983741
5:09:20	-0.48401123	-0.102591954	-0.684915859	5:09:24	-0.483935381	-0.0758713	-0.684847977
5:09:28	-0.483859532	-0.052508192	-0.684780095	5:09:32	-0.483783683	-0.029145085	-0.684712213
5:09:36	-0.483707834	-0.015530429	-0.68464433	5:09:40	-0.483631985	-0.01166426	-0.684576448
5:09:44	-0.483556136	-0.007798091	-0.684508566	5:09:48	-0.483480287	-0.018535396	-0.684440684
5:09:52	-0.483404438	-0.029272701	-0.684372802	5:09:56	-0.483328589	-0.032507758	-0.68430492
5:10:00	-0.48325274	-0.028240569	-0.684237038	5:10:04	-0.483251778	-0.024018036	-0.684169156
5:10:08	-0.483250816	-0.021929293	-0.684101273	5:10:12	-0.483249854	-0.019840532	-0.684033391
5:10:16	-0.483248892	-0.021534161	-0.683965509	5:10:20	-0.483247931	-0.027010143	-0.683897627
5:10:24	-0.483246969	-0.032486126	-0.683829745	5:10:28	-0.483246007	-0.034613693	-0.683761863
5:10:32	-0.483245045	-0.036741278	-0.683693981	5:10:36	-0.483244083	-0.034383967	-0.683626099
5:10:40	-0.483243121	-0.027541799	-0.683558216	5:10:44	-0.48324216	-0.02069963	-0.683490334
5:10:48	-0.483241198	-0.024800678	-0.683422452	5:10:52	-0.483240236	-0.028901726	-0.68335457
5:10:56	-0.483239274	-0.032181476	-0.683286688	5:11:00	-0.483238312	-0.034639928	-0.683218806
5:11:04	-0.483190019	-0.037070166	-0.683150924	5:11:08	-0.483141725	-0.049046623	-0.683083041
5:11:12	-0.483093431	-0.061023079	-0.683015159	5:11:16	-0.483045137	-0.070619492	-0.682947277
5:11:20	-0.482996844	-0.077835861	-0.682879395	5:11:24	-0.48294855	-0.08409283	-0.682811513
5:11:28	-0.482900256	-0.087471632	-0.682743631	5:11:32	-0.482851962	-0.090850417	-0.682675749
5:11:36	-0.482803669	-0.099235686	-0.682607867	5:11:40	-0.482755375	-0.112627439	-0.682539984
5:11:44	-0.482707081	-0.126019173	-0.682472102	5:11:48	-0.482658787	-0.137124396	-0.68240422
5:11:52	-0.482610494	-0.148229618	-0.682336338	5:11:56	-0.4825622	-0.162076964	-0.682268456
5:12:00	-0.482513906	-0.178666444	-0.682200574	5:12:04	-0.482338596	-0.19518021	-0.682132692
5:12:08	-0.482163286	-0.192154953	-0.68206481	5:12:12	-0.481987976	-0.189129697	-0.681996927
5:12:16	-0.481812665	-0.186688037	-0.681929045	5:12:20	-0.481637355	-0.184829975	-0.681861163
5:12:24	-0.481462045	-0.182971903	-0.681793281	5:12:28	-0.481286735	-0.186422494	-0.681725399
5:12:32	-0.481111425	-0.189873084	-0.681657517	5:12:36	-0.480936114	-0.190563893	-0.681589635
5:12:40	-0.480760804	-0.188494927	-0.681521753	5:12:44	-0.480585494	-0.186425963	-0.68145387
5:12:48	-0.480410184	-0.191927399	-0.681385988	5:12:52	-0.480234873	-0.197428844	-0.681318106
5:12:56	-0.480059563	-0.208875505	-0.681250224	5:13:00	-0.479884253	-0.22626738	-0.681182342
5:13:04	-0.47983867	-0.243736589	-0.68111446	5:13:08	-0.479793086	-0.246175931	-0.681046578
5:13:12	-0.479747503	-0.248615268	-0.680978696	5:13:16	-0.47970192	-0.253460868	-0.680910813
5:13:20	-0.479656336	-0.260712728	-0.680842931	5:13:24	-0.479610753	-0.267964588	-0.680775049
5:13:28	-0.479565169	-0.275216447	-0.680707167	5:13:32	-0.479519586	-0.29029253	-0.680639285
5:13:36	-0.479474003	-0.303957421	-0.680571403	5:13:40	-0.479428419	-0.313388743	-0.680503521
5:13:44	-0.479382836	-0.322820065	-0.680435639	5:13:48	-0.479337252	-0.335005199	-0.680367756
5:13:52	-0.479291669	-0.347190332	-0.680299874	5:13:56	-0.479246086	-0.359097216	-0.680231992
5:14:00	-0.479200502	-0.370725857	-0.68016411	5:14:04	-0.47913526	-0.38234277	-0.680096228
5:14:08	-0.479070017	-0.390460144	-0.680028346	5:14:12	-0.479004775	-0.398577516	-0.679960464
5:14:16	-0.478939532	-0.411296668	-0.679892581	5:14:20	-0.47887429	-0.428617595	-0.679824699
5:14:24	-0.478809047	-0.445938524	-0.679756817	5:14:28	-0.478743805	-0.458147152	-0.679688935
5:14:32	-0.478678562	-0.470355781	-0.679621053	5:14:36	-0.47861332	-0.478489294	-0.679553171
5:14:40	-0.478548077	-0.482547708	-0.679485289	5:14:44	-0.478482835	-0.486606104	-0.679417407
5:14:48	-0.478417592	-0.488203628	-0.679349524	5:14:52	-0.47835235	-0.489801169	-0.679281642
5:14:56	-0.478287107	-0.490349704	-0.67921376	5:15:00	-0.978221865	-0.989849269	-1.179145878
5:15:04	-0.978183509	-0.989364861	-1.179077996	5:15:08	-0.978145153	-0.999247134	-1.179010114
5:15:12	-0.478106797	-0.509129389	-0.678942232	5:15:16	-0.478068441	-0.519011662	-0.67887435
5:15:20	-0.478030086	-0.528893917	-0.678806467	5:15:24	-0.47799173	-0.53877619	-0.678738585
5:15:28	-0.477953374	-0.534182149	-0.678670703	5:15:32	-0.477915018	-0.529588126	-0.678602821
5:15:36	-0.477876663	-0.522347233	-0.678534939	5:15:40	-0.477838307	-0.512459471	-0.678467057
5:15:44	-0.477799951	-0.502571708	-0.678399175	5:15:48	-0.477761595	-0.482012316	-0.678331293
5:15:52	-0.47772324	-0.461452906	-0.67826341	5:15:56	-0.477684884	-0.452140347	-0.678195528

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
5:16:00	-0.477646528	-0.454074604	-0.678127646	5:16:04	-0.477402876	-0.455886503	-0.678059764
5:16:08	-0.477159224	-0.446801535	-0.677991882	5:16:12	-0.476915572	-0.437716567	-0.677924
5:16:16	-0.47667192	-0.424873893	-0.677856118	5:16:20	-0.476428269	-0.408273488	-0.677788236
5:16:24	-0.476184617	-0.391673082	-0.677720353	5:16:28	-0.475940965	-0.372690883	-0.677652471
5:16:32	-0.475697313	-0.353708684	-0.677584589	5:16:36	-0.475453661	-0.345543856	-0.677516707
5:16:40	-0.475210009	-0.340984814	-0.677448825	5:16:44	-0.474966357	-0.336425777	-0.677380943
5:16:48	-0.474722705	-0.326400762	-0.677313061	5:16:52	-0.474478769	-0.316375579	-0.677244794
5:16:56	-0.474231988	-0.307297204	-0.677172672	5:17:00	-0.473985208	-0.299167331	-0.677100551
5:17:04	-0.473891774	-0.291128867	-0.677028429	5:17:08	-0.473798341	-0.276958452	-0.676956307
5:17:12	-0.473704908	-0.262788037	-0.676884186	5:17:16	-0.473611475	-0.242394883	-0.676812064
5:17:20	-0.473518041	-0.215778987	-0.676739943	5:17:24	-0.473424608	-0.189163096	-0.676667821
5:17:28	-0.473331175	-0.176149508	-0.6765957	5:17:32	-0.473237742	-0.163135929	-0.676523578
5:17:36	-0.473144308	-0.153845796	-0.676451457	5:17:40	-0.473050875	-0.148279118	-0.676379335
5:17:44	-0.472957442	-0.141932392	-0.676307214	5:17:48	-0.472864009	-0.133245487	-0.676235092
5:17:52	-0.472770576	-0.124558581	-0.67616297	5:17:56	-0.472677142	-0.111364059	-0.676090849
5:18:00	-0.472583709	-0.096667018	-0.676018727	5:18:04	-0.472497522	-0.081974295	-0.675946606
5:18:08	-0.472411334	-0.070384905	-0.675874484	5:18:12	-0.472325147	-0.058795516	-0.675802363
5:18:16	-0.472238959	-0.052989461	-0.675730241	5:18:20	-0.472152771	-0.05296674	-0.67565812
5:18:24	-0.472066584	-0.052944002	-0.675585998	5:18:28	-0.471980396	-0.059736816	-0.675513877
5:18:32	-0.471894209	-0.06652963	-0.675441755	5:18:36	-0.471808021	-0.07287703	-0.675369633
5:18:40	-0.471721834	-0.07877898	-0.675297512	5:18:44	-0.471635646	-0.084680929	-0.67522539
5:18:48	-0.471549459	-0.08865246	-0.675153269	5:18:52	-0.471463271	-0.092623991	-0.675081147
5:18:56	-0.471377084	-0.096595521	-0.675009026	5:19:00	-0.471290896	-0.100567052	-0.674936904
5:19:04	-0.471228632	-0.103438339	-0.674864783	5:19:08	-0.471166368	-0.102966113	-0.674792661
5:19:12	-0.471104104	-0.102493888	-0.67472054	5:19:16	-0.47104184	-0.098438007	-0.674648418
5:19:20	-0.470979576	-0.090798452	-0.674576296	5:19:24	-0.470917312	-0.083158897	-0.674504175
5:19:28	-0.470855048	-0.072469677	-0.674432053	5:19:32	-0.470792783	-0.061780473	-0.674359932
5:19:36	-0.470730519	-0.061573155	-0.67428781	5:19:40	-0.470668255	-0.071847757	-0.674215689
5:19:44	-0.470605991	-0.082122359	-0.674143567	5:19:48	-0.470543727	-0.086074522	-0.674071446
5:19:52	-0.470481463	-0.090026684	-0.673999324	5:19:56	-0.470419199	-0.087596469	-0.673927203
5:20:00	-0.470356935	-0.08303877	-0.673855081	5:20:04	-0.470310648	-0.078490613	-0.673782959
5:20:08	-0.470264362	-0.073223359	-0.673710838	5:20:12	-0.470218075	-0.067956088	-0.673638716
5:20:16	-0.470171789	-0.068502812	-0.673566595	5:20:20	-0.470125502	-0.074863533	-0.673494473
5:20:24	-0.470079216	-0.081224253	-0.673422352	5:20:28	-0.470032929	-0.086997708	-0.67335023
5:20:32	-0.469986643	-0.092771164	-0.673278109	5:20:36	-0.469940356	-0.103509125	-0.673205987
5:20:40	-0.469894069	-0.119211609	-0.673133866	5:20:44	-0.469847783	-0.134914085	-0.673061744
5:20:48	-0.469801496	-0.143053133	-0.672989622	5:20:52	-0.46975521	-0.15119218	-0.672917501
5:20:56	-0.469708923	-0.160840143	-0.672845379	5:21:00	-0.469662637	-0.171997023	-0.672773258
5:21:04	-0.469601728	-0.183145195	-0.672701136	5:21:08	-0.469540819	-0.183665776	-0.672629015
5:21:12	-0.46947991	-0.184186348	-0.672556893	5:21:16	-0.469419001	-0.188079584	-0.672484772
5:21:20	-0.469358092	-0.195345476	-0.67241265	5:21:24	-0.469297183	-0.202611368	-0.672340529
5:21:28	-0.469236274	-0.205038412	-0.672268407	5:21:32	-0.469175366	-0.207465448	-0.672196286
5:21:36	-0.469114457	-0.20623891	-0.672124164	5:21:40	-0.469053548	-0.201358786	-0.672052042
5:21:44	-0.468992639	-0.196478667	-0.671979921	5:21:48	-0.46893173	-0.200859847	-0.671907799
5:21:52	-0.468870821	-0.205241026	-0.671835678	5:21:56	-0.468809912	-0.212247429	-0.671763556
5:22:00	-0.468749003	-0.221879051	-0.671691435	5:22:04	-0.468671642	-0.231500866	-0.671619313
5:22:08	-0.468594282	-0.247040625	-0.671547192	5:22:12	-0.468516921	-0.262580384	-0.67147507
5:22:16	-0.46843956	-0.276542636	-0.671402949	5:22:20	-0.468362199	-0.28892738	-0.671330827
5:22:24	-0.468284838	-0.301312125	-0.671258705	5:22:28	-0.468207478	-0.302076717	-0.671186584
5:22:32	-0.468130117	-0.302841309	-0.671114462	5:22:36	-0.468052756	-0.305596065	-0.671042341
5:22:40	-0.467975395	-0.310340985	-0.670970219	5:22:44	-0.467898034	-0.315085905	-0.670898098
5:22:48	-0.467820674	-0.315827225	-0.670825976	5:22:52	-0.467743313	-0.316568545	-0.670753855
5:22:56	-0.467665952	-0.314027979	-0.670681733	5:23:00	-0.467588591	-0.308205519	-0.670609612
5:23:04	-0.467564272	-0.302414677	-0.67053749	5:23:08	-0.467539953	-0.296623835	-0.670465368
5:23:12	-0.467515634	-0.290832994	-0.670393247	5:23:16	-0.467491315	-0.286135167	-0.670321125
5:23:20	-0.467466996	-0.282530356	-0.670249004	5:23:24	-0.467442677	-0.278925546	-0.670176882
5:23:28	-0.467418358	-0.275320735	-0.670104761	5:23:32	-0.467394039	-0.261518598	-0.670032639

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
5:23:36	-0.46736972	-0.245357568	-0.669960518	5:23:40	-0.467345401	-0.222119859	-0.669888396
5:23:44	-0.467321081	-0.198882149	-0.669816275	5:23:48	-0.467296762	-0.185321596	-0.669744153
5:23:52	-0.467272443	-0.171761044	-0.669672031	5:23:56	-0.467248124	-0.156533629	-0.66959991
5:24:00	-0.467223805	-0.139639344	-0.669527788	5:24:04	-0.466910246	-0.122572647	-0.669455667
5:24:08	-0.466596686	-0.10697557	-0.669383545	5:24:12	-0.466283126	-0.09137851	-0.669311424
5:24:16	-0.465969567	-0.082898649	-0.669239302	5:24:20	-0.465656007	-0.08153602	-0.669167181
5:24:24	-0.465342448	-0.08017339	-0.669095059	5:24:28	-0.465028888	-0.072043209	-0.669022938
5:24:32	-0.464715329	-0.063913045	-0.668950816	5:24:36	-0.464401769	-0.057288902	-0.668878694
5:24:40	-0.46408821	-0.052170814	-0.668806573	5:24:44	-0.46377465	-0.047052709	-0.668734451
5:24:48	-0.46346109	-0.039238633	-0.66866233	5:24:52	-0.463147531	-0.031424539	-0.668590208
5:24:56	-0.462833971	-0.020858674	-0.668518087	5:25:00	-0.462520412	-0.007541004	-0.668445965
5:25:04	-0.462459955	0.005625777	-0.668373844	5:25:08	-0.462399497	0.016897101	-0.668301722
5:25:12	-0.46233904	0.028168425	-0.668229601	5:25:16	-0.462278583	0.038695763	-0.668157479
5:25:20	-0.462218126	0.048479186	-0.668085358	5:25:24	-0.462157669	0.058262574	-0.668013236
5:25:28	-0.462097211	0.071850379	-0.667941114	5:25:32	-0.462036754	0.085438184	-0.667868993
5:25:36	-0.461976297	0.096369456	-0.667796871	5:25:40	-0.46191584	0.104644194	-0.66772475
5:25:44	-0.461855383	0.112918932	-0.667652628	5:25:48	-0.461794925	0.117424746	-0.667580507
5:25:52	-0.461734468	0.12193056	-0.667508385	5:25:56	-0.461674011	0.130054832	-0.667436264
5:26:00	-0.461613554	0.141797559	-0.667364142	5:26:04	-0.461277128	0.153704788	-0.667292021
5:26:08	-0.460940702	0.161384515	-0.667219899	5:26:12	-0.460604276	0.169064241	-0.667147777
5:26:16	-0.46026785	0.173001727	-0.667075656	5:26:20	-0.459931424	0.173197007	-0.667003534
5:26:24	-0.459594998	0.173392287	-0.666931413	5:26:28	-0.459258572	0.166843055	-0.666859291
5:26:32	-0.458922146	0.160293824	-0.66678717	5:26:36	-0.45858572	0.149786226	-0.666715048
5:26:40	-0.458249294	0.135320297	-0.666642927	5:26:44	-0.457912868	0.120854368	-0.666570805
5:26:48	-0.457576442	0.114401528	-0.666498684	5:26:52	-0.457240016	0.107948723	-0.666426562
5:26:56	-0.456903591	0.095219792	-0.66635444	5:27:00	-0.456567165	0.076214768	-0.666282319
5:27:04	-0.456535166	0.05702828	-0.666210197	5:27:08	-0.456503168	0.035113702	-0.666138076
5:27:12	-0.456471169	0.013199124	-0.666065954	5:27:16	-0.456439171	-0.006684291	-0.665993833
5:27:20	-0.456407172	-0.024536561	-0.665921711	5:27:24	-0.456375174	-0.042388831	-0.66584959
5:27:28	-0.456343176	-0.046110169	-0.665777468	5:27:32	-0.456311177	-0.049831507	-0.665705347
5:27:36	-0.456279179	-0.050480173	-0.665633225	5:27:40	-0.45624718	-0.048056167	-0.665561103
5:27:44	-0.456215182	-0.045632143	-0.665488982	5:27:48	-0.456183184	-0.055084587	-0.66541686
5:27:52	-0.456151185	-0.064537031	-0.665344739	5:27:56	-0.456119187	-0.076523858	-0.665272617
5:28:00	-0.456087188	-0.091045033	-0.665200496	5:28:04	-0.456080645	-0.105581382	-0.665128374
5:28:08	-0.456074101	-0.122398736	-0.665056253	5:28:12	-0.456067557	-0.13921609	-0.664984131
5:28:16	-0.456061014	-0.155563478	-0.66491201	5:28:20	-0.45605447	-0.171754201	-0.664839888
5:28:24	-0.456047927	-0.186768881	-0.664767766	5:28:28	-0.456041383	-0.19825539	-0.664695645
5:28:32	-0.456034839	-0.209741899	-0.664623523	5:28:36	-0.456028296	-0.219735404	-0.664551402
5:28:40	-0.456021752	-0.228235906	-0.66447928	5:28:44	-0.456015208	-0.236736408	-0.664407159
5:28:48	-0.456008665	-0.235297991	-0.664335037	5:28:52	-0.456002121	-0.233859573	-0.664262916
5:28:56	-0.455995577	-0.23275514	-0.664190794	5:29:00	-0.455989034	-0.231984697	-0.664118673
5:29:04	-0.455940322	-0.231189117	-0.664046551	5:29:08	-0.455891609	-0.226750318	-0.663974429
5:29:12	-0.455842897	-0.222311518	-0.663902308	5:29:16	-0.455794185	-0.217608877	-0.663830186
5:29:20	-0.455745472	-0.212642395	-0.663758065	5:29:24	-0.45569676	-0.207675912	-0.663685943
5:29:28	-0.455648048	-0.218339298	-0.663613822	5:29:32	-0.455599335	-0.229002685	-0.6635417
5:29:36	-0.455550623	-0.242154145	-0.663469579	5:29:40	-0.455501911	-0.25779368	-0.663397457
5:29:44	-0.455453199	-0.273433215	-0.663325336	5:29:48	-0.455404486	-0.281313817	-0.663253214
5:29:52	-0.455355774	-0.28919442	-0.663181093	5:29:56	-0.455307062	-0.293156738	-0.663108971
5:30:00	0.044741651	0.206799226	-0.163036849	5:30:04	0.045022731	0.206893703	-0.162964728
5:30:08	0.045303811	0.209927406	-0.162892606	5:30:12	-0.454415108	-0.287038893	-0.662820485
5:30:16	-0.454134028	-0.293644015	-0.662748363	5:30:20	-0.453852947	-0.309887963	-0.662676242
5:30:24	-0.453571867	-0.32613191	-0.66260412	5:30:28	-0.453290786	-0.347235275	-0.662531999
5:30:32	-0.453009706	-0.36833864	-0.662459877	5:30:36	-0.452728626	-0.383925941	-0.662387756
5:30:40	-0.452447545	-0.393997194	-0.662315634	5:30:44	-0.452166465	-0.404068439	-0.662243512
5:30:48	-0.451885384	-0.403538803	-0.662171391	5:30:52	-0.451604304	-0.403009166	-0.662099269
5:30:56	-0.451323223	-0.399583998	-0.662027148	5:31:00	-0.451042143	-0.393263282	-0.661955026
5:31:04	-0.450945096	-0.387052265	-0.661882905	5:31:08	-0.450848049	-0.370700294	-0.661810783

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
5:31:12	-0.450751002	-0.354348332	-0.661738662	5:31:16	-0.450653955	-0.340404354	-0.66166654
5:31:20	-0.450556908	-0.328868371	-0.661594419	5:31:24	-0.450459861	-0.317332384	-0.661522297
5:31:28	-0.450362814	-0.327952375	-0.661450175	5:31:32	-0.450265767	-0.338572369	-0.661378054
5:31:36	-0.45016872	-0.347868583	-0.661305932	5:31:40	-0.450071673	-0.355841029	-0.661233811
5:31:44	-0.449974626	-0.363813466	-0.661161689	5:31:48	-0.449877579	-0.371785903	-0.661089568
5:31:52	-0.449780532	-0.379758348	-0.661017446	5:31:56	-0.449683484	-0.390103518	-0.660945325
5:32:00	-0.449586437	-0.402821413	-0.660873203	5:32:04	-0.449256674	-0.41540059	-0.660801082
5:32:08	-0.448926911	-0.426412965	-0.66072896	5:32:12	-0.448597148	-0.437425339	-0.660656838
5:32:16	-0.448267385	-0.445935431	-0.660584717	5:32:20	-0.447937622	-0.451943239	-0.660512595
5:32:24	-0.447607859	-0.457951049	-0.660440474	5:32:28	-0.447278097	-0.465909972	-0.660368352
5:32:32	-0.446948334	-0.473868914	-0.660296231	5:32:36	-0.446618571	-0.483804552	-0.660224109
5:32:40	-0.446288808	-0.495716904	-0.660151988	5:32:44	-0.445959045	-0.507629257	-0.660079866
5:32:48	-0.445629282	-0.516935313	-0.660007745	5:32:52	-0.445299519	-0.526241352	-0.659935623
5:32:56	-0.444969756	-0.53382537	-0.659863501	5:33:00	-0.444639993	-0.539687348	-0.65979138
5:33:04	-0.444615222	-0.545731129	-0.659719258	5:33:08	-0.444590451	-0.54540596	-0.659647137
5:33:12	-0.44456568	-0.545080792	-0.659575015	5:33:16	-0.444540909	-0.541072966	-0.659502894
5:33:20	-0.444516139	-0.535837563	-0.659430772	5:33:24	-0.444491368	-0.530602177	-0.659358651
5:33:28	-0.444466597	-0.517248821	-0.659286529	5:33:32	-0.444441826	-0.503895446	-0.659214408
5:33:36	-0.444417055	-0.494829494	-0.659142286	5:33:40	-0.444392285	-0.498625772	-0.659070164
5:33:44	-0.444367514	-0.502422051	-0.658998043	5:33:48	-0.444342743	-0.517426471	-0.658925921
5:33:52	-0.444317972	-0.53243089	-0.6588538	5:33:56	-0.444293201	-0.539558121	-0.658781678
5:34:00	-0.444268431	-0.538808164	-0.658709557	5:34:04	-0.444311441	-0.53809861	-0.658637435
5:34:08	-0.444354452	-0.531621709	-0.658565314	5:34:12	-0.444397463	-0.525144809	-0.658493192
5:34:16	-0.444440474	-0.517219606	-0.658421071	5:34:20	-0.444483485	-0.507846082	-0.658348949
5:34:24	-0.444526495	-0.498472558	-0.658276828	5:34:28	-0.444569506	-0.506599576	-0.658204706
5:34:32	-0.444612517	-0.514726575	-0.658132584	5:34:36	-0.444655528	-0.522269081	-0.658060463
5:34:40	-0.444698538	-0.529227074	-0.657988341	5:34:44	-0.444741549	-0.536185067	-0.65791622
5:34:48	-0.44478456	-0.534617922	-0.657844098	5:34:52	-0.444827571	-0.53305076	-0.657771977
5:34:56	-0.444870581	-0.527401801	-0.657699855	5:35:00	-0.444913592	-0.517671047	-0.657627734
5:35:04	-0.444850876	-0.50787727	-0.657555612	5:35:08	-0.444788161	-0.506653613	-0.657483491
5:35:12	-0.444725445	-0.505429955	-0.657411369	5:35:16	-0.444662729	-0.511679891	-0.657339247
5:35:20	-0.444600013	-0.5254034	-0.657267126	5:35:24	-0.444537297	-0.53912691	-0.657195004
5:35:28	-0.444474582	-0.553622172	-0.657122883	5:35:32	-0.444411866	-0.568117416	-0.657050761
5:35:36	-0.44434915	-0.579381545	-0.65697864	5:35:40	-0.444286434	-0.5895686	-0.656906518
5:35:44	-0.444223718	-0.599755655	-0.656834397	5:35:48	-0.444161002	-0.605760828	-0.656762275
5:35:52	-0.444098287	-0.611766	-0.656690154	5:35:56	-0.444035571	-0.614690277	-0.656618032
5:36:00	-0.443972855	-0.614533621	-0.65654591	5:36:04	-0.443951833	-0.614401818	-0.656473789
5:36:08	-0.443930812	-0.623032064	-0.656401667	5:36:12	-0.443909791	-0.63166231	-0.656329546
5:36:16	-0.443888769	-0.63502191	-0.656257424	5:36:20	-0.443867748	-0.633110866	-0.656185303
5:36:24	-0.443846726	-0.631199822	-0.656113181	5:36:28	-0.443825705	-0.635554033	-0.65604106
5:36:32	-0.443804683	-0.639908244	-0.655968938	5:36:36	-0.443783662	-0.642183096	-0.655896817
5:36:40	-0.44376264	-0.64237859	-0.655824695	5:36:44	-0.443741619	-0.645445429	-0.655752573
5:36:48	-0.443720597	-0.657126336	-0.655680452	5:36:52	-0.443699576	-0.668807243	-0.65560833
5:36:56	-0.443678554	-0.68048815	-0.655536209	5:37:00	-0.443657533	-0.692169057	-0.655464087
5:37:04	-0.4436365162	-0.703878965	-0.655391966	5:37:08	-0.443712792	-0.717187517	-0.655319844
5:37:12	-0.443740421	-0.73049607	-0.655247723	5:37:16	-0.443768051	-0.737639525	-0.655175601
5:37:20	-0.44379568	-0.738617953	-0.65510348	5:37:24	-0.44382331	-0.739596381	-0.655031358
5:37:28	-0.443850939	-0.748899278	-0.654959236	5:37:32	-0.443878569	-0.758202174	-0.654887115
5:37:36	-0.443906198	-0.76450106	-0.654814993	5:37:40	-0.443933828	-0.767795934	-0.654742872
5:37:44	-0.443961457	-0.771090808	-0.65467075	5:37:48	-0.443989087	-0.756404358	-0.654598629
5:37:52	-0.444016716	-0.741717871	-0.654526507	5:37:56	-0.444044346	-0.729353338	-0.654454386
5:38:00	-0.444071975	-0.719310687	-0.654382264	5:38:04	-0.444054437	-0.709241147	-0.654310143
5:38:08	-0.444036898	-0.699171572	-0.654238021	5:38:12	-0.444019359	-0.689101997	-0.654165899
5:38:16	-0.444001821	-0.679531539	-0.654093778	5:38:20	-0.443984282	-0.670460162	-0.654021656
5:38:24	-0.443966743	-0.66138875	-0.653949535	5:38:28	-0.443949205	-0.652317374	-0.653877413
5:38:32	-0.443931666	-0.643245997	-0.653805292	5:38:36	-0.443914127	-0.639366604	-0.65373317
5:38:40	-0.443896589	-0.637217883	-0.653661049	5:38:44	-0.44387905	-0.635069162	-0.653588927

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
5:38:48	-0.443861511	-0.627625104	-0.653516806	5:38:52	-0.443843973	-0.620181009	-0.653444684
5:38:56	-0.443826434	-0.618938538	-0.653372563	5:39:00	-0.443808895	-0.623897616	-0.653300441
5:39:04	-0.443734435	-0.6288228	-0.653228319	5:39:08	-0.443659974	-0.638481602	-0.653156198
5:39:12	-0.443585513	-0.648140404	-0.653084076	5:39:16	-0.443511053	-0.650029494	-0.653011955
5:39:20	-0.443436592	-0.644148872	-0.652939833	5:39:24	-0.443362131	-0.636799286	-0.652867712
5:39:28	-0.44328767	-0.625042739	-0.65279559	5:39:32	-0.44321321	-0.613286193	-0.652723469
5:39:36	-0.443138749	-0.600389224	-0.652651347	5:39:40	-0.443064288	-0.586351903	-0.652579226
5:39:44	-0.442989828	-0.572314581	-0.652507104	5:39:48	-0.442915367	-0.563276674	-0.652434982
5:39:52	-0.442840906	-0.554238731	-0.652362861	5:39:56	-0.442766446	-0.542721315	-0.652290739
5:40:00	-0.442691985	-0.528724372	-0.652218618	5:40:04	-0.442769264	-0.514817898	-0.652146496
5:40:08	-0.442846542	-0.493811316	-0.652074375	5:40:12	-0.442923821	-0.472804734	-0.652002253
5:40:16	-0.4430011	-0.450240898	-0.651930132	5:40:20	-0.443078379	-0.426119808	-0.65185801
5:40:24	-0.443155657	-0.4019987	-0.651785889	5:40:28	-0.443232936	-0.383807522	-0.651713767
5:40:32	-0.443310215	-0.365616334	-0.651641645	5:40:36	-0.443387494	-0.348208951	-0.651569524
5:40:40	-0.443464772	-0.331585361	-0.651497402	5:40:44	-0.443542051	-0.314961775	-0.651425281
5:40:48	-0.44361933	-0.2874452	-0.651353159	5:40:52	-0.443696609	-0.259928625	-0.651281038
5:40:56	-0.443773887	-0.23607047	-0.651208916	5:41:00	-0.443851166	-0.215870735	-0.651136795
5:41:04	-0.443772188	-0.195577861	-0.651064673	5:41:08	-0.44369321	-0.183136737	-0.650992552
5:41:12	-0.443614232	-0.170695609	-0.65092043	5:41:16	-0.443535254	-0.15515429	-0.650848308
5:41:20	-0.443456276	-0.136512766	-0.650776187	5:41:24	-0.443377298	-0.11787125	-0.650704065
5:41:28	-0.44329832	-0.100620009	-0.650631944	5:41:32	-0.443219342	-0.083368776	-0.650559822
5:41:36	-0.443140364	-0.060438044	-0.650487701	5:41:40	-0.443061386	-0.03182783	-0.650415579
5:41:44	-0.442982408	-0.009896273	-0.650343458	5:41:48	-0.44290343	-0.00800069	-0.650271336
5:41:52	-0.442824452	-0.006105106	-0.650199215	5:41:56	-0.442745474	0.003850839	-0.650127093
5:42:00	-0.442666496	0.021867125	-0.650054971	5:42:04	-0.442527678	0.039919083	-0.64998285
5:42:08	-0.44238886	0.05334639	-0.649910728	5:42:12	-0.442250042	0.066773662	-0.649838607
5:42:16	-0.442111224	0.081664745	-0.649766485	5:42:20	-0.441972405	0.098019605	-0.649694364
5:42:24	-0.441833587	0.114374465	-0.649622242	5:42:28	-0.441694769	0.123734224	-0.649550121
5:42:32	-0.441555951	0.133093983	-0.649477999	5:42:36	-0.441417133	0.142453742	-0.649405878
5:42:40	-0.441278314	0.151813501	-0.649333756	5:42:44	-0.441139496	0.161173261	-0.649261635
5:42:48	-0.441000678	0.168800535	-0.649189513	5:42:52	-0.44086186	0.176427774	-0.649117391
5:42:56	-0.440723042	0.175543446	-0.64904527	5:43:00	-0.440584224	0.166147481	-0.648973148
5:43:04	-0.440529187	0.156701611	-0.648901027	5:43:08	-0.440474151	0.137257375	-0.648828905
5:43:12	-0.440419114	0.11781314	-0.648756784	5:43:16	-0.440364078	0.101079123	-0.648684662
5:43:20	-0.440309041	0.087055395	-0.648612541	5:43:24	-0.440254005	0.073031632	-0.648540419
5:43:28	-0.440198968	0.056668755	-0.648468298	5:43:32	-0.440143932	0.040305878	-0.648396176
5:43:36	-0.440088895	0.028341364	-0.648324054	5:43:40	-0.440033859	0.029571955	-0.648251933
5:43:44	-0.439978822	0.030802546	-0.648179811	5:43:48	-0.439923786	0.029856376	-0.64810769
5:43:52	-0.439868749	0.028910223	-0.648035568	5:43:56	-0.439813713	0.029314205	-0.647963447
5:44:00	-0.439758676	0.031068358	-0.647891325	5:44:04	-0.439576642	0.032154955	-0.647819204
5:44:08	-0.439394607	0.031011833	-0.647747082	5:44:12	-0.439212572	0.029868711	-0.647674961
5:44:16	-0.439030537	0.031422804	-0.647602839	5:44:20	-0.438848502	0.035674112	-0.647530717
5:44:24	-0.438666467	0.03992542	-0.647458596	5:44:28	-0.438484432	0.038385044	-0.647386474
5:44:32	-0.438302398	0.036844668	-0.647314353	5:44:36	-0.438120363	0.029884939	-0.647242231
5:44:40	-0.437938328	0.017505838	-0.64717011	5:44:44	-0.437756293	0.00512672	-0.647097988
5:44:48	-0.437574258	-0.014646725	-0.647025867	5:44:52	-0.437392223	-0.03442017	-0.646953745
5:44:56	-0.437210188	-0.051826717	-0.646881624	5:45:00	-0.937028153	-0.566866365	-1.146809502
5:45:04	-0.936952338	-0.581969348	-1.14673738	5:45:08	-0.936876522	-0.595645398	-1.146665259
5:45:12	-0.436800706	-0.109321466	-0.646593137	5:45:16	-0.43672489	-0.119650407	-0.646521016
5:45:20	-0.436649074	-0.126632246	-0.646448894	5:45:24	-0.436573258	-0.133614086	-0.646376773
5:45:28	-0.436497442	-0.146960948	-0.646304651	5:45:32	-0.436421626	-0.160307809	-0.64623253
5:45:36	-0.43634581	-0.174962321	-0.646160408	5:45:40	-0.436269995	-0.190924502	-0.646088287
5:45:44	-0.436194179	-0.206886683	-0.646016165	5:45:48	-0.436118363	-0.229260385	-0.645944043
5:45:52	-0.436042547	-0.251634087	-0.645871922	5:45:56	-0.435966731	-0.274540832	-0.6457998
5:46:00	-0.435890915	-0.29798062	-0.645727679	5:46:04	-0.434329737	-0.320535007	-0.645655557
5:46:08	-0.432768558	-0.334692565	-0.645583436	5:46:12	-0.431207379	-0.348850118	-0.645511314
5:46:16	-0.429646201	-0.356442984	-0.645439193	5:46:20	-0.428085022	-0.357471162	-0.645367071

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
5:46:24	-0.426523844	-0.358499338	-0.64529495	5:46:28	-0.424962665	-0.367909818	-0.645222828
5:46:32	-0.423401487	-0.377320287	-0.645150706	5:46:36	-0.421840308	-0.389295252	-0.645078585
5:46:40	-0.42027913	-0.402125045	-0.645006463	5:46:44	-0.418717951	-0.417195687	-0.644934342
5:46:48	-0.417156773	-0.438988882	-0.64486222	5:46:52	-0.415595594	-0.460782078	-0.644790099
5:46:56	-0.414034416	-0.470216619	-0.644717977	5:47:00	-0.412473237	-0.467292488	-0.644645856
5:47:04	-0.412416394	-0.465265085	-0.644573734	5:47:08	-0.41235955	-0.465246621	-0.644501613
5:47:12	-0.412302707	-0.465228158	-0.644429491	5:47:16	-0.412245864	-0.4632627	-0.64435737
5:47:20	-0.41218902	-0.459350232	-0.644285248	5:47:24	-0.412132177	-0.455437781	-0.644213126
5:47:28	-0.412075333	-0.458702216	-0.644141005	5:47:32	-0.41201849	-0.461966651	-0.644068883
5:47:36	-0.411961647	-0.474690685	-0.643996762	5:47:40	-0.411904803	-0.496874315	-0.64392464
5:47:44	-0.41184796	-0.519057945	-0.643852519	5:47:48	-0.411791117	-0.548473409	-0.643780397
5:47:52	-0.411734273	-0.577888925	-0.643708276	5:47:56	-0.41167743	-0.601342821	-0.643636154
5:48:00	-0.411620586	-0.618835166	-0.643564033	5:48:04	-0.410272121	-0.635557596	-0.643491911
5:48:08	-0.408923656	-0.652280026	-0.643419789	5:48:12	-0.407566038	-0.668997	-0.643335266
5:48:16	-0.406203581	-0.683534345	-0.643244186	5:48:20	-0.404841124	-0.695894945	-0.643153107
5:48:24	-0.403478667	-0.708255545	-0.643062027	5:48:28	-0.40211621	-0.710579125	-0.642970948
5:48:32	-0.400753753	-0.712902704	-0.642879868	5:48:36	-0.399391296	-0.715226248	-0.642788789
5:48:40	-0.398028839	-0.717549827	-0.642697709	5:48:44	-0.396666382	-0.719873406	-0.64260663
5:48:48	-0.395303925	-0.714303417	-0.64251555	5:48:52	-0.393941468	-0.708733428	-0.642424471
5:48:56	-0.392579011	-0.700951273	-0.642333391	5:49:00	-0.391216554	-0.690956913	-0.642242312
5:49:04	-0.391124487	-0.681719886	-0.642151233	5:49:08	-0.391032421	-0.672482787	-0.642060153
5:49:12	-0.390940354	-0.663245759	-0.641969074	5:49:16	-0.390848288	-0.652367629	-0.641877994
5:49:20	-0.390756221	-0.63984843	-0.641786915	5:49:24	-0.390664155	-0.627329231	-0.641695835
5:49:28	-0.390572088	-0.603829883	-0.641604756	5:49:32	-0.390480022	-0.580330535	-0.641513676
5:49:36	-0.390387955	-0.555610468	-0.641422597	5:49:40	-0.390295889	-0.529669681	-0.641331517
5:49:44	-0.390203822	-0.503728877	-0.641240438	5:49:48	-0.390111756	-0.488406302	-0.641149358
5:49:52	-0.39001969	-0.473083744	-0.641058279	5:49:56	-0.389927623	-0.45523931	-0.6409672
5:50:00	-0.389835557	-0.434873033	-0.64087612	5:50:04	-0.389827452	-0.414556806	-0.640785041
5:50:08	-0.389819348	-0.395566962	-0.640693961	5:50:12	-0.389811244	-0.376577128	-0.640602882
5:50:16	-0.38980314	-0.366087854	-0.640511802	5:50:20	-0.389795036	-0.364099141	-0.640420723
5:50:24	-0.389786932	-0.362110437	-0.640329643	5:50:28	-0.389778828	-0.354930674	-0.640238564
5:50:32	-0.389770724	-0.34775092	-0.640147484	5:50:36	-0.38976262	-0.342406703	-0.640056405
5:50:40	-0.389754516	-0.338898043	-0.639965325	5:50:44	-0.389746412	-0.335389373	-0.639874246
5:50:48	-0.389738308	-0.333161077	-0.639783166	5:50:52	-0.389730204	-0.330932781	-0.639692087
5:50:56	-0.389722099	-0.32614523	-0.639601008	5:51:00	-0.389713995	-0.318798416	-0.639509928
5:51:04	-0.38965626	-0.311422027	-0.639418849	5:51:08	-0.389598525	-0.303429736	-0.639327769
5:51:12	-0.38954079	-0.29543745	-0.63923669	5:51:16	-0.389483054	-0.288038198	-0.63914561
5:51:20	-0.389425319	-0.28123198	-0.639054531	5:51:24	-0.389367584	-0.274425763	-0.638963451
5:51:28	-0.389309849	-0.27164321	-0.638872372	5:51:32	-0.389252113	-0.268860658	-0.638781292
5:51:36	-0.389194378	-0.266419474	-0.638690213	5:51:40	-0.389136643	-0.264319661	-0.638599133
5:51:44	-0.389078907	-0.262219849	-0.638508054	5:51:48	-0.389021172	-0.251128532	-0.638416975
5:51:52	-0.388963437	-0.240037216	-0.638325895	5:51:56	-0.388905702	-0.222581613	-0.638234816
5:52:00	-0.388847966	-0.198761721	-0.638143736	5:52:04	-0.388350118	-0.174679486	-0.638052657
5:52:08	-0.387852271	-0.143213153	-0.637961577	5:52:12	-0.387354423	-0.111746829	-0.637870498
5:52:16	-0.386856575	-0.079674382	-0.637779418	5:52:20	-0.386358727	-0.046995803	-0.637688339
5:52:24	-0.385860879	-0.014317242	-0.637597259	5:52:28	-0.385363031	0.012384971	-0.63750618
5:52:32	-0.384865183	0.039087166	-0.6374151	5:52:36	-0.384367335	0.057673362	-0.637324021
5:52:40	-0.383869487	0.068143522	-0.637232941	5:52:44	-0.383371639	0.078613683	-0.637141862
5:52:48	-0.382873792	0.094531016	-0.637050783	5:52:52	-0.382375944	0.110448385	-0.636959703
5:52:56	-0.381878096	0.122063818	-0.636868624	5:53:00	-0.381380248	0.129377386	-0.636777544
5:53:04	-0.381322964	0.136428305	-0.636686465	5:53:08	-0.381265681	0.134825114	-0.636595385
5:53:12	-0.381208397	0.133221958	-0.636504306	5:53:16	-0.381151114	0.132523381	-0.636413226
5:53:20	-0.38109383	0.132729418	-0.636322147	5:53:24	-0.381036547	0.132935455	-0.636231067
5:53:28	-0.380979263	0.132555044	-0.636139988	5:53:32	-0.380921979	0.132174668	-0.636048908
5:53:36	-0.380864696	0.132356509	-0.635957829	5:53:40	-0.380807412	0.13422518	-0.63586675
5:53:44	-0.380750129	0.136093851	-0.63577567	5:53:48	-0.380692845	0.13714556	-0.635684591
5:53:52	-0.380635562	0.138197303	-0.635593511	5:53:56	-0.380578278	0.133478112	-0.635502432

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
5:54:00	-0.380520995	0.122987987	-0.635411352	5:54:04	-0.380100022	0.11271465	-0.635320273
5:54:08	-0.379679049	0.105314719	-0.635229193	5:54:12	-0.379258075	0.097914789	-0.635138114
5:54:16	-0.378837102	0.093470087	-0.635047034	5:54:20	-0.378416129	0.091980685	-0.634955955
5:54:24	-0.377995156	0.090491284	-0.634864875	5:54:28	-0.377574183	0.090260157	-0.634773796
5:54:32	-0.37715321	0.090028994	-0.634682716	5:54:36	-0.376732237	0.092267053	-0.634591637
5:54:40	-0.376311264	0.096974336	-0.634500558	5:54:44	-0.375890291	0.101681582	-0.634409478
5:54:48	-0.375469318	0.101860322	-0.634318399	5:54:52	-0.375048345	0.102039062	-0.634227319
5:54:56	-0.374627371	0.100077403	-0.63413624	5:55:00	-0.374206398	0.095975347	-0.63404516
5:55:04	-0.374111622	0.091678851	-0.633954081	5:55:08	-0.374016845	0.084952854	-0.633863001
5:55:12	-0.373922068	0.078226857	-0.633771922	5:55:16	-0.373827291	0.061343873	-0.633680842
5:55:20	-0.373732514	0.034303956	-0.633589763	5:55:24	-0.373637737	0.007264021	-0.633498683
5:55:28	-0.373542961	-0.019193338	-0.633407604	5:55:32	-0.373448184	-0.045650714	-0.633316525
5:55:36	-0.373353407	-0.069739932	-0.633225445	5:55:40	-0.37325863	-0.091461017	-0.633134366
5:55:44	-0.373163853	-0.113182093	-0.633043286	5:55:48	-0.373069076	-0.122850599	-0.632952207
5:55:52	-0.372974299	-0.132519107	-0.632861127	5:55:56	-0.372879523	-0.144427041	-0.632770048
5:56:00	-0.372784746	-0.158574403	-0.632678968	5:56:04	-0.371555525	-0.17204554	-0.632587889
5:56:08	-0.370326305	-0.182005209	-0.632496809	5:56:12	-0.369097085	-0.191964875	-0.63240573
5:56:16	-0.367867865	-0.199205965	-0.63231465	5:56:20	-0.366638644	-0.203728473	-0.63223571
5:56:24	-0.365409424	-0.208250982	-0.632132491	5:56:28	-0.364180204	-0.207796704	-0.632041412
5:56:32	-0.362950984	-0.207342427	-0.631950333	5:56:36	-0.361721763	-0.196394997	-0.631859253
5:56:40	-0.360492543	-0.174954415	-0.631768174	5:56:44	-0.359263323	-0.153513831	-0.631677094
5:56:48	-0.358034103	-0.145332656	-0.631586015	5:56:52	-0.356804882	-0.137151482	-0.631494935
5:56:56	-0.355575662	-0.128080606	-0.631403856	5:57:00	-0.354346442	-0.118120021	-0.631312776
5:57:04	-0.354301355	-0.108865289	-0.631221697	5:57:08	-0.354256268	-0.099610556	-0.631130617
5:57:12	-0.354211181	-0.090355815	-0.631039538	5:57:16	-0.354166094	-0.077213482	-0.630948458
5:57:20	-0.354121007	-0.060183548	-0.630857379	5:57:24	-0.35407592	-0.043153613	-0.6307663
5:57:28	-0.354030833	-0.03353561	-0.63067522	5:57:32	-0.353985747	-0.02391759	-0.630584141
5:57:36	-0.35394066	-0.023844419	-0.630493061	5:57:40	-0.353895573	-0.033316064	-0.630401982
5:57:44	-0.353850486	-0.042787708	-0.630310902	5:57:48	-0.353805399	-0.055338242	-0.630219823
5:57:52	-0.353760312	-0.067888766	-0.630128743	5:57:56	-0.353715225	-0.079642989	-0.630037664
5:58:00	-0.353670138	-0.090600899	-0.629946584	5:58:04	-0.354184225	-0.101892124	-0.629855505
5:58:08	-0.354698313	-0.111973449	-0.629764425	5:58:12	-0.3552124	-0.122054774	-0.629673346
5:58:16	-0.355726487	-0.1315909	-0.629582267	5:58:20	-0.356240574	-0.140581827	-0.629491187
5:58:24	-0.356754662	-0.149572755	-0.629400108	5:58:28	-0.357268749	-0.161785044	-0.629309028
5:58:32	-0.357782836	-0.173997334	-0.629217949	5:58:36	-0.358296923	-0.179310493	-0.629126869
5:58:40	-0.358811011	-0.177724523	-0.62903579	5:58:44	-0.359325098	-0.176138553	-0.62894471
5:58:48	-0.359839185	-0.189099461	-0.628853631	5:58:52	-0.360353273	-0.202060369	-0.628762551
5:58:56	-0.36086736	-0.21384349	-0.628671472	5:59:00	-0.361381447	-0.224448823	-0.628580392
5:59:04	-0.361406378	-0.234762578	-0.628489313	5:59:08	-0.361431309	-0.23008402	-0.628398233
5:59:12	-0.361456239	-0.225405463	-0.628307154	5:59:16	-0.36148117	-0.222857974	-0.628216075
5:59:20	-0.361506101	-0.222441552	-0.628124995	5:59:24	-0.361531031	-0.222025131	-0.628033916
5:59:28	-0.361555962	-0.217017064	-0.627942836	5:59:32	-0.361580893	-0.212008997	-0.627851757
5:59:36	-0.361605823	-0.199897253	-0.627760677	5:59:40	-0.361630754	-0.180681831	-0.627669598
5:59:44	-0.361655685	-0.16146641	-0.627578518	5:59:48	-0.361680615	-0.142930227	-0.627487439
5:59:52	-0.361705546	-0.124394044	-0.627396359	5:59:56	-0.361730477	-0.106604597	-0.62730528
6:00:00	0.138244593	0.452873474	-0.1272142	6:00:04	0.138569127	0.447855524	-0.127123121
6:00:08	0.138893661	0.442837556	-0.127032042	6:00:12	-0.360781805	-0.062180394	-0.626940962
6:00:16	-0.360457271	-0.067198353	-0.626849883	6:00:20	-0.360132737	-0.072590179	-0.626758803
6:00:24	-0.359808203	-0.078355872	-0.626667724	6:00:28	-0.359483669	-0.084121565	-0.626576644
6:00:32	-0.359159136	-0.089887259	-0.626485565	6:00:36	-0.358834602	-0.095652952	-0.626394485
6:00:40	-0.358510068	-0.101204029	-0.626303406	6:00:44	-0.358185534	-0.106540474	-0.626212326
6:00:48	-0.357861	-0.111876927	-0.626121247	6:00:52	-0.357536466	-0.114824277	-0.626030167
6:00:56	-0.357211932	-0.117771627	-0.625939088	6:01:00	-0.356887398	-0.129620078	-0.625848008
6:01:04	-0.356782231	-0.150500384	-0.625756929	6:01:08	-0.356677064	-0.17138069	-0.62566585
6:01:12	-0.356571898	-0.197371975	-0.62557477	6:01:16	-0.356466731	-0.223363258	-0.625483691
6:01:20	-0.356361565	-0.242453793	-0.625392611	6:01:24	-0.356256398	-0.254643576	-0.625301532
6:01:28	-0.356151232	-0.266833363	-0.625210452	6:01:32	-0.356046065	-0.269593983	-0.625119373

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
6:01:36	-0.355940899	-0.272354599	-0.625028293	6:01:40	-0.355835732	-0.272454245	-0.624937214
6:01:44	-0.355730565	-0.26989292	-0.624846134	6:01:48	-0.355625399	-0.267331591	-0.624755055
6:01:52	-0.355520232	-0.263816102	-0.624663975	6:01:56	-0.355415066	-0.260300609	-0.624572896
6:02:00	-0.355309899	-0.257859915	-0.624481817	6:02:04	-0.355734355	-0.256809722	-0.624390737
6:02:08	-0.356158811	-0.255759528	-0.624299658	6:02:12	-0.356583266	-0.255202087	-0.624208578
6:02:16	-0.357007722	-0.254644642	-0.624117499	6:02:20	-0.357432178	-0.251969399	-0.624026419
6:02:24	-0.357856633	-0.247176352	-0.62393534	6:02:28	-0.358281089	-0.242383304	-0.62384426
6:02:32	-0.358705545	-0.240648649	-0.623753181	6:02:36	-0.359130001	-0.238913993	-0.623662101
6:02:40	-0.359554456	-0.238856806	-0.623571022	6:02:44	-0.359978912	-0.240477084	-0.623479942
6:02:48	-0.360403368	-0.242097363	-0.623388863	6:02:52	-0.360827823	-0.246914006	-0.623297783
6:02:56	-0.361252279	-0.25173065	-0.623206704	6:03:00	-0.361676735	-0.257595924	-0.623115625
6:03:04	-0.361628486	-0.264228056	-0.623024545	6:03:08	-0.361580237	-0.270860189	-0.622933466
6:03:12	-0.361531988	-0.278339324	-0.622842386	6:03:16	-0.361483739	-0.28581846	-0.622751307
6:03:20	-0.36143549	-0.292617372	-0.622660227	6:03:24	-0.361387241	-0.298736069	-0.622569148
6:03:28	-0.361338992	-0.304854766	-0.622478068	6:03:32	-0.361290743	-0.30822768	-0.622386989
6:03:36	-0.361242494	-0.311600593	-0.622295909	6:03:40	-0.361194245	-0.314397593	-0.62220483
6:03:44	-0.361145996	-0.31661867	-0.62211375	6:03:48	-0.361097747	-0.318839747	-0.622022671
6:03:52	-0.361049498	-0.3699552	-0.621931592	6:03:56	-0.361001249	-0.421070645	-0.621840512
6:04:00	-0.360953	-0.458992511	-0.621749433	6:04:04	-0.361118404	-0.483848155	-0.621658353
6:04:08	-0.361283808	-0.508703799	-0.621567274	6:04:12	-0.361449212	-0.508789692	-0.621476194
6:04:16	-0.361614616	-0.508875585	-0.621385115	6:04:20	-0.36178002	-0.50784621	-0.621294035
6:04:24	-0.361945424	-0.505701603	-0.621202956	6:04:28	-0.362110828	-0.503556978	-0.621111876
6:04:32	-0.362276232	-0.502554267	-0.621020797	6:04:36	-0.362441636	-0.50155154	-0.620929717
6:04:40	-0.36260704	-0.502517016	-0.620838638	6:04:44	-0.362772444	-0.505450662	-0.620747558
6:04:48	-0.362937849	-0.508384326	-0.620656479	6:04:52	-0.363103253	-0.51497075	-0.6205654
6:04:56	-0.363268657	-0.521557156	-0.62047432	6:05:00	-0.363434061	-0.529266682	-0.620383241
6:05:04	-0.363376777	-0.537966552	-0.620292161	6:05:08	-0.363319494	-0.546666458	-0.620201082
6:05:12	-0.36326221	-0.55664965	-0.620110002	6:05:16	-0.363204927	-0.566632842	-0.620018923
6:05:20	-0.363147643	-0.576616035	-0.619927843	6:05:24	-0.36309036	-0.586599191	-0.619836764
6:05:28	-0.363033076	-0.596069588	-0.619745684	6:05:32	-0.362975792	-0.604001525	-0.619654605
6:05:36	-0.362918509	-0.611933463	-0.619563525	6:05:40	-0.362861225	-0.620047133	-0.619472446
6:05:44	-0.362803942	-0.628342537	-0.619381367	6:05:48	-0.362746658	-0.63663794	-0.619290287
6:05:52	-0.362689375	-0.644933379	-0.619199208	6:05:56	-0.362632091	-0.653228782	-0.619108128
6:06:00	-0.362574808	-0.660658689	-0.619017049	6:06:04	-0.361768647	-0.666776706	-0.618925969
6:06:08	-0.360962487	-0.672894687	-0.61883489	6:06:12	-0.360156327	-0.673876041	-0.61874381
6:06:16	-0.359350166	-0.674857394	-0.618652731	6:06:20	-0.358544006	-0.673776478	-0.618561651
6:06:24	-0.357737846	-0.67063333	-0.618470572	6:06:28	-0.356931686	-0.667490145	-0.618379492
6:06:32	-0.356125525	-0.664346961	-0.618288413	6:06:36	-0.355319365	-0.661203812	-0.618197333
6:06:40	-0.354513205	-0.658332854	-0.618106254	6:06:44	-0.353707044	-0.655734158	-0.618015175
6:06:48	-0.352900884	-0.653135462	-0.617924095	6:06:52	-0.352094724	-0.67033478	-0.617833016
6:06:56	-0.351288564	-0.687534099	-0.617741936	6:07:00	-0.350482403	-0.690992171	-0.617650857
6:07:04	-0.350435961	-0.68116189	-0.617559777	6:07:08	-0.350389519	-0.671331572	-0.617468698
6:07:12	-0.350343077	-0.671398966	-0.617377618	6:07:16	-0.350296635	-0.671466395	-0.617286539
6:07:20	-0.350250193	-0.672891722	-0.617195459	6:07:24	-0.350203751	-0.675675018	-0.61710438
6:07:28	-0.350157309	-0.678458315	-0.6170133	6:07:32	-0.350110866	-0.681241576	-0.616922221
6:07:36	-0.350064424	-0.684024872	-0.616831142	6:07:40	-0.350017982	-0.685886927	-0.616740062
6:07:44	-0.34997154	-0.68682781	-0.616648983	6:07:48	-0.349925098	-0.687768658	-0.616557903
6:07:52	-0.349878656	-0.686923017	-0.616466824	6:07:56	-0.349832214	-0.68607734	-0.616375744
6:08:00	-0.349785772	-0.683438814	-0.616284665	6:08:04	-0.349497819	-0.678863406	-0.616193585
6:08:08	-0.349209865	-0.674287999	-0.616102506	6:08:12	-0.348921912	-0.666005347	-0.616011426
6:08:16	-0.348633959	-0.657722659	-0.615920347	6:08:20	-0.348346006	-0.647313039	-0.615829267
6:08:24	-0.348058053	-0.634776451	-0.615738188	6:08:28	-0.347770099	-0.622239863	-0.615647109
6:08:32	-0.347482146	-0.608377353	-0.615556029	6:08:36	-0.347194193	-0.594514844	-0.61546495
6:08:40	-0.34690624	-0.579526194	-0.61537387	6:08:44	-0.346618287	-0.563411404	-0.615282791
6:08:48	-0.346330334	-0.547296614	-0.615191711	6:08:52	-0.34604238	-0.528297228	-0.615100632
6:08:56	-0.345754427	-0.509297841	-0.615009552	6:09:00	-0.345466474	-0.489235646	-0.614918473
6:09:04	-0.345388863	-0.468236041	-0.614827393	6:09:08	-0.345311252	-0.447236418	-0.614736314

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
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6:09:20	-0.345078418	-0.381067119	-0.614463075	6:09:24	-0.345000807	-0.359010692	-0.614371996
6:09:28	-0.344923195	-0.336954265	-0.614280917	6:09:32	-0.344845584	-0.315722084	-0.614189837
6:09:36	-0.344767973	-0.294489904	-0.614098758	6:09:40	-0.344690362	-0.27405992	-0.614007678
6:09:44	-0.34461275	-0.254432132	-0.613916599	6:09:48	-0.344535139	-0.234804344	-0.613825519
6:09:52	-0.344457528	-0.182685039	-0.61373444	6:09:56	-0.344379917	-0.130565739	-0.61364336
6:10:00	-0.344302306	-0.053022437	-0.613552281	6:10:04	-0.345180999	0.049374799	-0.613461201
6:10:08	-0.346059693	0.151772052	-0.613370122	6:10:12	-0.346938387	0.211751228	-0.613279042
6:10:16	-0.347817081	0.27173037	-0.613187963	6:10:20	-0.348695775	0.31406543	-0.613096884
6:10:24	-0.349574468	0.33875634	-0.613005804	6:10:28	-0.350453162	0.363447286	-0.612914725
6:10:32	-0.351331856	0.365966071	-0.612823645	6:10:36	-0.35221055	0.368484855	-0.612732566
6:10:40	-0.353089244	0.366026752	-0.612641486	6:10:44	-0.353967938	0.358591761	-0.612550407
6:10:48	-0.354846631	0.351156806	-0.612459327	6:10:52	-0.355725325	0.338775446	-0.612368248
6:10:56	-0.356604019	0.326394087	-0.612277168	6:11:00	-0.357482713	0.312724467	-0.612186089
6:11:04	-0.357423171	0.298325925	-0.612095009	6:11:08	-0.357363628	0.283927312	-0.61200393
6:11:12	-0.357304086	0.269528771	-0.61191285	6:11:16	-0.357244544	0.255130158	-0.611821771
6:11:20	-0.357185002	0.240946569	-0.611730692	6:11:24	-0.35712546	0.226977969	-0.611639612
6:11:28	-0.357065918	0.213009368	-0.611548533	6:11:32	-0.357006375	0.199040733	-0.611457453
6:11:36	-0.356946833	0.185072132	-0.611366374	6:11:40	-0.356887291	0.171685042	-0.611275294
6:11:44	-0.356827749	0.158879496	-0.611184215	6:11:48	-0.356768207	0.146073951	-0.611093135
6:11:52	-0.356708665	0.136555835	-0.611002056	6:11:56	-0.356649122	0.127037719	-0.610910976
6:12:00	-0.35658958	0.118743875	-0.610819897	6:12:04	-0.356513767	0.111683931	-0.610728817
6:12:08	-0.356437954	0.104624023	-0.610637738	6:12:12	-0.35636214	0.099080546	-0.610546659
6:12:16	-0.356286327	0.093537068	-0.610455579	6:12:20	-0.356210513	0.08799359	-0.6103645
6:12:24	-0.3561347	0.082450095	-0.61027342	6:12:28	-0.356058887	0.076906617	-0.610182341
6:12:32	-0.355983073	0.073351347	-0.610091261	6:12:36	-0.35590726	0.069796078	-0.610000182
6:12:40	-0.355831447	0.067099624	-0.609909102	6:12:44	-0.355755633	0.065261988	-0.609818023
6:12:48	-0.35567982	0.063424352	-0.609726943	6:12:52	-0.355604006	0.097397211	-0.609635864
6:12:56	-0.355528193	0.13137007	-0.609544784	6:13:00	-0.35545238	0.154699954	-0.609453705
6:13:04	-0.355410003	0.167366967	-0.609362625	6:13:08	-0.355367627	0.180033981	-0.609271546
6:13:12	-0.35532525	0.169765519	-0.609180467	6:13:16	-0.355282874	0.159497022	-0.609089387
6:13:20	-0.355240497	0.147048015	-0.608998308	6:13:24	-0.35519812	0.132418426	-0.608907228
6:13:28	-0.355155744	0.117788872	-0.608816149	6:13:32	-0.355113367	0.099661413	-0.608725069
6:13:36	-0.355070991	0.081533972	-0.60863399	6:13:40	-0.355028614	0.061666265	-0.60854291
6:13:44	-0.354986238	0.040058292	-0.608451831	6:13:48	-0.354943861	0.018450337	-0.608360751
6:13:52	-0.354901484	-0.003157618	-0.608269672	6:13:56	-0.354859108	-0.02476559	-0.608178592
6:14:00	-0.354816731	-0.045716358	-0.608087513	6:14:04	-0.354900124	-0.066084917	-0.607996434
6:14:08	-0.354983518	-0.086453475	-0.607905354	6:14:12	-0.355066911	-0.105201049	-0.607814275
6:14:16	-0.355150304	-0.123948614	-0.607723195	6:14:20	-0.355233697	-0.142276643	-0.607632116
6:14:24	-0.35531709	-0.160185123	-0.607541036	6:14:28	-0.355400483	-0.178093606	-0.607449957
6:14:32	-0.355483876	-0.194245673	-0.607358877	6:14:36	-0.355567269	-0.210397742	-0.607267798
6:14:40	-0.355650663	-0.22477267	-0.607176718	6:14:44	-0.355734056	-0.237370458	-0.607085639
6:14:48	-0.355817449	-0.249968245	-0.606994559	6:14:52	-0.355900842	-0.259420238	-0.60690348
6:14:56	-0.355984235	-0.268872231	-0.6068124	6:15:00	-0.856067628	-0.776692071	-1.106721321
6:15:04	-0.855954782	-0.782762776	-1.106630242	6:15:08	-0.855841936	-0.788833481	-1.106539162
6:15:12	-0.355729091	-0.292780159	-0.606448083	6:15:16	-0.355616245	-0.296726837	-0.606357003
6:15:20	-0.355503399	-0.300673515	-0.606265924	6:15:24	-0.355390553	-0.304620192	-0.606174844
6:15:28	-0.355277707	-0.30856687	-0.606083765	6:15:32	-0.355164861	-0.312513548	-0.605992685
6:15:36	-0.355052015	-0.316460225	-0.605901606	6:15:40	-0.354939169	-0.319872585	-0.605810526
6:15:44	-0.354826323	-0.322750627	-0.605719447	6:15:48	-0.354713477	-0.32562866	-0.605628367
6:15:52	-0.354600632	-0.318190153	-0.605537288	6:15:56	-0.354487786	-0.310751647	-0.605446209
6:16:00	-0.35437494	-0.311392606	-0.605355129	6:16:04	-0.354400263	-0.320195375	-0.60526405
6:16:08	-0.354425587	-0.328998145	-0.60517297	6:16:12	-0.354450911	-0.335210909	-0.605081891
6:16:16	-0.354476234	-0.341423674	-0.604990811	6:16:20	-0.354501558	-0.343936669	-0.604899732
6:16:24	-0.354526882	-0.342749977	-0.604808652	6:16:28	-0.354552206	-0.341563254	-0.604717573
6:16:32	-0.354577529	-0.337152984	-0.604626493	6:16:36	-0.354602853	-0.332742714	-0.604535414
6:16:40	-0.354628177	-0.328332435	-0.604444334	6:16:44	-0.3546535	-0.323922165	-0.604353255

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
6:16:48	-0.354678824	-0.319511895	-0.604262175	6:16:52	-0.354704148	-0.31830819	-0.604171096
6:16:56	-0.354729471	-0.317104484	-0.604080017	6:17:00	-0.354754795	-0.317929596	-0.603988937
6:17:04	-0.354716484	-0.320745603	-0.603897858	6:17:08	-0.354678173	-0.323561611	-0.603806778
6:17:12	-0.354639862	-0.327845124	-0.603715699	6:17:16	-0.354601551	-0.332128638	-0.603624619
6:17:20	-0.35456324	-0.336037272	-0.60353354	6:17:24	-0.354524929	-0.339571027	-0.60344246
6:17:28	-0.354486618	-0.343104781	-0.603351381	6:17:32	-0.354448307	-0.346638536	-0.603260301
6:17:36	-0.354409996	-0.35017229	-0.603169222	6:17:40	-0.354371685	-0.354883934	-0.603078142
6:17:44	-0.354333374	-0.360773465	-0.602987063	6:17:48	-0.354295063	-0.366663006	-0.602895984
6:17:52	-0.354256752	-0.373770565	-0.602804904	6:17:56	-0.354218441	-0.380878107	-0.602713825
6:18:00	-0.35418013	-0.387985667	-0.602622745	6:18:04	-0.35400752	-0.395013156	-0.602531666
6:18:08	-0.353834911	-0.402040662	-0.602440586	6:18:12	-0.353662302	-0.408563776	-0.602349507
6:18:16	-0.353489692	-0.415086907	-0.602258427	6:18:20	-0.353317083	-0.42161002	-0.602167348
6:18:24	-0.353144474	-0.428133151	-0.602076268	6:18:28	-0.352971864	-0.434656264	-0.601985189
6:18:32	-0.352799255	-0.440386734	-0.601894109	6:18:36	-0.352626646	-0.446117222	-0.60180303
6:18:40	-0.352454036	-0.451000529	-0.601711951	6:18:44	-0.352281427	-0.455036691	-0.601620871
6:18:48	-0.352108818	-0.459072852	-0.601529792	6:18:52	-0.351936208	-0.449549465	-0.601438712
6:18:56	-0.351763599	-0.440026078	-0.601347633	6:19:00	-0.35159099	-0.441479412	-0.601256553
6:19:04	-0.351535513	-0.453979323	-0.601165474	6:19:08	-0.351480036	-0.466479216	-0.601074394
6:19:12	-0.351424256	-0.470802265	-0.600983315	6:19:16	-0.351369083	-0.475125297	-0.600892235
6:19:20	-0.351313607	-0.475460704	-0.600801156	6:19:24	-0.35125813	-0.47180845	-0.600710076
6:19:28	-0.351202653	-0.468156196	-0.600618997	6:19:32	-0.351147177	-0.4598635	-0.600527917
6:19:36	-0.3510917	-0.451570786	-0.600436838	6:19:40	-0.351036223	-0.441666974	-0.600345759
6:19:44	-0.350980747	-0.430152045	-0.600254679	6:19:48	-0.35092527	-0.418637116	-0.6001636
6:19:52	-0.350869793	-0.405659228	-0.60007252	6:19:56	-0.350814317	-0.392681359	-0.599981441
6:20:00	-0.35075884	-0.379061526	-0.599890361	6:20:04	-0.35120703	-0.365099975	-0.599799282
6:20:08	-0.351655219	-0.351138433	-0.599708202	6:20:12	-0.352103408	-0.334732513	-0.599617123
6:20:16	-0.352551598	-0.318326592	-0.599526043	6:20:20	-0.352999787	-0.301268929	-0.599434964
6:20:24	-0.353447977	-0.283559515	-0.599343884	6:20:28	-0.353896166	-0.265850105	-0.599252805
6:20:32	-0.354344355	-0.249954258	-0.599161726	6:20:36	-0.354792545	-0.234058413	-0.599070646
6:20:40	-0.355240734	-0.218740735	-0.598979567	6:20:44	-0.355688924	-0.204001224	-0.598888487
6:20:48	-0.356137113	-0.189261714	-0.598797408	6:20:52	-0.356585303	-0.176719067	-0.598706328
6:20:56	-0.357033492	-0.164176424	-0.598615249	6:21:00	-0.357481681	-0.153239851	-0.598524169
6:21:04	-0.3579365673	-0.14357304	-0.59843309	6:21:08	-0.357249665	-0.133906234	-0.59834201
6:21:12	-0.357134179	-0.126847383	-0.598251638	6:21:16	-0.357042801	-0.119802904	-0.59819393
6:21:20	-0.356951424	-0.113539885	-0.598136223	6:21:24	-0.356860046	-0.108058326	-0.598078515
6:21:28	-0.356768668	-0.102576767	-0.598020807	6:21:32	-0.35667729	-0.098441906	-0.597963099
6:21:36	-0.356585912	-0.094307036	-0.597905392	6:21:40	-0.356494534	-0.090830552	-0.597847684
6:21:44	-0.356403156	-0.088012437	-0.597789976	6:21:48	-0.356311779	-0.085194331	-0.597732268
6:21:52	-0.356220401	-0.047380828	-0.597674561	6:21:56	-0.356129023	-0.009567324	-0.597616853
6:22:00	-0.356037645	0.03220714	-0.597559145	6:22:04	-0.357728906	0.076879996	-0.597501438
6:22:08	-0.359420168	0.121552852	-0.597443373	6:22:12	-0.361111429	0.138622398	-0.597386022
6:22:16	-0.362802691	0.155691944	-0.597328314	6:22:20	-0.364493952	0.166065441	-0.597270607
6:22:24	-0.366185214	0.169742817	-0.597212899	6:22:28	-0.367876475	0.173420229	-0.597155191
6:22:32	-0.369567737	0.171454186	-0.597097484	6:22:36	-0.371258998	0.169488143	-0.597039776
6:22:40	-0.37295026	0.166341103	-0.596982068	6:22:44	-0.374641522	0.162013136	-0.59692436
6:22:48	-0.376332783	0.157685169	-0.596866653	6:22:52	-0.378024045	0.153357167	-0.596808945
6:22:56	-0.379715306	0.1490292	-0.596751237	6:23:00	-0.381406568	0.144701198	-0.59669353
6:23:04	-0.381375269	0.141400022	-0.596635822	6:23:08	-0.381343971	0.138098811	-0.596578114
6:23:12	-0.381312673	0.134797635	-0.596520406	6:23:16	-0.381281375	0.13149646	-0.596462699
6:23:20	-0.381250076	0.128554699	-0.596404991	6:23:24	-0.381218778	0.125972426	-0.596347283
6:23:28	-0.38118748	0.123390116	-0.596289576	6:23:32	-0.381156182	0.122681379	-0.596231868
6:23:36	-0.381124883	0.121972642	-0.59617416	6:23:40	-0.381093585	0.12244778	-0.596116452
6:23:44	-0.381062287	0.124106758	-0.596058745	6:23:48	-0.381030989	0.125765736	-0.596001037
6:23:52	-0.380999691	0.128289749	-0.595943329	6:23:56	-0.380968392	0.130813761	-0.595885621
6:24:00	-0.380937094	0.133337809	-0.595827914	6:24:04	-0.382014179	0.135201131	-0.595770206
6:24:08	-0.383091264	0.137064453	-0.595712498	6:24:12	-0.384168349	0.137526745	-0.595654791
6:24:16	-0.385245434	0.137989036	-0.595597083	6:24:20	-0.38632252	0.137476791	-0.595539375

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
6:24:24	-0.387399605	0.13599001	-0.595481667	6:24:28	-0.38847669	0.134503229	-0.59542396
6:24:32	-0.389553775	0.131203383	-0.595366252	6:24:36	-0.39063086	0.127903501	-0.595308544
6:24:40	-0.391707945	0.123894239	-0.595250837	6:24:44	-0.39278503	0.119175597	-0.595193129
6:24:48	-0.393862115	0.114456955	-0.595135421	6:24:52	-0.3949392	0.106820247	-0.595077713
6:24:56	-0.396016285	0.099183504	-0.595020006	6:25:00	-0.39709337	0.095366563	-0.594962298
6:25:04	-0.397091434	0.096012611	-0.59490459	6:25:08	-0.397089498	0.096658624	-0.594846883
6:25:12	-0.397087562	0.095969122	-0.594789175	6:25:16	-0.397085626	0.09527962	-0.594731467
6:25:20	-0.39708369	0.093409902	-0.594673759	6:25:24	-0.397081754	0.090359897	-0.594616052
6:25:28	-0.397079818	0.087309892	-0.594558344	6:25:32	-0.397077882	0.081702339	-0.594500636
6:25:36	-0.397075946	0.076094786	-0.594442928	6:25:40	-0.39707401	0.06989883	-0.594385221
6:25:44	-0.397072074	0.063114401	-0.594327513	6:25:48	-0.397070138	0.056329971	-0.594269805
6:25:52	-0.397068202	0.049041788	-0.594212098	6:25:56	-0.397066266	0.041753605	-0.59415439
6:26:00	-0.39706433	0.033523786	-0.594096682	6:26:04	-0.398094382	0.02373718	-0.594038974
6:26:08	-0.399124433	0.013950592	-0.593981267	6:26:12	-0.400154484	0.001721019	-0.593923559
6:26:16	-0.401184536	-0.010508554	-0.593865851	6:26:20	-0.402214587	-0.022738144	-0.593808144
6:26:24	-0.403244638	-0.034967717	-0.593750436	6:26:28	-0.40427469	-0.047197289	-0.593692728
6:26:32	-0.405304741	-0.059426862	-0.59363502	6:26:36	-0.406334792	-0.071656435	-0.593577313
6:26:40	-0.407364843	-0.084483416	-0.593519605	6:26:44	-0.408394895	-0.09790777	-0.593461897
6:26:48	-0.409424946	-0.111332163	-0.59340419	6:26:52	-0.410454997	-0.126279913	-0.593346482
6:26:56	-0.411485049	-0.141227671	-0.593288774	6:27:00	-0.4125151	-0.15566592	-0.593231066
6:27:04	-0.412421464	-0.168924847	-0.593173359	6:27:08	-0.412327827	-0.182183779	-0.593115651
6:27:12	-0.412234191	-0.193775808	-0.593057943	6:27:16	-0.412140554	-0.205367837	-0.593000235
6:27:20	-0.412046918	-0.21620953	-0.592942528	6:27:24	-0.411953281	-0.226300888	-0.59288482
6:27:28	-0.411859645	-0.236392247	-0.592827112	6:27:32	-0.411766008	-0.246483605	-0.592769405
6:27:36	-0.411672372	-0.256574963	-0.592711697	6:27:40	-0.411578735	-0.267195461	-0.592653989
6:27:44	-0.411485099	-0.278345096	-0.592596281	6:27:48	-0.411391462	-0.289494733	-0.592538574
6:27:52	-0.411297826	-0.32376432	-0.592480866	6:27:56	-0.411204189	-0.358033907	-0.592423158
6:28:00	-0.411110553	-0.3968057	-0.592365451	6:28:04	-0.411096623	-0.440127229	-0.592307743
6:28:08	-0.411082694	-0.48344874	-0.592250035	6:28:12	-0.411068765	-0.499613529	-0.592192327
6:28:16	-0.411054835	-0.515778318	-0.59213462	6:28:20	-0.411040906	-0.526970659	-0.592076912
6:28:24	-0.411026977	-0.533190537	-0.592019204	6:28:28	-0.411013047	-0.539410414	-0.591961497
6:28:32	-0.410999118	-0.542375673	-0.591903789	6:28:36	-0.410985189	-0.545340915	-0.591846081
6:28:40	-0.410971259	-0.548306174	-0.591788373	6:28:44	-0.41095733	-0.551271434	-0.591730666
6:28:48	-0.410943401	-0.554236693	-0.591672958	6:28:52	-0.410929471	-0.55701283	-0.59161525
6:28:56	-0.410915542	-0.559788966	-0.591557543	6:29:00	-0.410901613	-0.561287181	-0.591499835
6:29:04	-0.410842759	-0.561480731	-0.591442127	6:29:08	-0.410783906	-0.561674245	-0.591384419
6:29:12	-0.410725052	-0.551181368	-0.591326712	6:29:16	-0.410666198	-0.540688525	-0.591269004
6:29:20	-0.410607345	-0.530723615	-0.591211296	6:29:24	-0.410548491	-0.521286671	-0.591153588
6:29:28	-0.410489638	-0.511849727	-0.591095881	6:29:32	-0.410430784	-0.508267958	-0.591038173
6:29:36	-0.410371931	-0.504686171	-0.590980465	6:29:40	-0.410313077	-0.503651541	-0.590922758
6:29:44	-0.410254224	-0.505164031	-0.59086505	6:29:48	-0.41019537	-0.506676539	-0.590807342
6:29:52	-0.410136517	-0.510963983	-0.590749634	6:29:56	-0.410077663	-0.515251426	-0.590691927
6:30:00	0.089981191	-0.020088598	-0.090634219	6:30:04	0.090189123	-0.025386636	-0.090576511
6:30:08	0.090397055	-0.030684655	-0.090518804	6:30:12	-0.409395012	-0.533532336	-0.590461096
6:30:16	-0.40918708	-0.536380017	-0.590403388	6:30:20	-0.408979148	-0.53861629	-0.59034568
6:30:24	-0.408771215	-0.54024112	-0.590287973	6:30:28	-0.408563283	-0.541865932	-0.590230265
6:30:32	-0.408355351	-0.54349078	-0.590172557	6:30:36	-0.408147418	-0.545115627	-0.59011485
6:30:40	-0.407939486	-0.546932938	-0.590057142	6:30:44	-0.407731554	-0.548942746	-0.589999434
6:30:48	-0.407523621	-0.550952555	-0.589941726	6:30:52	-0.407315689	-0.561223661	-0.589884019
6:30:56	-0.407107757	-0.571494802	-0.589826311	6:31:00	-0.406899824	-0.583124588	-0.589768603
6:31:04	-0.406896082	-0.596234733	-0.589710895	6:31:08	-0.406892339	-0.609344912	-0.589653188
6:31:12	-0.406888596	-0.609853701	-0.58959548	6:31:16	-0.406884853	-0.610362489	-0.589537772
6:31:20	-0.40688111	-0.572041582	-0.589480065	6:31:24	-0.406877367	-0.494890908	-0.589422357
6:31:28	-0.406873624	-0.417740234	-0.589364649	6:31:32	-0.406869881	-0.315060075	-0.589306941
6:31:36	-0.406866138	-0.21237992	-0.589249234	6:31:40	-0.406862395	-0.129675161	-0.589191526
6:31:44	-0.406858652	-0.066945819	-0.589133818	6:31:48	-0.40685491	-0.004216459	-0.589076111
6:31:52	-0.406851167	0.031897006	-0.589018403	6:31:56	-0.406847424	0.068010489	-0.588960695

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
6:32:00	-0.406843681	0.087029372	-0.588902987	6:32:04	-0.406863288	0.100336167	-0.58884528
6:32:08	-0.406882895	0.113642961	-0.588787572	6:32:12	-0.406902501	0.118172003	-0.588729864
6:32:16	-0.406922108	0.122701044	-0.588672157	6:32:20	-0.406941715	0.126536907	-0.588614449
6:32:24	-0.406961322	0.129679556	-0.588556741	6:32:28	-0.406980929	0.132822205	-0.588499033
6:32:32	-0.407000536	0.130650401	-0.588441326	6:32:36	-0.407020142	0.128478561	-0.588383618
6:32:40	-0.407039749	0.124575764	-0.58832591	6:32:44	-0.407059356	0.118942011	-0.588268202
6:32:48	-0.407078963	0.113308221	-0.588210495	6:32:52	-0.40709857	0.106252687	-0.588152787
6:32:56	-0.407118177	0.099197154	-0.588095079	6:33:00	-0.407137783	0.092141655	-0.588037372
6:33:04	-0.407130878	0.085101924	-0.587979664	6:33:08	-0.407123973	0.078062194	-0.587921956
6:33:12	-0.407117068	0.071803968	-0.587864248	6:33:16	-0.407110163	0.065545778	-0.587806541
6:33:20	-0.407103258	0.059701967	-0.587748833	6:33:24	-0.407096353	0.054272606	-0.587691125
6:33:28	-0.407089448	0.048843246	-0.587633418	6:33:32	-0.407082543	0.042545245	-0.58757571
6:33:36	-0.407075638	0.036247244	-0.587518002	6:33:40	-0.407068733	0.029320657	-0.587460294
6:33:44	-0.407061828	0.021765483	-0.587402587	6:33:48	-0.407054923	0.01421031	-0.587344879
6:33:52	-0.407048018	0.040040306	-0.587287171	6:33:56	-0.407041113	0.065870284	-0.587229464
6:34:00	-0.407034208	0.066109072	-0.587171756	6:34:04	-0.407265029	0.040614893	-0.587114048
6:34:08	-0.40749585	0.015120715	-0.58705634	6:34:12	-0.40772667	-0.010373464	-0.586998633
6:34:16	-0.407957491	-0.035867625	-0.586940925	6:34:20	-0.408188312	-0.058246656	-0.586883217
6:34:24	-0.408419132	-0.077510523	-0.58682551	6:34:28	-0.408649953	-0.096774407	-0.586767802
6:34:32	-0.408880773	-0.112051964	-0.586710094	6:34:36	-0.409111594	-0.12732952	-0.586652386
6:34:40	-0.409342415	-0.140282707	-0.586594679	6:34:44	-0.409573235	-0.150911525	-0.586536971
6:34:48	-0.409804056	-0.161540342	-0.586479263	6:34:52	-0.410034876	-0.167557506	-0.586421555
6:34:56	-0.410265697	-0.173574664	-0.586363848	6:35:00	-0.410496518	-0.177748003	-0.58630614
6:35:04	-0.410430436	-0.179900537	-0.586248432	6:35:08	-0.410364355	-0.182053072	-0.586190725
6:35:12	-0.410298274	-0.182249983	-0.586133017	6:35:16	-0.410232193	-0.182446895	-0.586075309
6:35:20	-0.410166112	-0.181767847	-0.586017601	6:35:24	-0.410100031	-0.18021283	-0.585959894
6:35:28	-0.410033949	-0.178657818	-0.585902186	6:35:32	-0.409967868	-0.17526797	-0.585844478
6:35:36	-0.409901787	-0.171878126	-0.585786771	6:35:40	-0.409835706	-0.16793194	-0.585729063
6:35:44	-0.409769625	-0.163429418	-0.585671355	6:35:48	-0.409703544	-0.158926895	-0.585613647
6:35:52	-0.409637462	-0.153734427	-0.58555594	6:35:56	-0.409571381	-0.148541958	-0.585498232
6:36:00	-0.4095053	-0.144438759	-0.585440524	6:36:04	-0.409397425	-0.141399926	-0.585382817
6:36:08	-0.40928955	-0.138361093	-0.585325109	6:36:12	-0.409181675	-0.140734685	-0.585267401
6:36:16	-0.4090738	-0.143108277	-0.585209693	6:36:20	-0.408965926	-0.147774279	-0.585151986
6:36:24	-0.408858051	-0.154732675	-0.585094278	6:36:28	-0.408750176	-0.16169107	-0.58503657
6:36:32	-0.408642301	-0.169727045	-0.584978862	6:36:36	-0.408534426	-0.177763025	-0.584921155
6:36:40	-0.408426551	-0.184941747	-0.584863447	6:36:44	-0.408318676	-0.19126322	-0.584805739
6:36:48	-0.408210801	-0.197584693	-0.584748032	6:36:52	-0.408102926	-0.183244919	-0.584690324
6:36:56	-0.407995051	-0.168905146	-0.584632616	6:37:00	-0.407887176	-0.140776678	-0.584574908
6:37:04	-0.40784323	-0.098897616	-0.584517201	6:37:08	-0.407799283	-0.057018554	-0.584459493
6:37:12	-0.407755337	-0.039118989	-0.584401785	6:37:16	-0.40771139	-0.021219424	-0.584344078
6:37:20	-0.407667444	-0.011838282	-0.58428637	6:37:24	-0.407623497	-0.010975529	-0.584228662
6:37:28	-0.40757955	-0.010112776	-0.584170954	6:37:32	-0.407535604	-0.017122983	-0.584113247
6:37:36	-0.407491657	-0.02413319	-0.584055539	6:37:40	-0.407447711	-0.032922906	-0.583997831
6:37:44	-0.407403764	-0.043492164	-0.583940124	6:37:48	-0.407359818	-0.054061406	-0.583882416
6:37:52	-0.407315871	-0.067786333	-0.583824708	6:37:56	-0.407271925	-0.081511278	-0.583767
6:38:00	-0.407227978	-0.09478086	-0.583709293	6:38:04	-0.407308378	-0.107669219	-0.583651585
6:38:08	-0.407388778	-0.120557578	-0.583593877	6:38:12	-0.407469179	-0.132491866	-0.583536169
6:38:16	-0.407549579	-0.144426144	-0.583478462	6:38:20	-0.407629979	-0.155572523	-0.583420754
6:38:24	-0.407710379	-0.165930984	-0.583363046	6:38:28	-0.407790779	-0.176289445	-0.583305339
6:38:32	-0.407871179	-0.183548316	-0.583247631	6:38:36	-0.40795158	-0.190807187	-0.583189923
6:38:40	-0.40803198	-0.19642416	-0.583132215	6:38:44	-0.40811238	-0.200399226	-0.583074508
6:38:48	-0.40819278	-0.204374292	-0.5830168	6:38:52	-0.40827318	-0.205184074	-0.582959092
6:38:56	-0.408353581	-0.205993852	-0.582901385	6:39:00	-0.408433981	-0.205797282	-0.582843677
6:39:04	-0.408395003	-0.204523195	-0.582785969	6:39:08	-0.408356026	-0.203249109	-0.582728261
6:39:12	-0.408317048	-0.201975022	-0.582670554	6:39:16	-0.408278071	-0.200700936	-0.582612846
6:39:20	-0.408239093	-0.19871118	-0.582555138	6:39:24	-0.408200115	-0.196005751	-0.582497431
6:39:28	-0.408161138	-0.193300323	-0.582439723	6:39:32	-0.40812216	-0.190594899	-0.582382015

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
6:39:36	-0.408083183	-0.18788947	-0.582324307	6:39:40	-0.408044205	-0.184756085	-0.5822666
6:39:44	-0.408005227	-0.181194749	-0.582208892	6:39:48	-0.40796625	-0.177633408	-0.582151184
6:39:52	-0.407927272	-0.160029874	-0.582093477	6:39:56	-0.407888295	-0.142426335	-0.582035769
6:40:00	-0.407849317	-0.13112915	-0.581978061	6:40:04	-0.407866028	-0.126171506	-0.581920353
6:40:08	-0.40788274	-0.12121387	-0.581862646	6:40:12	-0.407899451	-0.116755538	-0.581804938
6:40:16	-0.407916162	-0.112297206	-0.58174723	6:40:20	-0.407932874	-0.108659141	-0.581689522
6:40:24	-0.407949585	-0.105841326	-0.581631815	6:40:28	-0.407966296	-0.10302352	-0.581574107
6:40:32	-0.407983007	-0.102998023	-0.581516399	6:40:36	-0.407999719	-0.102972526	-0.581458692
6:40:40	-0.40801643	-0.105556246	-0.581400984	6:40:44	-0.408033141	-0.110749192	-0.581343276
6:40:48	-0.408049852	-0.115942139	-0.581285568	6:40:52	-0.408066564	-0.128608767	-0.581227861
6:40:56	-0.408083275	-0.141275395	-0.581170153	6:41:00	-0.408099986	-0.156634645	-0.581112445
6:41:04	-0.40806146	-0.174653592	-0.581054738	6:41:08	-0.408022934	-0.192672543	-0.58099703
6:41:12	-0.407984409	-0.211621331	-0.580939322	6:41:16	-0.407945883	-0.23057012	-0.580881614
6:41:20	-0.407907357	-0.248274874	-0.580823907	6:41:24	-0.407868831	-0.264735594	-0.580766199
6:41:28	-0.407830305	-0.281196315	-0.580708491	6:41:32	-0.407791779	-0.294926006	-0.580650784
6:41:36	-0.407753254	-0.308655696	-0.580593076	6:41:40	-0.407714728	-0.320191078	-0.580535368
6:41:44	-0.407676202	-0.329532154	-0.58047766	6:41:48	-0.407637676	-0.33887323	-0.580419953
6:41:52	-0.40759915	-0.343169433	-0.580362245	6:41:56	-0.407560624	-0.347465645	-0.580304537
6:42:00	-0.407522098	-0.34924459	-0.580246829	6:42:04	-0.407504289	-0.348518634	-0.580189122
6:42:08	-0.407486479	-0.347792677	-0.580131414	6:42:12	-0.407468669	-0.344015367	-0.580073706
6:42:16	-0.40745086	-0.340238057	-0.580015999	6:42:20	-0.40743305	-0.33529206	-0.579958291
6:42:24	-0.40741524	-0.329177377	-0.579900583	6:42:28	-0.407397431	-0.323062702	-0.579842875
6:42:32	-0.407379621	-0.314582875	-0.579785168	6:42:36	-0.407361811	-0.306103049	-0.57972746
6:42:40	-0.407344002	-0.295774214	-0.579669752	6:42:44	-0.407326192	-0.283596366	-0.579612045
6:42:48	-0.407308382	-0.271418526	-0.579554337	6:42:52	-0.407290573	-0.225259434	-0.579496629
6:42:56	-0.407272763	-0.179100345	-0.579438921	6:43:00	-0.407254953	-0.139466	-0.579381214
6:43:04	-0.40719881	-0.106333554	-0.579323506	6:43:08	-0.407142667	-0.073201107	-0.579265798
6:43:12	-0.407086524	-0.062480361	-0.579208091	6:43:16	-0.407030381	-0.051759632	-0.579150383
6:43:20	-0.406974237	-0.046215324	-0.579092675	6:43:24	-0.406918094	-0.045847473	-0.579034967
6:43:28	-0.406861951	-0.045479604	-0.57897726	6:43:32	-0.406805808	-0.050694435	-0.578919552
6:43:36	-0.406749665	-0.055909284	-0.578861844	6:43:40	-0.406693521	-0.061991654	-0.578804136
6:43:44	-0.406637378	-0.068941581	-0.578746429	6:43:48	-0.406581235	-0.075891491	-0.578688721
6:43:52	-0.406525092	-0.080252284	-0.578631013	6:43:56	-0.406468949	-0.084613077	-0.578573306
6:44:00	-0.406412806	-0.088973852	-0.578515598	6:44:04	-0.406367734	-0.093341245	-0.57845789
6:44:08	-0.406322663	-0.097708637	-0.578400182	6:44:12	-0.406277591	-0.101451778	-0.578342475
6:44:16	-0.40623252	-0.10519491	-0.578284767	6:44:20	-0.406187449	-0.107909102	-0.578227059
6:44:24	-0.406142377	-0.109594353	-0.578169352	6:44:28	-0.406097306	-0.111279596	-0.578111644
6:44:32	-0.406052235	-0.109956501	-0.578053936	6:44:36	-0.406007163	-0.108633407	-0.577996228
6:44:40	-0.405962092	-0.10554149	-0.577938521	6:44:44	-0.405917021	-0.100680732	-0.577880813
6:44:48	-0.405871949	-0.095819984	-0.577823105	6:44:52	-0.405826878	-0.088767524	-0.577765398
6:44:56	-0.405781806	-0.081715038	-0.57770769	6:45:00	-0.905736735	-0.579438059	-1.077649982
6:45:04	-0.905704533	-0.581944241	-1.077592274	6:45:08	-0.905672332	-0.584450423	-1.077534567
6:45:12	-0.40564013	-0.070253077	-0.577476859	6:45:16	-0.405607928	-0.056055731	-0.577419151
6:45:20	-0.405575727	-0.041182864	-0.577361444	6:45:24	-0.405543525	-0.025634459	-0.577303736
6:45:28	-0.405511323	-0.010086072	-0.577246028	6:45:32	-0.405479122	0.001134479	-0.57718832
6:45:36	-0.40544692	0.012355047	-0.577130613	6:45:40	-0.405414718	0.020950542	-0.577072905
6:45:44	-0.405382517	0.026920966	-0.577015197	6:45:48	-0.405350315	0.03289139	-0.576957489
6:45:52	-0.405318113	0.038861813	-0.576899782	6:45:56	-0.405285912	0.044832237	-0.576842074
6:46:00	-0.40525371	0.062341314	-0.576784366	6:46:04	-0.405219381	0.091390331	-0.576726659
6:46:08	-0.405185051	0.120439313	-0.576668951	6:46:12	-0.405150722	0.141864324	-0.576611243
6:46:16	-0.405116393	0.163289299	-0.576553535	6:46:20	-0.405082063	0.176862738	-0.576495828
6:46:24	-0.405047734	0.18258464	-0.57643812	6:46:28	-0.405013405	0.188306507	-0.576380412
6:46:32	-0.404979075	0.181514491	-0.576322705	6:46:36	-0.404944746	0.174722475	-0.576264997
6:46:40	-0.404910417	0.164780742	-0.576207289	6:46:44	-0.404876087	0.151689291	-0.576149581
6:46:48	-0.404841758	0.138597841	-0.576091874	6:46:52	-0.404807429	0.123461993	-0.576034166
6:46:56	-0.4047731	0.108326145	-0.575976458	6:47:00	-0.40473877	0.092546042	-0.575918751
6:47:04	-0.40470702	0.076120076	-0.575861043	6:47:08	-0.40467527	0.059694146	-0.575803335

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
6:47:12	-0.40464352	0.043843241	-0.575745627	6:47:16	-0.40461177	0.027992337	-0.57568792
6:47:20	-0.40458002	0.014100665	-0.575630212	6:47:24	-0.40454827	0.002168228	-0.575572504
6:47:28	-0.404516521	-0.009764192	-0.575514796	6:47:32	-0.404484771	-0.021050759	-0.575457089
6:47:36	-0.404453021	-0.032337343	-0.575399381	6:47:40	-0.404421271	-0.045973025	-0.575341673
6:47:44	-0.404389521	-0.061957822	-0.575283966	6:47:48	-0.404357771	-0.07794262	-0.575226258
6:47:52	-0.404326021	-0.098592517	-0.57516855	6:47:56	-0.404294271	-0.119242423	-0.575110842
6:48:00	-0.404262521	-0.141334902	-0.575053135	6:48:04	-0.404238048	-0.164874293	-0.574995427
6:48:08	-0.404213576	-0.188413685	-0.574937719	6:48:12	-0.404189103	-0.213733321	-0.574880012
6:48:16	-0.40416463	-0.239052958	-0.574822304	6:48:20	-0.404140158	-0.264372594	-0.574764596
6:48:24	-0.404115685	-0.289692231	-0.574706888	6:48:28	-0.404091212	-0.315011868	-0.574649181
6:48:32	-0.40406674	-0.338426666	-0.574591473	6:48:36	-0.404042267	-0.361841474	-0.574533765
6:48:40	-0.404017795	-0.383379938	-0.574476058	6:48:44	-0.403993322	-0.403042076	-0.57441835
6:48:48	-0.403968849	-0.422704206	-0.574360642	6:48:52	-0.403944377	-0.47668401	-0.574302934
6:48:56	-0.403919904	-0.530663831	-0.574245227	6:49:00	-0.403895431	-0.593280656	-0.574187519
6:49:04	-0.403873929	-0.664506432	-0.574129811	6:49:08	-0.403752428	-0.735732209	-0.574072103
6:49:12	-0.403680926	-0.775506858	-0.574014396	6:49:16	-0.403609424	-0.815281508	-0.573956688
6:49:20	-0.403537922	-0.835443429	-0.57389898	6:49:24	-0.40346642	-0.835992692	-0.573841273
6:49:28	-0.403394918	-0.836541956	-0.573783565	6:49:32	-0.403323416	-0.836499334	-0.573725857
6:49:36	-0.403251914	-0.836456713	-0.573668149	6:49:40	-0.403180412	-0.836414092	-0.573610442
6:49:44	-0.403108911	-0.836371471	-0.573552734	6:49:48	-0.403037409	-0.83632885	-0.573495026
6:49:52	-0.402965907	-0.836286229	-0.573437319	6:49:56	-0.402894405	-0.836243607	-0.573379611
6:50:00	-0.402822903	-0.836200986	-0.573321903	6:50:04	-0.402798304	-0.836186323	-0.573264195
6:50:08	-0.402773705	-0.83617166	-0.573206488	6:50:12	-0.402749106	-0.836156997	-0.57314878
6:50:16	-0.402724507	-0.836142334	-0.573091072	6:50:20	-0.402699907	-0.831808183	-0.573033365
6:50:24	-0.402675308	-0.823154581	-0.572975657	6:50:28	-0.402650709	-0.814500943	-0.572917949
6:50:32	-0.40262611	-0.801684253	-0.572860241	6:50:36	-0.402601511	-0.788867564	-0.572802534
6:50:40	-0.402576912	-0.775380541	-0.572744826	6:50:44	-0.402552313	-0.761223186	-0.572687118
6:50:48	-0.402527714	-0.747065794	-0.572629411	6:50:52	-0.402503114	-0.732908438	-0.572571703
6:50:56	-0.402478515	-0.718751082	-0.572513995	6:51:00	-0.402453916	-0.706016857	-0.572456287
6:51:04	-0.402389642	-0.694682076	-0.57239858	6:51:08	-0.402325368	-0.683347296	-0.572340872
6:51:12	-0.402261093	-0.673567744	-0.572283164	6:51:16	-0.402196819	-0.663788192	-0.572225456
6:51:20	-0.402132545	-0.654373882	-0.572167749	6:51:24	-0.402068271	-0.64532485	-0.572110041
6:51:28	-0.402003996	-0.636275818	-0.572052333	6:51:32	-0.401939722	-0.62772029	-0.571994626
6:51:36	-0.401875448	-0.619164762	-0.571936918	6:51:40	-0.401811174	-0.609884505	-0.57187921
6:51:44	-0.401746899	-0.599879519	-0.571821502	6:51:48	-0.401682625	-0.589874568	-0.571763795
6:51:52	-0.401618351	-0.553306342	-0.571706087	6:51:56	-0.401554077	-0.516738081	-0.571648379
6:52:00	-0.401489802	-0.460369833	-0.571590672	6:52:04	-0.401425282	-0.38421769	-0.571532964
6:52:08	-0.401415362	-0.308065551	-0.571475256	6:52:12	-0.401378141	-0.257485034	-0.571417548
6:52:16	-0.401340921	-0.206904516	-0.571359841	6:52:20	-0.4013037	-0.168385294	-0.571302133
6:52:24	-0.40126648	-0.141927356	-0.571244425	6:52:28	-0.40122926	-0.115469427	-0.571186718
6:52:32	-0.401192039	-0.103410811	-0.57112901	6:52:36	-0.401154819	-0.091352195	-0.571071302
6:52:40	-0.401117599	-0.083161887	-0.571013594	6:52:44	-0.401080378	-0.078839879	-0.570955887
6:52:48	-0.401043158	-0.07451787	-0.570898179	6:52:52	-0.401005938	-0.074990608	-0.570840471
6:52:56	-0.400968717	-0.075463364	-0.570782763	6:53:00	-0.400931497	-0.077333296	-0.570725056
6:53:04	-0.400865416	-0.080583201	-0.570667348	6:53:08	-0.400799334	-0.083833105	-0.57060964
6:53:12	-0.400733253	-0.08818721	-0.570551933	6:53:16	-0.400667172	-0.092541298	-0.570494225
6:53:20	-0.400601091	-0.096228099	-0.570436517	6:53:24	-0.40053501	-0.099247586	-0.570378809
6:53:28	-0.400468929	-0.102267074	-0.570321102	6:53:32	-0.400402847	-0.102945555	-0.570263394
6:53:36	-0.400336766	-0.103624046	-0.570205686	6:53:40	-0.400270685	-0.10309928	-0.570147979
6:53:44	-0.400204604	-0.101371257	-0.570090271	6:53:48	-0.400138523	-0.099643235	-0.570032563
6:53:52	-0.400072442	-0.096512529	-0.569974855	6:53:56	-0.40000636	-0.093381823	-0.569917148
6:54:00	-0.399940279	-0.090858333	-0.56985944	6:54:04	-0.399913738	-0.088965617	-0.569801732
6:54:08	-0.399887196	-0.08707292	-0.569744025	6:54:12	-0.399860655	-0.087606917	-0.569686317
6:54:16	-0.399834113	-0.088140931	-0.569628609	6:54:20	-0.399807572	-0.088674927	-0.569570901
6:54:24	-0.39978103	-0.089208942	-0.569513194	6:54:28	-0.399754488	-0.089742938	-0.569455486
6:54:32	-0.399727947	-0.086624494	-0.569397778	6:54:36	-0.399701405	-0.08350605	-0.56934007
6:54:40	-0.399674864	-0.078759933	-0.569282363	6:54:44	-0.399648322	-0.072386143	-0.569224655

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
6:54:48	-0.399621781	-0.066012335	-0.569166947	6:54:52	-0.399595239	-0.03562486	-0.56910924
6:54:56	-0.399568698	-0.005237384	-0.569051532	6:55:00	-0.399542156	0.029868538	-0.568993824
6:55:04	-0.399508148	0.069697377	-0.568936116	6:55:08	-0.399474139	0.109526179	-0.568878409
6:55:12	-0.39944013	0.121918003	-0.568820701	6:55:16	-0.399406122	0.134309792	-0.568762993
6:55:20	-0.399372113	0.148065092	-0.568705286	6:55:24	-0.399338105	0.163183869	-0.568647578
6:55:28	-0.399304096	0.178302646	-0.56858987	6:55:32	-0.399270087	0.185659562	-0.568532162
6:55:36	-0.399236079	0.193016478	-0.568474455	6:55:40	-0.39920207	0.197986458	-0.568416747
6:55:44	-0.399168062	0.200569502	-0.568359039	6:55:48	-0.399134053	0.203152581	-0.568301332
6:55:52	-0.399100044	0.203522817	-0.568243624	6:55:56	-0.399066036	0.20389309	-0.568185916
6:56:00	-0.398996093	0.204284746	-0.56807952	6:56:04	-0.3988579	0.204717121	-0.567928135
6:56:08	-0.398719707	0.20514946	-0.567776749	6:56:12	-0.398581514	0.207513427	-0.567625363
6:56:16	-0.398443321	0.209877393	-0.567473977	6:56:20	-0.398305128	0.212541583	-0.567322591
6:56:24	-0.398166935	0.215505926	-0.567171205	6:56:28	-0.398028742	0.218470268	-0.56701982
6:56:32	-0.397890549	0.219536736	-0.566868434	6:56:36	-0.397752356	0.220603169	-0.566717048
6:56:40	-0.397614163	0.218992958	-0.566565662	6:56:44	-0.39747597	0.214706104	-0.566414276
6:56:48	-0.397337777	0.210419215	-0.566262891	6:56:52	-0.397199584	0.20005328	-0.566111505
6:56:56	-0.397061391	0.189687345	-0.565960119	6:57:00	-0.396923198	0.177639661	-0.565808733
6:57:04	-0.396829536	0.163883613	-0.565657347	6:57:08	-0.396735875	0.150127565	-0.565505961
6:57:12	-0.396642213	0.137355361	-0.565354576	6:57:16	-0.396548551	0.124583194	-0.56520319
6:57:20	-0.396454889	0.111075496	-0.565051804	6:57:24	-0.396361227	0.09683234	-0.564900418
6:57:28	-0.396267566	0.082589148	-0.564749032	6:57:32	-0.396173904	0.065568125	-0.564597646
6:57:36	-0.396080242	0.04854712	-0.564446261	6:57:40	-0.39598658	0.030684441	-0.564294875
6:57:44	-0.395892918	0.011980124	-0.564143489	6:57:48	-0.395799257	-0.006724211	-0.563992103
6:57:52	-0.395705595	-0.0731426	-0.563840717	6:57:56	-0.395611933	-0.139561007	-0.563689331
6:58:00	-0.395518271	-0.186952374	-0.563537946	6:58:04	-0.395373587	-0.2152863	-0.56338656
6:58:08	-0.395228903	-0.243620229	-0.563235174	6:58:12	-0.395084218	-0.2461742	-0.563083788
6:58:16	-0.394939534	-0.24872817	-0.562932402	6:58:20	-0.39479485	-0.253076223	-0.562781017
6:58:24	-0.394650165	-0.259218358	-0.562629631	6:58:28	-0.394505481	-0.265360494	-0.562478245
6:58:32	-0.394360797	-0.276684574	-0.562326859	6:58:36	-0.394216113	-0.288008656	-0.562175473
6:58:40	-0.394071428	-0.300089035	-0.562024087	6:58:44	-0.393926744	-0.312925724	-0.561872702
6:58:48	-0.39378206	-0.325762403	-0.561721316	6:58:52	-0.393637375	-0.338599092	-0.56156993
6:58:56	-0.393492691	-0.351435772	-0.561418544	6:59:00	-0.393348007	-0.36332578	-0.561267158
6:59:04	-0.393250279	-0.374297105	-0.561115772	6:59:08	-0.393152552	-0.385268422	-0.560964387
6:59:12	-0.393054825	-0.385542244	-0.560813001	6:59:16	-0.392957097	-0.385816066	-0.560661615
6:59:20	-0.39285937	-0.383625746	-0.560510229	6:59:24	-0.392761643	-0.378971293	-0.560358843
6:59:28	-0.392663915	-0.37431684	-0.560207457	6:59:32	-0.392566188	-0.369662387	-0.560056072
6:59:36	-0.392468461	-0.365007934	-0.559904686	6:59:40	-0.392370733	-0.360353481	-0.5597533
6:59:44	-0.392273006	-0.355699028	-0.559601914	6:59:48	-0.392175279	-0.351339638	-0.559450528
6:59:52	-0.392077551	-0.347865454	-0.559299143	6:59:56	-0.391979824	-0.34439127	-0.559147757
7:00:00	0.108117903	0.162463848	-0.058996371	7:00:04	0.10831548	0.172759427	-0.058844985
7:00:08	0.108513057	0.183054988	-0.058693599	7:00:12	-0.391289366	-0.306649437	-0.558542213
7:00:16	-0.391091789	-0.296353867	-0.558390828	7:00:20	-0.390894212	-0.286917295	-0.558239442
7:00:24	-0.390696635	-0.278339727	-0.558088056	7:00:28	-0.390499058	-0.269762157	-0.55793667
7:00:32	-0.390301481	-0.265686906	-0.557785284	7:00:36	-0.390103904	-0.261611655	-0.557633898
7:00:40	-0.389906327	-0.259005874	-0.557482513	7:00:44	-0.38970875	-0.257869564	-0.557331127
7:00:48	-0.389511173	-0.256733253	-0.557179741	7:00:52	-0.389313596	-0.269752651	-0.557028355
7:00:56	-0.389116019	-0.282772049	-0.556876969	7:01:00	-0.388918442	-0.292584771	-0.556725584
7:01:04	-0.388813036	-0.299245751	-0.556574198	7:01:08	-0.388707629	-0.305906731	-0.556422812
7:01:12	-0.388602222	-0.304935431	-0.556271426	7:01:16	-0.388496816	-0.30396413	-0.55612004
7:01:20	-0.388391409	-0.302305869	-0.555968654	7:01:24	-0.388286002	-0.299906051	-0.555817269
7:01:28	-0.388180596	-0.297615428	-0.555665883	7:01:32	-0.388075189	-0.299415284	-0.555514497
7:01:36	-0.387969782	-0.301215135	-0.555363111	7:01:40	-0.387864376	-0.30301499	-0.555211725
7:01:44	-0.387758969	-0.304814841	-0.555060339	7:01:48	-0.387653562	-0.306614697	-0.554908954
7:01:52	-0.387548156	-0.304479395	-0.554757568	7:01:56	-0.387442749	-0.302344094	-0.554606182
7:02:00	-0.387337342	-0.299657101	-0.554454796	7:02:04	-0.387178316	-0.296386449	-0.55430341
7:02:08	-0.387019289	-0.293115798	-0.554152024	7:02:12	-0.386860262	-0.290872684	-0.554000639
7:02:16	-0.386701236	-0.288629574	-0.553849253	7:02:20	-0.386542209	-0.28290448	-0.553697867

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
7:02:24	-0.386383182	-0.273697403	-0.553546481	7:02:28	-0.386224156	-0.264490325	-0.553395095
7:02:32	-0.386065129	-0.263351352	-0.55324371	7:02:36	-0.385906103	-0.262212378	-0.553092324
7:02:40	-0.385747076	-0.261073404	-0.552940938	7:02:44	-0.385588049	-0.259934431	-0.552789552
7:02:48	-0.385429023	-0.258795457	-0.552638166	7:02:52	-0.385269996	-0.253624289	-0.55248678
7:02:56	-0.38511097	-0.248453121	-0.552335395	7:03:00	-0.384951943	-0.24376813	-0.552184009
7:03:04	-0.384828467	-0.239590504	-0.552032623	7:03:08	-0.384704991	-0.235412878	-0.551881237
7:03:12	-0.384581516	-0.231767302	-0.551729851	7:03:16	-0.38445804	-0.228121727	-0.551578465
7:03:20	-0.384334564	-0.225173018	-0.55142708	7:03:24	-0.384211088	-0.222921176	-0.551275694
7:03:28	-0.384087613	-0.220669335	-0.551124308	7:03:32	-0.383964137	-0.216433504	-0.550972922
7:03:36	-0.383840661	-0.212197673	-0.550821536	7:03:40	-0.383717185	-0.206594801	-0.55067015
7:03:44	-0.38359371	-0.199624891	-0.550518765	7:03:48	-0.383470234	-0.192654978	-0.550367379
7:03:52	-0.383346758	-0.174249409	-0.550215993	7:03:56	-0.383223283	-0.155843837	-0.550064607
7:04:00	-0.383099807	-0.143670981	-0.549913221	7:04:04	-0.38299857	-0.137744082	-0.549761836
7:04:08	-0.382897332	-0.131817192	-0.54961045	7:04:12	-0.382796095	-0.145820406	-0.549459064
7:04:16	-0.382694858	-0.159823624	-0.549307678	7:04:20	-0.382593621	-0.172677937	-0.549156292
7:04:24	-0.382492383	-0.184383349	-0.549004906	7:04:28	-0.382391146	-0.196088758	-0.548853521
7:04:32	-0.382289909	-0.20779417	-0.548702135	7:04:36	-0.382188672	-0.219499581	-0.548550749
7:04:40	-0.382087434	-0.233259858	-0.548399363	7:04:44	-0.381986197	-0.249074999	-0.548247977
7:04:48	-0.38188496	-0.264890142	-0.548096591	7:04:52	-0.381783723	-0.269379474	-0.547945206
7:04:56	-0.381682485	-0.273868806	-0.54779382	7:05:00	-0.381581248	-0.282228636	-0.547642434
7:05:04	-0.381484424	-0.294461585	-0.547491048	7:05:08	-0.3813876	-0.306694535	-0.547339662
7:05:12	-0.381290776	-0.321879876	-0.547188276	7:05:16	-0.381193953	-0.337065226	-0.547036891
7:05:20	-0.381097129	-0.350722216	-0.546885505	7:05:24	-0.381000305	-0.362850847	-0.546734119
7:05:28	-0.380903481	-0.374979478	-0.546582733	7:05:32	-0.380806657	-0.384755014	-0.546431347
7:05:36	-0.380709833	-0.394530541	-0.546279962	7:05:40	-0.380613009	-0.403298472	-0.546128576
7:05:44	-0.380516185	-0.411058807	-0.54597719	7:05:48	-0.380419362	-0.418819142	-0.545825804
7:05:52	-0.380322538	-0.425265972	-0.545674418	7:05:56	-0.380225714	-0.431712821	-0.545523032
7:06:00	-0.38012889	-0.43716918	-0.545371647	7:06:04	-0.380081652	-0.441664644	-0.545220261
7:06:08	-0.380034414	-0.446160108	-0.545068875	7:06:12	-0.379987176	-0.453422939	-0.544917489
7:06:16	-0.379939939	-0.460685789	-0.544766103	7:06:20	-0.379892701	-0.468824899	-0.544614717
7:06:24	-0.379845463	-0.477840308	-0.544463332	7:06:28	-0.379798225	-0.486855698	-0.544311946
7:06:32	-0.379750987	-0.495871106	-0.54416056	7:06:36	-0.379703749	-0.504886514	-0.544009174
7:06:40	-0.379656511	-0.514101011	-0.543857788	7:06:44	-0.379609274	-0.523514615	-0.543706402
7:06:48	-0.379562036	-0.532928219	-0.543555017	7:06:52	-0.379514798	-0.49698701	-0.543403631
7:06:56	-0.37946756	-0.461045819	-0.543252245	7:07:00	-0.379420322	-0.438657319	-0.543100859
7:07:04	-0.379373981	-0.429789296	-0.542949473	7:07:08	-0.37921764	-0.420921255	-0.542798088
7:07:12	-0.379116299	-0.42124643	-0.542646702	7:07:16	-0.379014958	-0.421571605	-0.542495316
7:07:20	-0.378913616	-0.423175235	-0.54234393	7:07:24	-0.378812275	-0.426057319	-0.542192544
7:07:28	-0.378710934	-0.428939421	-0.542041158	7:07:32	-0.378609593	-0.43041415	-0.541889773
7:07:36	-0.378508252	-0.431888879	-0.541738387	7:07:40	-0.378406911	-0.432465087	-0.541587001
7:07:44	-0.37830557	-0.432142738	-0.541435615	7:07:48	-0.378204228	-0.431820407	-0.541284229
7:07:52	-0.378102887	-0.431498059	-0.541132843	7:07:56	-0.378001546	-0.431175728	-0.540981458
7:08:00	-0.377900205	-0.43085338	-0.540830072	7:08:04	-0.377793014	-0.430527562	-0.540678686
7:08:08	-0.377685823	-0.430201727	-0.5405273	7:08:12	-0.377578632	-0.429425006	-0.540375914
7:08:16	-0.377471441	-0.428648284	-0.540224528	7:08:20	-0.37736425	-0.426999334	-0.540073143
7:08:24	-0.377257059	-0.424478172	-0.539921757	7:08:28	-0.377149868	-0.42195701	-0.539770371
7:08:32	-0.377042677	-0.417258056	-0.539618985	7:08:36	-0.376935486	-0.412559083	-0.539467599
7:08:40	-0.376828295	-0.407380109	-0.539316214	7:08:44	-0.376721104	-0.40172115	-0.539164828
7:08:48	-0.376613913	-0.396062155	-0.539013442	7:08:52	-0.376506722	-0.390403196	-0.538862056
7:08:56	-0.376399531	-0.384744202	-0.53871067	7:09:00	-0.37629234	-0.379420445	-0.538559284
7:09:04	-0.37618603	-0.374432433	-0.538407899	7:09:08	-0.37607972	-0.369444404	-0.538256513
7:09:12	-0.37597341	-0.366314988	-0.538105127	7:09:16	-0.375867099	-0.363185573	-0.537953741
7:09:20	-0.375760789	-0.363988837	-0.537802355	7:09:24	-0.375654479	-0.368724788	-0.537650969
7:09:28	-0.375548169	-0.373460739	-0.537499584	7:09:32	-0.375441859	-0.376133968	-0.537348198
7:09:36	-0.375335549	-0.378807197	-0.537196812	7:09:40	-0.375229239	-0.379400908	-0.537045426
7:09:44	-0.375122929	-0.377915101	-0.53689404	7:09:48	-0.375016618	-0.376429294	-0.536742654
7:09:52	-0.374910308	-0.3331395	-0.536591269	7:09:56	-0.374803998	-0.289849706	-0.536439883

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
7:10:00	-0.374697688	-0.259115291	-0.536288497	7:10:04	-0.374439367	-0.240845642	-0.536137111
7:10:08	-0.374181047	-0.222575994	-0.535985725	7:10:12	-0.373922726	-0.211451888	-0.53583434
7:10:16	-0.373664405	-0.207473326	-0.535682954	7:10:20	-0.373406085	-0.206221314	-0.535531568
7:10:24	-0.373147764	-0.207695852	-0.535380182	7:10:28	-0.372889444	-0.20917039	-0.535228796
7:10:32	-0.372631123	-0.21440956	-0.53507741	7:10:36	-0.372372802	-0.219648731	-0.534926025
7:10:40	-0.372114482	-0.224887901	-0.534774639	7:10:44	-0.371856161	-0.230127071	-0.534623253
7:10:48	-0.37159784	-0.235366241	-0.534471867	7:10:52	-0.37133952	-0.239367433	-0.534320481
7:10:56	-0.371081199	-0.243368624	-0.534169095	7:11:00	-0.370822879	-0.246679011	-0.53401771
7:11:04	-0.37068043	-0.249367663	-0.533866324	7:11:08	-0.370537982	-0.252056314	-0.533714938
7:11:12	-0.370259534	-0.251926498	-0.533563552	7:11:16	-0.370253086	-0.251796683	-0.533412166
7:11:20	-0.370110637	-0.249877168	-0.533260781	7:11:24	-0.369968189	-0.246167956	-0.533109395
7:11:28	-0.369825741	-0.242458743	-0.532958009	7:11:32	-0.369683293	-0.23587372	-0.532806623
7:11:36	-0.369540844	-0.229288697	-0.532655237	7:11:40	-0.369398396	-0.222703674	-0.532503851
7:11:44	-0.369255948	-0.216118651	-0.532352466	7:11:48	-0.369113499	-0.209533628	-0.53220108
7:11:52	-0.368971051	-0.206034493	-0.532049694	7:11:56	-0.368828603	-0.202535358	-0.531898308
7:12:00	-0.368686155	-0.201015069	-0.531746922	7:12:04	-0.368526098	-0.201463126	-0.531595536
7:12:08	-0.367942713	-0.201658844	-0.530870577	7:12:12	-0.349285191	-0.19422138	-0.505656694
7:12:16	-0.330627669	-0.186783918	-0.480442811	7:12:20	-0.311970147	-0.17999793	-0.455228929
7:12:24	-0.293312624	-0.173869007	-0.430015046	7:12:28	-0.274655102	-0.167738222	-0.404801164
7:12:32	-0.25599758	-0.160670918	-0.379587281	7:12:36	-0.237340058	-0.153603615	-0.354373398
7:12:40	-0.218682535	-0.145879573	-0.329159516	7:12:44	-0.200025013	-0.137498791	-0.303945633
7:12:48	-0.181367491	-0.12911801	-0.278731751	7:12:52	-0.162709969	-0.06374356	-0.253517868
7:12:56	-0.14950408	-0.001618746	-0.235690487	7:13:00	-0.157709564	0.029857218	-0.246873699
7:13:04	-0.165986864	0.043404516	-0.25805691	7:13:08	-0.174264163	0.056951806	-0.269240122
7:13:12	-0.182541462	0.048359444	-0.280423334	7:13:16	-0.190818762	0.039767065	-0.291606546
7:13:20	-0.199096061	0.028933038	-0.302789758	7:13:24	-0.207373361	0.015857354	-0.31397297
7:13:28	-0.21565066	0.00278167	-0.325156181	7:13:32	-0.22392796	-0.013541713	-0.336339393
7:13:36	-0.232205259	-0.029865095	-0.347522605	7:13:40	-0.240482558	-0.045619972	-0.358705817
7:13:44	-0.248759858	-0.060806333	-0.369889029	7:13:48	-0.257037157	-0.075992704	-0.381072241
7:13:52	-0.265314457	-0.087942794	-0.392255452	7:13:56	-0.273591756	-0.099892884	-0.403438664
7:14:00	-0.281869055	-0.109765552	-0.414621876	7:14:04	-0.290020395	-0.117485711	-0.425805088
7:14:08	-0.298171735	-0.125205871	-0.4369883	7:14:12	-0.306323075	-0.129165562	-0.448171512
7:14:16	-0.314474415	-0.133125249	-0.459354724	7:14:20	-0.322625755	-0.135341837	-0.470537935
7:14:24	-0.330777095	-0.135815321	-0.481721147	7:14:28	-0.338928435	-0.136288805	-0.492904359
7:14:32	-0.347079775	-0.132481866	-0.504087571	7:14:36	-0.355231115	-0.128674932	-0.515270783
7:14:40	-0.363382455	-0.122865218	-0.526453995	7:14:44	-0.371533795	-0.115052748	-0.537637206
7:14:48	-0.379685135	-0.107240269	-0.548820418	7:14:52	-0.387836475	-0.099427789	-0.56000363
7:14:56	-0.380125072	-0.082159784	-0.549694171	7:15:00	-0.863113671	-0.560166826	-1.026784003
7:15:04	-0.846211967	-0.539057917	-1.003873835	7:15:08	-0.829310263	-0.51794899	-0.980963668
7:15:12	-0.312408559	0.00398349	-0.4580535	7:15:16	-0.295506855	0.025915971	-0.435143332
7:15:20	-0.278605151	0.047848469	-0.412233164	7:15:24	-0.261703448	0.069780949	-0.389322997
7:15:28	-0.244801744	0.09171343	-0.366412829	7:15:32	-0.22790004	0.106171892	-0.343502661
7:15:36	-0.210998336	0.120630336	-0.320592493	7:15:40	-0.194096632	0.134488261	-0.297682325
7:15:44	-0.177194928	0.147745652	-0.274772158	7:15:48	-0.160293224	0.161003042	-0.25186199
7:15:52	-0.14339152	0.203374896	-0.228951822	7:15:56	-0.362596999	0.105006936	-0.525946857
7:16:00	-0.366756979	0.126811727	-0.531573485	7:16:04	-0.370909186	0.140608631	-0.537200112
7:16:08	-0.375061392	0.154405535	-0.54282674	7:16:12	-0.379213598	0.152637008	-0.548453368
7:16:16	-0.383365804	0.15086848	-0.554079995	7:16:20	-0.38751801	0.147543977	-0.559706623
7:16:24	-0.391670216	0.142663464	-0.56533325	7:16:28	-0.395822422	0.137782951	-0.570959878
7:16:32	-0.399974628	0.132902473	-0.576586506	7:16:36	-0.404126834	0.12802196	-0.582213133
7:16:40	-0.40827904	0.123485266	-0.587839761	7:16:44	-0.412431247	0.119292389	-0.593466388
7:16:48	-0.416583453	0.115099512	-0.599093016	7:16:52	-0.420378652	0.111119441	-0.60423593
7:16:56	-0.419945277	0.109659958	-0.603649484	7:17:00	-0.419511901	0.107906789	-0.603063037
7:17:04	-0.419042934	0.105881221	-0.602476591	7:17:08	-0.418573968	0.103855617	-0.601890145
7:17:12	-0.418105001	0.103071695	-0.601303699	7:17:16	-0.417636034	0.102287772	-0.600717252
7:17:20	-0.417167067	0.102404485	-0.600130806	7:17:24	-0.4166981	0.103421797	-0.59954436
7:17:28	-0.416229133	0.104439109	-0.598957914	7:17:32	-0.415760166	0.10782236	-0.598371468

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
7:17:36	-0.4152912	0.111205646	-0.597785021	7:17:40	-0.414822233	0.116729116	-0.597198575
7:17:44	-0.414353266	0.124392843	-0.596612129	7:17:48	-0.413884299	0.132056534	-0.596025683
7:17:52	-0.413415332	0.140376311	-0.595439236	7:17:56	-0.412946365	0.148696124	-0.59485279
7:18:00	-0.412477398	0.15541118	-0.594266344	7:18:04	-0.411765195	0.16066654	-0.593679898
7:18:08	-0.411052991	0.165921865	-0.593093452	7:18:12	-0.410340788	0.166588105	-0.592507005
7:18:16	-0.409628584	0.167254345	-0.591920559	7:18:20	-0.408916381	0.165923193	-0.591334113
7:18:24	-0.408204177	0.162594648	-0.590747667	7:18:28	-0.407491974	0.159266104	-0.59016122
7:18:32	-0.40677977	0.152438731	-0.589574774	7:18:36	-0.406067567	0.145611358	-0.588988328
7:18:40	-0.405355363	0.13878402	-0.588401882	7:18:44	-0.40464316	0.131956647	-0.587815436
7:18:48	-0.403930956	0.125129273	-0.587228989	7:18:52	-0.403218753	0.062578079	-0.586642543
7:18:56	-0.402506549	2.6849E-05	-0.586056097	7:19:00	-0.401794346	-0.053050021	-0.585469651
7:19:04	-0.401396752	-0.096840109	-0.584883204	7:19:08	-0.400999157	-0.140630189	-0.584296758
7:19:12	-0.400601563	-0.160156039	-0.583710312	7:19:16	-0.400203969	-0.179681879	-0.583123866
7:19:20	-0.399806375	-0.193009505	-0.58253742	7:19:24	-0.399408781	-0.200138901	-0.581950973
7:19:28	-0.399011187	-0.207268297	-0.581364527	7:19:32	-0.398613593	-0.208340787	-0.580778081
7:19:36	-0.398215999	-0.209413279	-0.580191635	7:19:40	-0.397818405	-0.208661849	-0.579605189
7:19:44	-0.397420811	-0.206086502	-0.579018742	7:19:48	-0.397023217	-0.203511154	-0.578432296
7:19:52	-0.396625623	-0.201545907	-0.57784585	7:19:56	-0.396228029	-0.199580657	-0.577259404
7:20:00	-0.395830435	-0.198233625	-0.576672957	7:20:04	-0.394727375	-0.197084293	-0.576086511
7:20:08	-0.393624315	-0.19593496	-0.575500065	7:20:12	-0.392521255	-0.197617541	-0.574913619
7:20:16	-0.391418195	-0.199300121	-0.574327173	7:20:20	-0.390315135	-0.202989127	-0.573740726
7:20:24	-0.389212075	-0.208684557	-0.57315428	7:20:28	-0.388109015	-0.214379985	-0.572567834
7:20:32	-0.387005955	-0.223033182	-0.571981388	7:20:36	-0.385902895	-0.231686379	-0.571394941
7:20:40	-0.384799836	-0.241316575	-0.570808495	7:20:44	-0.383696776	-0.251923771	-0.570222049
7:20:48	-0.382593716	-0.262530968	-0.569635603	7:20:52	-0.381490656	-0.276211149	-0.569049157
7:20:56	-0.380387596	-0.289891337	-0.56846271	7:21:00	-0.379284536	-0.304439828	-0.567876264
7:21:04	-0.378877907	-0.320271772	-0.567289818	7:21:08	-0.378471279	-0.336103706	-0.566703372
7:21:12	-0.37806465	-0.35193565	-0.566116925	7:21:16	-0.377658022	-0.367767594	-0.565530479
7:21:20	-0.377251393	-0.383163921	-0.564944033	7:21:24	-0.376844764	-0.398124657	-0.564357587
7:21:28	-0.376438136	-0.413085375	-0.563771141	7:21:32	-0.376031507	-0.425805876	-0.563184694
7:21:36	-0.375624879	-0.438526376	-0.562598248	7:21:40	-0.37521825	-0.450420374	-0.562011802
7:21:44	-0.374811621	-0.461487905	-0.561425356	7:21:48	-0.374404993	-0.472555417	-0.560838909
7:21:52	-0.373998364	-0.516519624	-0.560252463	7:21:56	-0.373591736	-0.56048383	-0.559666017
7:22:00	-0.373185107	-0.614137527	-0.559079571	7:22:04	-0.372167943	-0.677116766	-0.558493125
7:22:08	-0.371150779	-0.740096005	-0.557906678	7:22:12	-0.370133615	-0.770379984	-0.557320232
7:22:16	-0.369116451	-0.800663963	-0.556733786	7:22:20	-0.368099287	-0.815502777	-0.55614734
7:22:24	-0.367082122	-0.814896461	-0.555560893	7:22:28	-0.366064958	-0.814290145	-0.554974447
7:22:32	-0.365047794	-0.813683829	-0.554388001	7:22:36	-0.36403063	-0.813077514	-0.553801555
7:22:40	-0.363013466	-0.812471198	-0.553215109	7:22:44	-0.361996302	-0.811864882	-0.552628662
7:22:48	-0.360979138	-0.811258566	-0.552042216	7:22:52	-0.359961974	-0.810652251	-0.55145577
7:22:56	-0.35894481	-0.810045935	-0.550869324	7:23:00	-0.357927645	-0.80320293	-0.550282877
7:23:04	-0.357494365	-0.790471243	-0.549696431	7:23:08	-0.357061085	-0.777739557	-0.549109985
7:23:12	-0.356627804	-0.76500787	-0.548523539	7:23:16	-0.356194524	-0.752276184	-0.547937093
7:23:20	-0.355761243	-0.740434935	-0.547350646	7:23:24	-0.355327963	-0.729484053	-0.5467642
7:23:28	-0.354894682	-0.718533172	-0.546177754	7:23:32	-0.354461402	-0.706765291	-0.545591308
7:23:36	-0.354028121	-0.694997411	-0.545004861	7:23:40	-0.353594841	-0.682484053	-0.544418415
7:23:44	-0.35316156	-0.669225252	-0.543831969	7:23:48	-0.35272828	-0.655966451	-0.543245523
7:23:52	-0.352294999	-0.640921197	-0.542659077	7:23:56	-0.351861719	-0.625875942	-0.54207263
7:24:00	-0.351428439	-0.609635656	-0.541486184	7:24:04	-0.350473057	-0.591889157	-0.540899738
7:24:08	-0.349517676	-0.574142623	-0.540313292	7:24:12	-0.348562294	-0.553206934	-0.539726845
7:24:16	-0.347606913	-0.532271245	-0.539140399	7:24:20	-0.346651531	-0.510252016	-0.538553953
7:24:24	-0.34569615	-0.487149282	-0.537967507	7:24:28	-0.344740768	-0.464046548	-0.537381061
7:24:32	-0.343785387	-0.440943814	-0.536794614	7:24:36	-0.342830005	-0.41784108	-0.536208168
7:24:40	-0.341874624	-0.394514723	-0.535621722	7:24:44	-0.340919242	-0.37096471	-0.535035276
7:24:48	-0.339963861	-0.347414723	-0.534448883	7:24:52	-0.339008479	-0.347990561	-0.533862383
7:24:56	-0.338053098	-0.34856639	-0.533275937	7:25:00	-0.337097717	-0.350463619	-0.532689491
7:25:04	-0.336721354	-0.354027367	-0.532103045	7:25:08	-0.336344991	-0.357591132	-0.531516598

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
7:25:12	-0.335968628	-0.363076506	-0.530930152	7:25:16	-0.335592265	-0.368561861	-0.530343706
7:25:20	-0.335215902	-0.369671966	-0.52975726	7:25:24	-0.334839539	-0.36640682	-0.529170814
7:25:28	-0.334463176	-0.363141656	-0.528584367	7:25:32	-0.334086813	-0.355097877	-0.527997921
7:25:36	-0.33371045	-0.347054115	-0.527411475	7:25:40	-0.333334087	-0.338346521	-0.526825029
7:25:44	-0.332957724	-0.328975114	-0.526238582	7:25:48	-0.332581361	-0.319603707	-0.525652136
7:25:52	-0.332204999	-0.3102323	-0.52506569	7:25:56	-0.331828636	-0.300860893	-0.524479244
7:26:00	-0.331452273	-0.292409395	-0.523892798	7:26:04	-0.330363668	-0.28445326	-0.523306351
7:26:08	-0.329275063	-0.276497124	-0.522719905	7:26:12	-0.328186459	-0.271971966	-0.522133459
7:26:16	-0.327097854	-0.267446799	-0.521547013	7:26:20	-0.326009249	-0.264099564	-0.520960566
7:26:24	-0.324920645	-0.261930259	-0.52037412	7:26:28	-0.32383204	-0.259760948	-0.519787674
7:26:32	-0.322743435	-0.257591638	-0.519201228	7:26:36	-0.321654831	-0.255422332	-0.518614782
7:26:40	-0.320566226	-0.251242973	-0.518028335	7:26:44	-0.319477622	-0.245053568	-0.517441889
7:26:48	-0.318389017	-0.238864159	-0.516855443	7:26:52	-0.317300412	-0.228095743	-0.516268997
7:26:56	-0.316211808	-0.217327328	-0.51568255	7:27:00	-0.315123203	-0.204904421	-0.515096104
7:27:04	-0.314729223	-0.191241078	-0.514509658	7:27:08	-0.314335242	-0.177577735	-0.513923212
7:27:12	-0.313941262	-0.162581843	-0.513336766	7:27:16	-0.313547282	-0.147585949	-0.512750319
7:27:20	-0.313153302	-0.13331527	-0.512163873	7:27:24	-0.312759321	-0.119769808	-0.511577427
7:27:28	-0.312365341	-0.106224342	-0.510990981	7:27:32	-0.311971361	-0.094715927	-0.510404534
7:27:36	-0.311577381	-0.083207504	-0.509818088	7:27:40	-0.3111834	-0.072369369	-0.509231642
7:27:44	-0.31078942	-0.062201524	-0.508645196	7:27:48	-0.31039544	-0.052033678	-0.50805875
7:27:52	-0.31000146	-0.001786275	-0.507472303	7:27:56	-0.309607479	0.048461129	-0.506885857
7:28:00	-0.309213499	0.104096833	-0.506299411	7:28:04	-0.30944109	0.164750276	-0.505712965
7:28:08	-0.309668681	0.225403754	-0.505126518	7:28:12	-0.309896272	0.250724376	-0.504540072
7:28:16	-0.310123863	0.276044999	-0.503953626	7:28:20	-0.310351454	0.298388434	-0.50336718
7:28:24	-0.310579045	0.317754755	-0.502780734	7:28:28	-0.310806636	0.337121039	-0.502194287
7:28:32	-0.311034226	0.34006073	-0.501607841	7:28:36	-0.311261817	0.343000421	-0.501021395
7:28:40	-0.311489408	0.340330552	-0.500434949	7:28:44	-0.311716999	0.332051122	-0.499848502
7:28:48	-0.31194459	0.323771693	-0.499262056	7:28:52	-0.312172181	0.308199924	-0.49867561
7:28:56	-0.312399772	0.292628156	-0.498089164	7:29:00	-0.312627363	0.275860503	-0.497502718
7:29:04	-0.312166075	0.258307595	-0.496916271	7:29:08	-0.311704788	0.240754688	-0.496329825
7:29:12	-0.3112435	0.226606173	-0.495743379	7:29:16	-0.310782213	0.212457658	-0.495156933
7:29:20	-0.310320925	0.199982648	-0.494570486	7:29:24	-0.309859638	0.189181216	-0.49398404
7:29:28	-0.30939835	0.178379784	-0.493397594	7:29:32	-0.308937063	0.167578352	-0.492811148
7:29:36	-0.308475775	0.15677692	-0.492224702	7:29:40	-0.308014488	0.144921365	-0.491638255
7:29:44	-0.3075532	0.132011725	-0.491051809	7:29:48	-0.307091913	0.119102084	-0.490465363
7:29:52	-0.306630625	0.104783223	-0.489878917	7:29:56	-0.306169338	0.090464362	-0.48929247
7:30:00	0.19429195	0.577015457	0.011293976	7:30:04	0.194300404	0.564166597	0.011880422
7:30:08	0.194308858	0.551317737	0.012466868	7:30:12	-0.305682688	0.041317838	-0.486946686
7:30:16	-0.305674233	0.03131794	-0.486360239	7:30:20	-0.305665779	0.021865336	-0.485773793
7:30:24	-0.305657325	0.012960045	-0.485187347	7:30:28	-0.305648871	0.004054753	-0.484600901
7:30:32	-0.305640416	-0.004243429	-0.484014455	7:30:36	-0.305631962	-0.012541594	-0.483428008
7:30:40	-0.305623508	-0.020490185	-0.482841562	7:30:44	-0.305615054	-0.028089202	-0.482255116
7:30:48	-0.305606599	-0.035688201	-0.48166867	7:30:52	-0.305598145	-0.061957698	-0.481082223
7:30:56	-0.305589691	-0.088227195	-0.480495777	7:31:00	-0.305581237	-0.111512236	-0.479909331
7:31:04	-0.306531559	-0.132384341	-0.479322885	7:31:08	-0.304757508	-0.151632486	-0.475045143
7:31:12	-0.300893887	-0.16601397	-0.467936211	7:31:16	-0.297030265	-0.180395453	-0.460827279
7:31:20	-0.292215985	-0.192285252	-0.453718348	7:31:24	-0.287080955	-0.202058847	-0.446609416
7:31:28	-0.281945926	-0.211832443	-0.439500484	7:31:32	-0.276810896	-0.213175099	-0.432391552
7:31:36	-0.271675867	-0.21451776	-0.42528262	7:31:40	-0.269101216	-0.214315803	-0.421642784
7:31:44	-0.270995906	-0.21370713	-0.424058525	7:31:48	-0.272890596	-0.213098463	-0.426474267
7:31:52	-0.274785286	-0.219855125	-0.428890008	7:31:56	-0.276679976	-0.226611783	-0.43130575
7:32:00	-0.278574665	-0.233368445	-0.433721491	7:32:04	-0.280274467	-0.240008933	-0.436137232
7:32:08	-0.281974268	-0.246649425	-0.438552974	7:32:12	-0.28367407	-0.254028534	-0.440968715
7:32:16	-0.285373871	-0.261407643	-0.443384457	7:32:20	-0.287073673	-0.265585463	-0.445800198
7:32:24	-0.288773474	-0.266561996	-0.448215939	7:32:28	-0.290473276	-0.267538537	-0.450631681
7:32:32	-0.292173077	-0.269921039	-0.453047422	7:32:36	-0.293872879	-0.272303541	-0.455463164
7:32:40	-0.29557268	-0.276145422	-0.457878905	7:32:44	-0.297272482	-0.281446664	-0.460294646

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
7:32:48	-0.298972283	-0.286747916	-0.462710388	7:32:52	-0.300672085	-0.292049158	-0.465126129
7:32:56	-0.302371886	-0.297350401	-0.467541871	7:33:00	-0.304071688	-0.301400004	-0.469957612
7:33:04	-0.30587287	-0.304258508	-0.472373353	7:33:08	-0.307674053	-0.307116967	-0.474789095
7:33:12	-0.309475235	-0.307271531	-0.477204836	7:33:16	-0.311276418	-0.307426096	-0.479620578
7:33:20	-0.3130776	-0.30758066	-0.482036319	7:33:24	-0.314878783	-0.307735225	-0.484452061
7:33:28	-0.316679965	-0.307889789	-0.486867802	7:33:32	-0.318481148	-0.306819718	-0.489283543
7:33:36	-0.32028233	-0.305749646	-0.491699285	7:33:40	-0.322083512	-0.304679574	-0.494115026
7:33:44	-0.323884695	-0.303609502	-0.496530768	7:33:48	-0.325685877	-0.30253943	-0.498946509
7:33:52	-0.325801688	-0.317327701	-0.499078715	7:33:56	-0.325597642	-0.331925309	-0.498777541
7:34:00	-0.325393595	-0.360140245	-0.498476367	7:34:04	-0.325008894	-0.401864798	-0.498175193
7:34:08	-0.324624193	-0.443589351	-0.497874019	7:34:12	-0.324239492	-0.470644808	-0.497572845
7:34:16	-0.323854791	-0.497700264	-0.497271671	7:34:20	-0.323470089	-0.516680846	-0.496970497
7:34:24	-0.323085388	-0.527586483	-0.496669323	7:34:28	-0.322700687	-0.538492155	-0.496368149
7:34:32	-0.322315986	-0.537520702	-0.496066976	7:34:36	-0.321931285	-0.53654925	-0.495765802
7:34:40	-0.321546584	-0.531244311	-0.495464628	7:34:44	-0.321161883	-0.521605922	-0.495163454
7:34:48	-0.320777182	-0.511967498	-0.49486228	7:34:52	-0.32039248	-0.498917469	-0.494561106
7:34:56	-0.320007779	-0.485867404	-0.494259932	7:35:00	-0.319623078	-0.471903896	-0.493958758
7:35:04	-0.319449297	-0.457152654	-0.493657584	7:35:08	-0.319275516	-0.442401411	-0.49335641
7:35:12	-0.319101735	-0.426398095	-0.493055236	7:35:16	-0.318927954	-0.410394778	-0.492754062
7:35:20	-0.318754173	-0.394391462	-0.492452888	7:35:24	-0.318580392	-0.378388145	-0.492151714
7:35:28	-0.318406611	-0.362384829	-0.491850541	7:35:32	-0.318232831	-0.347005764	-0.491549367
7:35:36	-0.31805905	-0.331626699	-0.491248193	7:35:40	-0.317885269	-0.317875191	-0.490947019
7:35:44	-0.317711488	-0.305751251	-0.490645845	7:35:48	-0.317537707	-0.29362731	-0.490344671
7:35:52	-0.317363926	-0.284923252	-0.490043497	7:35:56	-0.317190145	-0.276219194	-0.489742323
7:36:00	-0.317016364	-0.268611183	-0.489441149	7:36:04	-0.316121248	-0.261669241	-0.489139975
7:36:08	-0.315226132	-0.2547273	-0.488838801	7:36:12	-0.314331016	-0.248425648	-0.488537627
7:36:16	-0.3134359	-0.242123991	-0.488236453	7:36:20	-0.312540784	-0.235822338	-0.487935279
7:36:24	-0.311645668	-0.229520681	-0.487634106	7:36:28	-0.310752097	-0.223219949	-0.487332932
7:36:32	-0.309858932	-0.216049127	-0.487031758	7:36:36	-0.308965766	-0.208878306	-0.486730584
7:36:40	-0.308072601	-0.201361385	-0.48642941	7:36:44	-0.307179436	-0.193498367	-0.486128236
7:36:48	-0.30628627	-0.185635347	-0.485827062	7:36:52	-0.305393105	-0.153819709	-0.485525888
7:36:56	-0.30449994	-0.122004068	-0.485224714	7:37:00	-0.303606774	-0.080844458	-0.48492354
7:37:04	-0.303377575	-0.030736651	-0.484622366	7:37:08	-0.303148375	0.019371155	-0.484321192
7:37:12	-0.302919175	0.050325379	-0.484020018	7:37:16	-0.302689976	0.081279585	-0.483718844
7:37:20	-0.302460776	0.094778817	-0.48341767	7:37:24	-0.302231576	0.090823056	-0.483116497
7:37:28	-0.302002377	0.086867295	-0.482815323	7:37:32	-0.301773177	0.091516613	-0.482514149
7:37:36	-0.301485328	0.096200874	-0.48213351	7:37:40	-0.301168138	0.099457359	-0.481713117
7:37:44	-0.300850949	0.101268579	-0.481292724	7:37:48	-0.300533759	0.103079782	-0.480872331
7:37:52	-0.30021657	0.101058498	-0.480451939	7:37:56	-0.29989938	0.099037197	-0.480031546
7:38:00	-0.29958219	0.095334147	-0.479611153	7:38:04	-0.299411699	0.089861903	-0.47919076
7:38:08	-0.299241208	0.084389642	-0.478770367	7:38:12	-0.299070716	0.078917381	-0.478349974
7:38:16	-0.298900225	0.073445137	-0.477929582	7:38:20	-0.298729733	0.068348315	-0.477509189
7:38:24	-0.298559242	0.06362695	-0.477088796	7:38:28	-0.298388751	0.058905567	-0.476668403
7:38:32	-0.298218259	0.056334904	-0.47624801	7:38:36	-0.298047768	0.05376424	-0.475827617
7:38:40	-0.297877276	0.050806182	-0.475407224	7:38:44	-0.297706785	0.047460693	-0.474986832
7:38:48	-0.297536293	0.044115222	-0.474566439	7:38:52	-0.297365802	0.03974892	-0.474146046
7:38:56	-0.297195311	0.035382618	-0.473725653	7:39:00	-0.297024819	0.03060922	-0.47330526
7:39:04	-0.296724795	0.025505921	-0.472884867	7:39:08	-0.296424771	0.020402622	-0.472464474
7:39:12	-0.296124747	0.01353161	-0.472044082	7:39:16	-0.295824723	0.006660581	-0.471623689
7:39:20	-0.295524699	-0.00021043	-0.471203296	7:39:24	-0.295224675	-0.00708146	-0.470782903
7:39:28	-0.294924651	-0.013952471	-0.47036251	7:39:32	-0.294624627	-0.019121411	-0.469942117
7:39:36	-0.294324603	-0.024290351	-0.469521725	7:39:40	-0.294024579	-0.029459281	-0.469101332
7:39:44	-0.293724555	-0.034628212	-0.468680939	7:39:48	-0.293424531	-0.039797152	-0.468260546
7:39:52	-0.293124507	-0.075638965	-0.467840153	7:39:56	-0.292824483	-0.111480777	-0.46741976
7:40:00	-0.292524459	-0.12966901	-0.466999367	7:40:04	-0.292164785	-0.130168101	-0.466578975
7:40:08	-0.29180511	-0.130667193	-0.466158582	7:40:12	-0.291445436	-0.119675565	-0.465738189
7:40:16	-0.291085761	-0.108683941	-0.465317796	7:40:20	-0.290726087	-0.101817703	-0.464897403

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
7:40:24	-0.290366412	-0.09907685	-0.46447701	7:40:28	-0.290006738	-0.096335998	-0.464056618
7:40:32	-0.289647063	-0.099496953	-0.463636225	7:40:36	-0.289287389	-0.102657907	-0.463215832
7:40:40	-0.288927714	-0.107633917	-0.462795439	7:40:44	-0.28856804	-0.114424983	-0.462375046
7:40:48	-0.288208365	-0.121216048	-0.461954653	7:40:52	-0.287848691	-0.128007113	-0.46153426
7:40:56	-0.287489016	-0.13479818	-0.461113868	7:41:00	-0.287129342	-0.142428463	-0.460693475
7:41:04	-0.286804925	-0.150918978	-0.460273082	7:41:08	-0.286480508	-0.159409494	-0.459852689
7:41:12	-0.28615609	-0.171112491	-0.459432296	7:41:16	-0.285831673	-0.182815486	-0.459011903
7:41:20	-0.285507256	-0.192250869	-0.45859151	7:41:24	-0.285182839	-0.19941864	-0.458171118
7:41:28	-0.284858421	-0.206586411	-0.457750725	7:41:32	-0.284892738	-0.209286332	-0.457816385
7:41:36	-0.28525127	-0.212179511	-0.458277111	7:41:40	-0.285616175	-0.22067125	-0.458737836
7:41:44	-0.285981079	-0.234757747	-0.459198561	7:41:48	-0.286345984	-0.248844244	-0.459659287
7:41:52	-0.286710888	-0.260843842	-0.460120012	7:41:56	-0.287075793	-0.272843439	-0.460580738
7:42:00	-0.287440698	-0.283723079	-0.461041463	7:42:04	-0.287701524	-0.293420713	-0.461502189
7:42:08	-0.287962351	-0.303118355	-0.461962914	7:42:12	-0.288223178	-0.309732117	-0.462423639
7:42:16	-0.288484005	-0.316345869	-0.462884365	7:42:20	-0.288744831	-0.321597051	-0.46334509
7:42:24	-0.289005658	-0.325485654	-0.463805816	7:42:28	-0.289266485	-0.329374256	-0.464266541
7:42:32	-0.289527312	-0.333262859	-0.464727266	7:42:36	-0.289788139	-0.337151461	-0.465187992
7:42:40	-0.290048965	-0.340495167	-0.465648717	7:42:44	-0.290309792	-0.343294012	-0.466109443
7:42:48	-0.290570619	-0.346092857	-0.466570168	7:42:52	-0.290831446	-0.430760315	-0.467030893
7:42:56	-0.291092272	-0.515427773	-0.467491619	7:43:00	-0.291353099	-0.596846529	-0.467952344
7:43:04	-0.291721618	-0.675080704	-0.46841307	7:43:08	-0.292090136	-0.753314916	-0.468873795
7:43:12	-0.292458654	-0.760286592	-0.46933452	7:43:16	-0.292827173	-0.767258232	-0.469795246
7:43:20	-0.293195691	-0.770853905	-0.470255971	7:43:24	-0.293564209	-0.771073573	-0.470716697
7:43:28	-0.293932728	-0.771293241	-0.471177422	7:43:32	-0.294301246	-0.771512909	-0.471638147
7:43:36	-0.294669765	-0.771732577	-0.472098873	7:43:40	-0.295038283	-0.771952245	-0.472559598
7:43:44	-0.295406801	-0.772171913	-0.473020324	7:43:48	-0.29577532	-0.772391581	-0.473481049
7:43:52	-0.296143838	-0.772611249	-0.473941775	7:43:56	-0.296512356	-0.772830917	-0.4744025
7:44:00	-0.296880875	-0.761644829	-0.474863225	7:44:04	-0.297341112	-0.739107622	-0.475323951
7:44:08	-0.297801349	-0.716570414	-0.475784676	7:44:12	-0.298261586	-0.690849488	-0.476245402
7:44:16	-0.298721823	-0.665128561	-0.476706127	7:44:20	-0.299182059	-0.63940767	-0.477166852
7:44:24	-0.299642296	-0.613686743	-0.477627578	7:44:28	-0.300102533	-0.587965817	-0.478088303
7:44:32	-0.30056277	-0.563639952	-0.478549029	7:44:36	-0.301023007	-0.539314088	-0.479009754
7:44:40	-0.301483244	-0.513604282	-0.479470479	7:44:44	-0.301943481	-0.486510535	-0.479931205
7:44:48	-0.302403718	-0.459416805	-0.48039193	7:44:52	-0.302863955	-0.427908245	-0.480852656
7:44:56	-0.303324192	-0.396399703	-0.481313381	7:45:00	-0.803784429	-0.862979253	-0.981774106
7:45:04	-0.804270396	-0.827662267	-0.982234832	7:45:08	-0.804756363	-0.792345281	-0.982695557
7:45:12	-0.305242331	-0.255206112	-0.483156283	7:45:16	-0.305728298	-0.218066945	-0.483617008
7:45:20	-0.306214265	-0.180927776	-0.484077733	7:45:24	-0.306700232	-0.143788609	-0.484538459
7:45:28	-0.306880817	-0.106467405	-0.484585416	7:45:32	-0.306648564	-0.07118873	-0.484073014
7:45:36	-0.306416311	-0.035910045	-0.483560612	7:45:40	-0.306184058	-0.002863673	-0.48304821
7:45:44	-0.305951805	0.027950378	-0.482535808	7:45:48	-0.305719552	0.058764429	-0.482023406
7:45:52	-0.305487299	0.119564356	-0.481511004	7:45:56	-0.305255046	0.180364247	-0.480998601
7:46:00	-0.305022793	0.251519788	-0.480486199	7:46:04	-0.304513649	0.333195956	-0.479973797
7:46:08	-0.304004506	0.414872125	-0.479461395	7:46:12	-0.303495363	0.415175617	-0.478948993
7:46:16	-0.302986219	0.41547911	-0.478436591	7:46:20	-0.302477076	0.415782602	-0.477924188
7:46:24	-0.301967933	0.416086095	-0.477411786	7:46:28	-0.301458789	0.416389587	-0.476899384
7:46:32	-0.300949646	0.416693079	-0.476386982	7:46:36	-0.300440503	0.416996572	-0.47587458
7:46:40	-0.29993136	0.417300064	-0.475362178	7:46:44	-0.299430762	0.417598463	-0.474849775
7:46:48	-0.298931364	0.417896146	-0.474337373	7:46:52	-0.298431966	0.418193829	-0.473824971
7:46:56	-0.297932569	0.418491513	-0.473312569	7:47:00	-0.297433171	0.418789196	-0.472800167
7:47:04	-0.29690891	0.4191017	-0.472287765	7:47:08	-0.296384649	0.419414203	-0.471775362
7:47:12	-0.295860389	0.419726707	-0.47126296	7:47:16	-0.295336128	0.420039211	-0.470750558
7:47:20	-0.294811867	0.420351714	-0.470238156	7:47:24	-0.294287606	0.420664218	-0.469725754
7:47:28	-0.293763345	0.420976722	-0.469213352	7:47:32	-0.293239085	0.421289226	-0.468700949
7:47:36	-0.292714824	0.421601729	-0.468188547	7:47:40	-0.292190563	0.421914233	-0.467676145
7:47:44	-0.291666302	0.422226737	-0.467163743	7:47:48	-0.291142042	0.42253924	-0.466651341
7:47:52	-0.290617781	0.422851744	-0.466138939	7:47:56	-0.29009352	0.423164248	-0.465626537

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
7:48:00	-0.289569259	0.423476752	-0.465114134	7:48:04	-0.289133487	0.423736509	-0.464601732
7:48:08	-0.288697715	0.423996266	-0.46408933	7:48:12	-0.288261943	0.424256023	-0.463576928
7:48:16	-0.287826171	0.42451578	-0.463064526	7:48:20	-0.287390399	0.412082728	-0.462552124
7:48:24	-0.286954627	0.386956832	-0.462039721	7:48:28	-0.286518855	0.361830935	-0.461527319
7:48:32	-0.286083083	0.323655906	-0.461014917	7:48:36	-0.285647311	0.285480912	-0.460502515
7:48:40	-0.285211538	0.248806219	-0.459990113	7:48:44	-0.284775766	0.213631825	-0.459477711
7:48:48	-0.284339994	0.178457432	-0.458965308	7:48:52	-0.283904222	0.062388801	-0.458452906
7:48:56	-0.283447316	-0.053667231	-0.457911869	7:49:00	-0.282902863	-0.177404597	-0.457252213
7:49:04	-0.282331807	-0.308859619	-0.456592557	7:49:08	-0.281760752	-0.440314634	-0.455932901
7:49:12	-0.281189696	-0.541813342	-0.455273245	7:49:16	-0.280618641	-0.64331205	-0.454613589
7:49:20	-0.280047586	-0.707716283	-0.453953934	7:49:24	-0.27947653	-0.735026006	-0.453294278
7:49:28	-0.278905475	-0.762335728	-0.452634622	7:49:32	-0.27833442	-0.761995331	-0.451974966
7:49:36	-0.277763364	-0.761654934	-0.45131531	7:49:40	-0.277192309	-0.761314537	-0.450655654
7:49:44	-0.276621254	-0.760974139	-0.449995998	7:49:48	-0.276050198	-0.760633742	-0.449336343
7:49:52	-0.275479143	-0.760293345	-0.448676687	7:49:56	-0.274908087	-0.759952948	-0.448017031
7:50:00	-0.274337032	-0.751997107	-0.447357375	7:50:04	-0.273678979	-0.736373928	-0.446697719
7:50:08	-0.273020925	-0.720750786	-0.446038063	7:50:12	-0.272362872	-0.700263916	-0.445378407
7:50:16	-0.271704819	-0.679777046	-0.444718752	7:50:20	-0.271046765	-0.660598263	-0.444059096
7:50:24	-0.270388712	-0.642727601	-0.44339944	7:50:28	-0.269730658	-0.624856939	-0.442739784
7:50:32	-0.269072605	-0.607813793	-0.442080128	7:50:36	-0.268414552	-0.590770646	-0.441420472
7:50:40	-0.267756498	-0.573521429	-0.440760817	7:50:44	-0.267098445	-0.556066071	-0.440101161
7:50:48	-0.266440392	-0.538610712	-0.439441505	7:50:52	-0.265782338	-0.521155353	-0.438781849
7:50:56	-0.265373812	-0.503848734	-0.438460282	7:51:00	-0.265108515	-0.48727704	-0.438332776
7:51:04	-0.265182278	-0.471557003	-0.438205271	7:51:08	-0.265256042	-0.455836931	-0.438077766
7:51:12	-0.265329806	-0.438771964	-0.437950261	7:51:16	-0.26540357	-0.42170698	-0.437822756
7:51:20	-0.265477333	-0.404642013	-0.43769525	7:51:24	-0.265551097	-0.387577028	-0.437567745
7:51:28	-0.265624861	-0.370512062	-0.43744024	7:51:32	-0.265698625	-0.350687544	-0.437312735
7:51:36	-0.265772388	-0.330863026	-0.43718523	7:51:40	-0.265846152	-0.309537018	-0.437057725
7:51:44	-0.265919916	-0.286709519	-0.436930219	7:51:48	-0.26599368	-0.263882029	-0.436802714
7:51:52	-0.266026769	-0.306146473	-0.436675209	7:51:56	-0.26605568	-0.348408435	-0.436547704
7:52:00	-0.26608459	-0.380578394	-0.436420199	7:52:04	-0.26623123	-0.402726526	-0.436292693
7:52:08	-0.266377869	-0.424874658	-0.436165188	7:52:12	-0.266524509	-0.429769551	-0.436037683
7:52:16	-0.266671148	-0.434664427	-0.435910178	7:52:20	-0.266817788	-0.431426373	-0.435782673
7:52:24	-0.266964427	-0.420055372	-0.435655168	7:52:28	-0.267111066	-0.408684371	-0.435527662
7:52:32	-0.267257706	-0.388817845	-0.435400157	7:52:36	-0.267404345	-0.368951319	-0.435272652
7:52:40	-0.267550985	-0.34728347	-0.435145147	7:52:44	-0.267697624	-0.32381428	-0.435017642
7:52:48	-0.267844264	-0.30034509	-0.434890136	7:52:52	-0.267990903	-0.27801499	-0.434762631
7:52:56	-0.268137542	-0.255684891	-0.434635126	7:53:00	-0.268284182	-0.232059203	-0.434507621
7:53:04	-0.267998691	-0.20774406	-0.434380116	7:53:08	-0.267713199	-0.18459055	-0.434252611
7:53:12	-0.267427708	-0.164921938	-0.434125105	7:53:16	-0.267142217	-0.145253325	-0.4339976
7:53:20	-0.266856726	-0.131880609	-0.433870095	7:53:24	-0.266571235	-0.120606525	-0.43374259
7:53:28	-0.266285743	-0.110859659	-0.433615085	7:53:32	-0.266000252	-0.105694452	-0.433487579
7:53:36	-0.265714761	-0.100529241	-0.433360074	7:53:40	-0.26542927	-0.098505473	-0.433232569
7:53:44	-0.265143779	-0.097528845	-0.433105064	7:53:48	-0.264858287	-0.09670975	-0.432977559
7:53:52	-0.26531453	-0.096805377	-0.43385504	7:53:56	-0.265978102	-0.097024589	-0.435013435
7:54:00	-0.266641674	-0.096337495	-0.436171829	7:54:04	-0.267279307	-0.095332843	-0.437330224
7:54:08	-0.267916941	-0.09432819	-0.438488619	7:54:12	-0.268554575	-0.093323532	-0.439647013
7:54:16	-0.269192208	-0.09231888	-0.440805408	7:54:20	-0.269829842	-0.093502669	-0.441963802
7:54:24	-0.270467476	-0.095415944	-0.443122197	7:54:28	-0.271105109	-0.098229823	-0.444280592
7:54:32	-0.271742743	-0.103745522	-0.445438986	7:54:36	-0.272380377	-0.109261217	-0.446597381
7:54:40	-0.27301801	-0.116417748	-0.447755776	7:54:44	-0.273655644	-0.124121224	-0.44891417
7:54:48	-0.274293277	-0.12881499	-0.450072565	7:54:52	-0.274930911	-0.12447962	-0.45123096
7:54:56	-0.275568545	-0.12014425	-0.452389354	7:55:00	-0.276206178	-0.11580888	-0.453547749
7:55:04	-0.277005268	-0.111569751	-0.454706144	7:55:08	-0.277804358	-0.10896231	-0.455864538
7:55:12	-0.278603448	-0.111249915	-0.457022933	7:55:16	-0.279402537	-0.113537521	-0.458181328
7:55:20	-0.280201627	-0.11806966	-0.459339722	7:55:24	-0.281000717	-0.123349974	-0.460498117
7:55:28	-0.281799807	-0.130612553	-0.461656512	7:55:32	-0.282598896	-0.14382193	-0.462814906

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
7:55:36	-0.283397986	-0.157031306	-0.463973301	7:55:40	-0.284197076	-0.169554512	-0.465131695
7:55:44	-0.284996166	-0.181848996	-0.46629009	7:55:48	-0.285795255	-0.19333622	-0.467448485
7:55:52	-0.286594345	-0.202401667	-0.468606879	7:55:56	-0.287393435	-0.211467113	-0.469765274
7:56:00	-0.288192525	-0.216500954	-0.470923669	7:56:04	-0.289311581	-0.220381655	-0.472082063
7:56:08	-0.290430638	-0.222999205	-0.473240458	7:56:12	-0.291549695	-0.221827304	-0.474398853
7:56:16	-0.292668751	-0.220655408	-0.475557247	7:56:20	-0.293787808	-0.218887417	-0.476715642
7:56:24	-0.294906865	-0.216920723	-0.477874037	7:56:28	-0.296025921	-0.215252463	-0.479032431
7:56:32	-0.297144978	-0.214479487	-0.480190826	7:56:36	-0.298264035	-0.213706512	-0.481349221
7:56:40	-0.299207863	-0.212329215	-0.482270196	7:56:44	-0.300133551	-0.210774482	-0.483166592
7:56:48	-0.301059239	-0.209049804	-0.484062989	7:56:52	-0.301984927	-0.206815292	-0.484959385
7:56:56	-0.302910615	-0.20458078	-0.485855781	7:57:00	-0.303836302	-0.202918388	-0.486752178
7:57:04	-0.304494422	-0.20128721	-0.487648574	7:57:08	-0.305152542	-0.199355813	-0.488544971
7:57:12	-0.305810662	-0.19652375	-0.489441367	7:57:16	-0.306468782	-0.193691687	-0.490337763
7:57:20	-0.307126902	-0.190859624	-0.49123416	7:57:24	-0.307785022	-0.188027562	-0.492130556
7:57:28	-0.308443142	-0.185679215	-0.493026952	7:57:32	-0.309101262	-0.184782012	-0.493923349
7:57:36	-0.309759382	-0.18388481	-0.494819745	7:57:40	-0.310417502	-0.185934987	-0.495716141
7:57:44	-0.311075622	-0.188967622	-0.496612538	7:57:48	-0.311733742	-0.195746313	-0.497508934
7:57:52	-0.312391862	-0.21376317	-0.49840533	7:57:56	-0.313049983	-0.231780026	-0.499301727
7:58:00	-0.313708103	-0.293429497	-0.500198123	7:58:04	-0.313604567	-0.369169153	-0.50109452
7:58:08	-0.313501031	-0.438896283	-0.501990916	7:58:12	-0.313397494	-0.490585809	-0.502887312
7:58:16	-0.313293958	-0.542275336	-0.503783709	7:58:20	-0.313190422	-0.57375158	-0.504680105
7:58:24	-0.313086886	-0.598490063	-0.505576501	7:58:28	-0.31298335	-0.618840239	-0.506472898
7:58:32	-0.312879814	-0.626025562	-0.507369294	7:58:36	-0.312776278	-0.633210885	-0.50826569
7:58:40	-0.312672742	-0.632738236	-0.509162087	7:58:44	-0.312569206	-0.629712905	-0.510058483
7:58:48	-0.31246567	-0.625241137	-0.510954879	7:58:52	-0.312362134	-0.616430021	-0.511851276
7:58:56	-0.312258598	-0.607618904	-0.512747672	7:59:00	-0.312155062	-0.595670257	-0.513644069
7:59:04	-0.312875069	-0.583166668	-0.514540465	7:59:08	-0.313595075	-0.569087207	-0.515436861
7:59:12	-0.314315082	-0.550280061	-0.516333258	7:59:16	-0.315035089	-0.531472916	-0.517229654
7:59:20	-0.315755095	-0.510734996	-0.51812605	7:59:24	-0.32645725	-0.495303665	-0.532547411
7:59:28	-0.338870333	-0.482739773	-0.549286933	7:59:32	-0.351283416	-0.475718647	-0.566026456
7:59:36	-0.351663364	-0.461524773	-0.566462102	7:59:40	-0.342440205	-0.445102445	-0.553886353
7:59:44	-0.333217046	-0.429845375	-0.541310604	7:59:48	-0.323993888	-0.415009311	-0.528734855
7:59:52	-0.314770729	-0.401436228	-0.516159106	7:59:56	-0.305547571	-0.387863146	-0.503583357
8:00:00	0.203675588	0.409351425	0.008992392	8:00:04	0.212545953	0.405934404	0.021568141
8:00:08	0.221416317	0.415016138	0.03414389	8:00:12	-0.269713318	-0.075902128	-0.453280361
8:00:16	-0.260842953	-0.066820385	-0.440704612	8:00:20	-0.251972588	-0.057738651	-0.428128863
8:00:24	-0.255388032	-0.055980297	-0.432199343	8:00:28	-0.263267305	-0.067508984	-0.442317931
8:00:32	-0.271146577	-0.079037663	-0.452436519	8:00:36	-0.279025849	-0.098652071	-0.462555107
8:00:40	-0.286905121	-0.120961717	-0.472673695	8:00:44	-0.289766034	-0.140279999	-0.475992832
8:00:48	-0.290097914	-0.153775922	-0.475885344	8:00:52	-0.290429794	-0.167271847	-0.475777856
8:00:56	-0.290761674	-0.176307002	-0.475670367	8:01:00	-0.291093554	-0.180881388	-0.475562879
8:01:04	-0.291137236	-0.185283985	-0.475455391	8:01:08	-0.291180919	-0.176931979	-0.475347902
8:01:12	-0.291224602	-0.168579974	-0.475240414	8:01:16	-0.291268285	-0.1640025	-0.475132926
8:01:20	-0.291311968	-0.163199559	-0.475025438	8:01:24	-0.291355651	-0.162396616	-0.474917949
8:01:28	-0.291399333	-0.169238035	-0.474810461	8:01:32	-0.291443016	-0.176079453	-0.474702973
8:01:36	-0.291486699	-0.183846636	-0.474595485	8:01:40	-0.291530382	-0.191922408	-0.474487996
8:01:44	-0.291574065	-0.199998179	-0.474380508	8:01:48	-0.291617748	-0.213086422	-0.47427302
8:01:52	-0.29166143	-0.226174664	-0.474165531	8:01:56	-0.291705113	-0.235087646	-0.474058043
8:02:00	-0.291748796	-0.242608879	-0.473950555	8:02:04	-0.291029382	-0.249675237	-0.473843067
8:02:08	-0.290363842	-0.254319396	-0.473735578	8:02:12	-0.289698768	-0.258963832	-0.47362809
8:02:16	-0.289033695	-0.272488106	-0.473520602	8:02:20	-0.288368621	-0.294892226	-0.473413113
8:02:24	-0.287703548	-0.317296338	-0.473305625	8:02:28	-0.287038474	-0.341663742	-0.473198137
8:02:32	-0.286373401	-0.366031155	-0.473090649	8:02:36	-0.285708327	-0.391912582	-0.47298316
8:02:40	-0.285043254	-0.419308024	-0.472875672	8:02:44	-0.28437818	-0.446454441	-0.472768184
8:02:48	-0.283713106	-0.472853745	-0.472660696	8:02:52	-0.283048033	-0.499253049	-0.472553207
8:02:56	-0.282382959	-0.527717961	-0.472445719	8:03:00	-0.281717886	-0.558248483	-0.472338231
8:03:04	-0.281763509	-0.589202639	-0.472230742	8:03:08	-0.281809132	-0.597705694	-0.472123254

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
8:03:12	-0.281854756	-0.606208748	-0.472015766	8:03:16	-0.281900379	-0.607763921	-0.471908278
8:03:20	-0.281946002	-0.602371141	-0.471800789	8:03:24	-0.281991626	-0.596978362	-0.471693301
8:03:28	-0.282037249	-0.583787837	-0.471585813	8:03:32	-0.282082872	-0.562799531	-0.471478324
8:03:36	-0.282128495	-0.535420943	-0.471370836	8:03:40	-0.282174119	-0.501652106	-0.471263348
8:03:44	-0.282219742	-0.467883234	-0.47115586	8:03:48	-0.282265365	-0.427452563	-0.471048371
8:03:52	-0.282310988	-0.38702191	-0.470940883	8:03:56	-0.282356612	-0.346957086	-0.470833395
8:04:00	-0.282402235	-0.307258108	-0.470725907	8:04:04	-0.281302573	-0.266876443	-0.470618418
8:04:08	-0.280202912	-0.242669522	-0.47051093	8:04:12	-0.279383355	-0.218629576	-0.47078296
8:04:16	-0.278765815	-0.203573503	-0.471328705	8:04:20	-0.278148275	-0.197380892	-0.471874451
8:04:24	-0.277530735	-0.191188282	-0.472420196	8:04:28	-0.276913195	-0.183764936	-0.472965941
8:04:32	-0.276295655	-0.176341591	-0.473511687	8:04:36	-0.275678114	-0.165199132	-0.474057432
8:04:40	-0.275060574	-0.150337559	-0.474603178	8:04:44	-0.274443034	-0.135475988	-0.475148923
8:04:48	-0.273825494	-0.128987178	-0.475694669	8:04:52	-0.273207954	-0.122498366	-0.476240414
8:04:56	-0.272590414	-0.114365961	-0.476786159	8:05:00	-0.271972874	-0.104589966	-0.477331905
8:05:04	-0.27247164	-0.09547938	-0.47787765	8:05:08	-0.273986467	-0.078787544	-0.478423396
8:05:12	-0.275501294	-0.062095717	-0.478969141	8:05:16	-0.277016121	-0.050597089	-0.479514886
8:05:20	-0.278530947	-0.040829535	-0.480060632	8:05:24	-0.280045774	-0.03106198	-0.480606377
8:05:28	-0.281560601	-0.017521895	-0.481152123	8:05:32	-0.283746405	-0.004381796	-0.481697868
8:05:36	-0.286245663	0.005899984	-0.482243614	8:05:40	-0.288744921	0.013510272	-0.482789359
8:05:44	-0.29124418	0.021120543	-0.483335104	8:05:48	-0.293743438	0.025390339	-0.48388085
8:05:52	-0.296242696	0.029660135	-0.484426595	8:05:56	-0.298294666	0.033304978	-0.484972341
8:06:00	-0.299126343	0.037380015	-0.485518086	8:06:04	-0.299749417	0.041579397	-0.486063831
8:06:08	-0.300372491	0.048791922	-0.486609577	8:06:12	-0.300995565	0.056004464	-0.487155322
8:06:16	-0.301618639	0.066787338	-0.487701068	8:06:20	-0.302241713	0.08114058	-0.488246813
8:06:24	-0.302864787	0.095493804	-0.488792559	8:06:28	-0.303487861	0.112020575	-0.489338304
8:06:32	-0.304110935	0.128547346	-0.489884049	8:06:36	-0.304734009	0.1376004	-0.490429795
8:06:40	-0.305357083	0.139179666	-0.49097554	8:06:44	-0.305980157	0.140758968	-0.491521286
8:06:48	-0.306578779	0.130721442	-0.492033901	8:06:52	-0.307061453	0.120752995	-0.492389415
8:06:56	-0.307544126	0.105848999	-0.49274493	8:07:00	-0.3080268	0.086009435	-0.493100445
8:07:04	-0.30899905	0.065878043	-0.493455959	8:07:08	-0.3099713	0.053044479	-0.493811474
8:07:12	-0.310943551	0.040210933	-0.494166989	8:07:16	-0.311915801	0.029071287	-0.494522503
8:07:20	-0.312888051	0.01962554	-0.494878018	8:07:24	-0.313860301	0.010179794	-0.495233533
8:07:28	-0.314832552	-0.00198095	-0.495589047	8:07:32	-0.315804802	-0.014141711	-0.495944562
8:07:36	-0.316777052	-0.031452282	-0.496300077	8:07:40	-0.31756463	-0.053802609	-0.496655591
8:07:44	-0.318237932	-0.076084809	-0.497011106	8:07:48	-0.318911234	-0.099703359	-0.497366621
8:07:52	-0.319584537	-0.123321904	-0.497722135	8:07:56	-0.320257839	-0.148752182	-0.49807765
8:08:00	-0.320931141	-0.175994193	-0.498433165	8:08:04	-0.320367557	-0.202498914	-0.498788679
8:08:08	-0.319803973	-0.230453466	-0.499144194	8:08:12	-0.319240389	-0.258408015	-0.499499708
8:08:16	-0.318676805	-0.278808569	-0.499855223	8:08:20	-0.318113221	-0.296691118	-0.500210738
8:08:24	-0.317549637	-0.314573667	-0.500566252	8:08:28	-0.316986053	-0.324019307	-0.500921767
8:08:32	-0.31642247	-0.333464954	-0.501277282	8:08:36	-0.315858886	-0.343350901	-0.501632796
8:08:40	-0.315295302	-0.353677136	-0.501988311	8:08:44	-0.314731718	-0.364003371	-0.502343826
8:08:48	-0.313197349	-0.392813173	-0.501384009	8:08:52	-0.31101546	-0.421237016	-0.499546858
8:08:56	-0.308833571	-0.432346633	-0.497709706	8:09:00	-0.306651682	-0.437684872	-0.495872554
8:09:04	-0.305835421	-0.443837123	-0.494035403	8:09:08	-0.30501916	-0.470846396	-0.492198251
8:09:12	-0.304202899	-0.497855668	-0.490361099	8:09:16	-0.303386638	-0.517221376	-0.488523948
8:09:20	-0.302570376	-0.528943501	-0.486686796	8:09:24	-0.301754115	-0.540665625	-0.484849645
8:09:28	-0.300937854	-0.55238775	-0.483012493	8:09:32	-0.300121593	-0.564109874	-0.481175341
8:09:36	-0.299305332	-0.568165357	-0.47933819	8:09:40	-0.298489071	-0.564554234	-0.477501038
8:09:44	-0.29767281	-0.560943111	-0.475663886	8:09:48	-0.296856549	-0.545679409	-0.473826735
8:09:52	-0.296040288	-0.530415672	-0.471989583	8:09:56	-0.295224026	-0.521381731	-0.470152431
8:10:00	-0.294407765	-0.514424342	-0.46831528	8:10:04	-0.293013005	-0.507122119	-0.466478128
8:10:08	-0.291618245	-0.492171267	-0.464640976	8:10:12	-0.290223485	-0.477220416	-0.462803825
8:10:16	-0.288828725	-0.461170995	-0.460966673	8:10:20	-0.287433965	-0.444022988	-0.459129521
8:10:24	-0.286039204	-0.426874962	-0.45729237	8:10:28	-0.284644444	-0.412046403	-0.455455218
8:10:32	-0.283490455	-0.397361346	-0.453944291	8:10:36	-0.282834425	-0.380665213	-0.453108056
8:10:40	-0.282178395	-0.361661161	-0.45227182	8:10:44	-0.281563585	-0.34268168	-0.451435585

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
8:10:48	-0.281239631	-0.31654838	-0.450599349	8:10:52	-0.280915678	-0.290415072	-0.449763114
8:10:56	-0.280591724	-0.264744418	-0.448926879	8:11:00	-0.280267771	-0.239227985	-0.448090643
8:11:04	-0.280076011	-0.213790345	-0.447254408	8:11:08	-0.279884251	-0.185690074	-0.446418172
8:11:12	-0.27969249	-0.157589801	-0.445581937	8:11:16	-0.27950073	-0.145239375	-0.444745701
8:11:20	-0.27930897	-0.138138896	-0.443909466	8:11:24	-0.27911721	-0.131038417	-0.443073231
8:11:28	-0.27892545	-0.117623648	-0.442236995	8:11:32	-0.278733689	-0.104208879	-0.44140076
8:11:36	-0.278541929	-0.086617744	-0.440564524	8:11:40	-0.278350169	-0.064850247	-0.439728289
8:11:44	-0.278158409	-0.04308275	-0.438892054	8:11:48	-0.277966649	-0.016687806	-0.438055818
8:11:52	-0.277774889	0.009707138	-0.437219583	8:11:56	-0.277583128	0.032637272	-0.436383347
8:12:00	-0.277391368	0.052102597	-0.435547112	8:12:04	-0.276947152	0.071718406	-0.434710877
8:12:08	-0.276502935	0.087663585	-0.433874641	8:12:12	-0.276058719	0.103608763	-0.433038406
8:12:16	-0.275614502	0.114956756	-0.43220217	8:12:20	-0.274997854	0.121810312	-0.431365935
8:12:24	-0.272033575	0.130063272	-0.4305297	8:12:28	-0.269069295	0.142901587	-0.429693464
8:12:32	-0.266105016	0.155739865	-0.428857229	8:12:36	-0.263140736	0.16857818	-0.428020993
8:12:40	-0.260176457	0.181416459	-0.427184758	8:12:44	-0.257212177	0.192742677	-0.426348523
8:12:48	-0.254247898	0.199532643	-0.425512287	8:12:52	-0.251283619	0.206322574	-0.424676052
8:12:56	-0.248319339	0.212399252	-0.423839816	8:13:00	-0.24535506	0.217762677	-0.423003581
8:13:04	-0.242662661	0.222964038	-0.422167346	8:13:08	-0.239970262	0.228165399	-0.42133111
8:13:12	-0.237277863	0.23336676	-0.420494875	8:13:16	-0.234585465	0.244975388	-0.419658639
8:13:20	-0.230576981	0.263775779	-0.416127205	8:13:24	-0.230360824	0.280315659	-0.410843582
8:13:28	-0.230144667	0.295513451	-0.40555996	8:13:32	-0.22992851	0.310711208	-0.400276337
8:13:36	-0.229712354	0.318319741	-0.394992714	8:13:40	-0.225158256	0.320924795	-0.389709092
8:13:44	-0.219709696	0.324063025	-0.384425469	8:13:48	-0.216913491	0.312790097	-0.382735562
8:13:52	-0.215181842	0.300882603	-0.382488039	8:13:56	-0.213450194	0.286020022	-0.382240515
8:14:00	-0.211718545	0.268202318	-0.381992992	8:14:04	-0.210185353	0.250266318	-0.381745469
8:14:08	-0.208652162	0.234009863	-0.381497946	8:14:12	-0.20711897	0.217753373	-0.381250423
8:14:16	-0.205585779	0.210610281	-0.3810029	8:14:20	-0.204052587	0.212580589	-0.380755376
8:14:24	-0.202519395	0.214550861	-0.380507853	8:14:28	-0.200986204	0.204534862	-0.38026033
8:14:32	-0.199453012	0.194518863	-0.380012807	8:14:36	-0.19791982	0.189755638	-0.379765284
8:14:40	-0.196386629	0.190245151	-0.379517761	8:14:44	-0.194853437	0.190734664	-0.379270237
8:14:48	-0.193320246	0.192687526	-0.379022714	8:14:52	-0.191787054	0.194640424	-0.378775191
8:14:56	-0.191067141	0.194531461	-0.378527668	8:15:00	-0.690901954	-0.307485175	-0.878280145
8:15:04	-0.690540569	-0.309384895	-0.878032622	8:15:08	-0.690179183	-0.319704339	-0.877785098
8:15:12	-0.189817798	0.169976236	-0.377537575	8:15:16	-0.189456413	0.159656793	-0.377290052
8:15:20	-0.189095028	0.149337367	-0.377042529	8:15:24	-0.188733643	0.139017924	-0.376795006
8:15:28	-0.188372258	0.12634313	-0.376547483	8:15:32	-0.188010872	0.113668336	-0.376299959
8:15:36	-0.187649487	0.101275663	-0.376052436	8:15:40	-0.187288102	0.089165129	-0.375804913
8:15:44	-0.186926717	0.077054595	-0.37555739	8:15:48	-0.186565332	0.04988892	-0.375309867
8:15:52	-0.186203947	0.022723263	-0.375062344	8:15:56	-0.185842561	-0.003010843	-0.37481482
8:16:00	-0.185481176	-0.028267763	-0.374567297	8:16:04	-0.18524487	-0.053599245	-0.374319774
8:16:08	-0.185008563	-0.076866104	-0.374072251	8:16:12	-0.184772256	-0.100132964	-0.373824728
8:16:16	-0.18453595	-0.119333157	-0.373577205	8:16:20	-0.184299643	-0.134466683	-0.373329681
8:16:24	-0.184063337	-0.149600209	-0.373082158	8:16:28	-0.18382703	-0.150044182	-0.372834635
8:16:32	-0.183590723	-0.15048815	-0.372587112	8:16:36	-0.183354417	-0.155553011	-0.372339589
8:16:40	-0.18311811	-0.165238764	-0.372092066	8:16:44	-0.182881803	-0.174924517	-0.371844542
8:16:48	-0.182645497	-0.190519414	-0.371597019	8:16:52	-0.18240919	-0.206114298	-0.371349496
8:16:56	-0.182172884	-0.219192687	-0.371101973	8:17:00	-0.181936577	-0.229754564	-0.37085445
8:17:04	-0.182197934	-0.240613091	-0.371786093	8:17:08	-0.182786261	-0.260856466	-0.373160753
8:17:12	-0.183374587	-0.281099842	-0.374535413	8:17:16	-0.183962914	-0.293471126	-0.375910073
8:17:20	-0.184551241	-0.297970303	-0.377284733	8:17:24	-0.185139568	-0.30246948	-0.378659393
8:17:28	-0.185727894	-0.315589636	-0.380034053	8:17:32	-0.186316221	-0.328709792	-0.381408713
8:17:36	-0.186904548	-0.346834193	-0.382783373	8:17:40	-0.187492875	-0.369962805	-0.384158033
8:17:44	-0.188081201	-0.393091434	-0.385532693	8:17:48	-0.188669528	-0.413016875	-0.386907352
8:17:52	-0.189257855	-0.432942315	-0.388282012	8:17:56	-0.189846182	-0.451007081	-0.389656672
8:18:00	-0.190434508	-0.467211207	-0.391031332	8:18:04	-0.191971339	-0.483980721	-0.392405992
8:18:08	-0.193508169	-0.494059267	-0.393780652	8:18:12	-0.195045	-0.504137777	-0.395155312
8:18:16	-0.19658183	-0.519404149	-0.396529972	8:18:20	-0.198118661	-0.539858347	-0.397904632

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
8:18:24	-0.199655491	-0.560312545	-0.399279292	8:18:28	-0.201192322	-0.548390608	-0.400653952
8:18:32	-0.202729152	-0.536468672	-0.402028611	8:18:36	-0.204265983	-0.538564364	-0.403403271
8:18:40	-0.205802813	-0.554677686	-0.404777931	8:18:44	-0.207254858	-0.570740504	-0.406037714
8:18:48	-0.208223099	-0.576403123	-0.406641983	8:18:52	-0.209191339	-0.582065742	-0.407246252
8:18:56	-0.21015958	-0.586039578	-0.407850521	8:19:00	-0.211127821	-0.589450485	-0.40845479
8:19:04	-0.211347221	-0.592415056	-0.409059059	8:19:08	-0.211566621	-0.583551213	-0.409663328
8:19:12	-0.211786021	-0.574687334	-0.410267597	8:19:16	-0.212005421	-0.561275869	-0.410871866
8:19:20	-0.212224821	-0.543316747	-0.411476135	8:19:24	-0.212444221	-0.525357625	-0.412080404
8:19:28	-0.212663621	-0.499768741	-0.412684673	8:19:32	-0.212883021	-0.474179893	-0.413288942
8:19:36	-0.213102421	-0.454569186	-0.413893211	8:19:40	-0.213321822	-0.440936657	-0.41449748
8:19:44	-0.213550718	-0.427309789	-0.415101749	8:19:48	-0.213813626	-0.411483442	-0.415706018
8:19:52	-0.214076533	-0.395657094	-0.416310287	8:19:56	-0.214339441	-0.376154377	-0.416914556
8:20:00	-0.214602349	-0.352975291	-0.417518825	8:20:04	-0.215538997	-0.330197828	-0.418123094
8:20:08	-0.216475646	-0.304205044	-0.418727363	8:20:12	-0.217412295	-0.278212277	-0.419331632
8:20:16	-0.218348943	-0.258508383	-0.419935901	8:20:20	-0.219285592	-0.245093372	-0.42054017
8:20:24	-0.220222241	-0.23167837	-0.421144439	8:20:28	-0.22115889	-0.230177079	-0.421748708
8:20:32	-0.222095538	-0.228675787	-0.422352977	8:20:36	-0.223032187	-0.228233788	-0.422957246
8:20:40	-0.223968836	-0.228851097	-0.423561515	8:20:44	-0.224905484	-0.229468407	-0.424165784
8:20:48	-0.225842133	-0.222820219	-0.424770053	8:20:52	-0.226778782	-0.216172041	-0.425374322
8:20:56	-0.227715431	-0.209523858	-0.425978591	8:21:00	-0.228652079	-0.202875675	-0.42658286
8:21:04	-0.228638079	-0.195660825	-0.427187129	8:21:08	-0.228624078	-0.183577926	-0.427791398
8:21:12	-0.228610077	-0.171495026	-0.428395667	8:21:16	-0.228596076	-0.161408332	-0.428999935
8:21:20	-0.228582076	-0.153317842	-0.429604204	8:21:24	-0.228568075	-0.145227352	-0.430208473
8:21:28	-0.228554074	-0.146876546	-0.430812742	8:21:32	-0.228540073	-0.148525738	-0.431417011
8:21:36	-0.228526073	-0.150174931	-0.43202128	8:21:40	-0.228512072	-0.151824123	-0.432625549
8:21:44	-0.228498071	-0.153473316	-0.433229818	8:21:48	-0.228484071	-0.160139156	-0.433834087
8:21:52	-0.227456284	-0.166200696	-0.433064763	8:21:56	-0.22636179	-0.171191807	-0.432205055
8:22:00	-0.225267296	-0.175152254	-0.431345347	8:22:04	-0.224854136	-0.179518834	-0.430485638
8:22:08	-0.224440976	-0.179944661	-0.42962593	8:22:12	-0.224027816	-0.180370488	-0.428766222
8:22:16	-0.223614657	-0.181172106	-0.427906514	8:22:20	-0.223201497	-0.182349504	-0.427046806
8:22:24	-0.222788337	-0.183526903	-0.426187097	8:22:28	-0.222375178	-0.181734949	-0.425327389
8:22:32	-0.221962018	-0.179942995	-0.4244467681	8:22:36	-0.221548858	-0.178151041	-0.423607973
8:22:40	-0.221135698	-0.176359087	-0.422748265	8:22:44	-0.220722539	-0.174567134	-0.421888556
8:22:48	-0.220309379	-0.165603985	-0.421028848	8:22:52	-0.219896219	-0.156640836	-0.42016914
8:22:56	-0.219483059	-0.155379662	-0.419309432	8:23:00	-0.2190699	-0.161820465	-0.418449723
8:23:04	-0.218686874	-0.168279232	-0.417590015	8:23:08	-0.218303849	-0.165664728	-0.416730307
8:23:12	-0.217920824	-0.163050225	-0.415870599	8:23:16	-0.217537799	-0.161779283	-0.415010891
8:23:20	-0.217154774	-0.161701902	-0.414151182	8:23:24	-0.216771749	-0.161674521	-0.413291474
8:23:28	-0.216388724	-0.160416261	-0.412431766	8:23:32	-0.216005699	-0.159158004	-0.411572058
8:23:36	-0.215622674	-0.160260316	-0.41071235	8:23:40	-0.215239649	-0.163723197	-0.409852641
8:23:44	-0.214856624	-0.167186079	-0.408992933	8:23:48	-0.214473599	-0.181476171	-0.408133225
8:23:52	-0.214090574	-0.195766263	-0.407273517	8:23:56	-0.213707549	-0.205495938	-0.406413809
8:24:00	-0.213324524	-0.210665188	-0.4055541	8:24:04	-0.212993443	-0.215865409	-0.404694392
8:24:08	-0.212662361	-0.211970014	-0.403834684	8:24:12	-0.21233128	-0.208074619	-0.402974976
8:24:16	-0.212000199	-0.20924133	-0.402115267	8:24:20	-0.211669118	-0.215470137	-0.401255559
8:24:24	-0.211338037	-0.221698952	-0.400395851	8:24:28	-0.211006956	-0.230715032	-0.399536143
8:24:32	-0.210675875	-0.239731112	-0.398676435	8:24:36	-0.210344794	-0.248259408	-0.397816726
8:24:40	-0.210013713	-0.256299913	-0.396957018	8:24:44	-0.209682632	-0.264340426	-0.39609731
8:24:48	-0.209351551	-0.259796735	-0.395237602	8:24:52	-0.20902047	-0.255253044	-0.394377894
8:24:56	-0.208689389	-0.249752466	-0.393518185	8:25:00	-0.208358308	-0.243294984	-0.392658477
8:25:04	-0.208471185	-0.237102138	-0.392659186	8:25:08	-0.208622437	-0.225507208	-0.39271189
8:25:12	-0.208773689	-0.213912288	-0.392764594	8:25:16	-0.208924941	-0.199616565	-0.392817297
8:25:20	-0.209076194	-0.182620042	-0.392870001	8:25:24	-0.209227446	-0.16562352	-0.392922705
8:25:28	-0.209378698	-0.168684932	-0.392975409	8:25:32	-0.20952995	-0.17174634	-0.393028113
8:25:36	-0.209701681	-0.168509719	-0.393080816	8:25:40	-0.209931006	-0.158997191	-0.39313352
8:25:44	-0.210160331	-0.149484662	-0.393186224	8:25:48	-0.210389656	-0.134131913	-0.393238928
8:25:52	-0.210618981	-0.118779164	-0.393291632	8:25:56	-0.210848307	-0.104491554	-0.393344335

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
8:26:00	-0.211077632	-0.091269079	-0.393397039	8:26:04	-0.211972025	-0.078443044	-0.393449743
8:26:08	-0.212866418	-0.087817008	-0.393502447	8:26:12	-0.213760811	-0.097190973	-0.393555151
8:26:16	-0.214655204	-0.10897537	-0.393607855	8:26:20	-0.215549597	-0.123170197	-0.393660558
8:26:24	-0.21644399	-0.137365025	-0.393713262	8:26:28	-0.217338383	-0.131236132	-0.393765966
8:26:32	-0.218232776	-0.12510724	-0.39381867	8:26:36	-0.219127169	-0.116951193	-0.393871374
8:26:40	-0.220021562	-0.106767992	-0.393924077	8:26:44	-0.220915955	-0.096584791	-0.393976781
8:26:48	-0.221810349	-0.091239139	-0.394029485	8:26:52	-0.222704742	-0.085893484	-0.394082189
8:26:56	-0.223599135	-0.086002414	-0.394134893	8:27:00	-0.224493528	-0.087929535	-0.394187597
8:27:04	-0.224675422	-0.089431951	-0.3942403	8:27:08	-0.224857315	-0.089056434	-0.394293004
8:27:12	-0.225039209	-0.088680916	-0.394345708	8:27:16	-0.225221103	-0.090162792	-0.394398412
8:27:20	-0.225402997	-0.092263803	-0.394451116	8:27:24	-0.225584891	-0.094364813	-0.394503819
8:27:28	-0.225766785	-0.082239544	-0.394556523	8:27:32	-0.225948679	-0.070114275	-0.394609227
8:27:36	-0.226130572	-0.067780483	-0.394661931	8:27:40	-0.226312466	-0.07523816	-0.394714635
8:27:44	-0.22649436	-0.082695837	-0.394767338	8:27:48	-0.226676254	-0.094203285	-0.394820042
8:27:52	-0.226858148	-0.105710728	-0.394872746	8:27:56	-0.227040042	-0.125948559	-0.39492545
8:28:00	-0.227221936	-0.154916774	-0.394978154	8:28:04	-0.227376441	-0.18102477	-0.395030858
8:28:08	-0.227530947	-0.19860108	-0.395083561	8:28:12	-0.228802808	-0.216843423	-0.395136265
8:28:16	-0.230396358	-0.226725228	-0.395188969	8:28:20	-0.231989908	-0.228054742	-0.395241673
8:28:24	-0.233583458	-0.229384246	-0.395294377	8:28:28	-0.235177009	-0.23524017	-0.39534708
8:28:32	-0.236770559	-0.241096094	-0.395399784	8:28:36	-0.250546225	-0.246869394	-0.395452488
8:28:40	-0.257120034	-0.241005576	-0.395505192	8:28:44	-0.263918905	-0.235275913	-0.395557896
8:28:48	-0.271473388	-0.229996663	-0.395610599	8:28:52	-0.278678045	-0.224508884	-0.395663303
8:28:56	-0.28367009	-0.2153224	-0.397493584	8:29:00	-0.288938532	-0.205507408	-0.399698359
8:29:04	-0.293937126	-0.195531564	-0.401903135	8:29:08	-0.29893572	-0.189256898	-0.40410791
8:29:12	-0.305321595	-0.18380917	-0.406312686	8:29:16	-0.313882389	-0.17754691	-0.408517461
8:29:20	-0.322443182	-0.169173682	-0.410722237	8:29:24	-0.331003976	-0.168000455	-0.412927012
8:29:28	-0.326770981	-0.154044346	-0.415131787	8:29:32	-0.331767187	-0.152789613	-0.417336563
8:29:36	-0.336763392	-0.15259741	-0.419541338	8:29:40	-0.341759598	-0.153467722	-0.421746114
8:29:44	-0.346755803	-0.154338034	-0.423950889	8:29:48	-0.351082359	-0.158512417	-0.425248345
8:29:52	-0.353260616	-0.161406232	-0.424193038	8:29:56	-0.35268785	-0.162660206	-0.42313773
8:30:00	0.147884916	0.336085821	0.077917577	8:30:04	0.147334206	0.334162161	0.078972885
8:30:08	0.146783496	0.334770682	0.080028192	8:30:12	-0.353767214	-0.164620797	-0.4189165
8:30:16	-0.354317923	-0.160274849	-0.417861193	8:30:20	-0.354868633	-0.152191465	-0.416805885
8:30:24	-0.355419343	-0.144108086	-0.415750577	8:30:28	-0.355970053	-0.143990812	-0.41469527
8:30:32	-0.356520762	-0.143873539	-0.413639962	8:30:36	-0.357071472	-0.147450271	-0.412584655
8:30:40	-0.357622182	-0.154720999	-0.411529347	8:30:44	-0.358172892	-0.163127003	-0.41047404
8:30:48	-0.358723601	-0.174938825	-0.409418732	8:30:52	-0.359274311	-0.186750642	-0.408363425
8:30:56	-0.359825021	-0.19686653	-0.407308117	8:31:00	-0.360375731	-0.205286484	-0.40625281
8:31:04	-0.359910476	-0.213100837	-0.405197502	8:31:08	-0.359445221	-0.227515258	-0.404142195
8:31:12	-0.358979966	-0.241929681	-0.403086887	8:31:16	-0.358514711	-0.258002506	-0.40203158
8:31:20	-0.358049457	-0.275733743	-0.400976272	8:31:24	-0.357584202	-0.293464974	-0.399920965
8:31:28	-0.357118947	-0.307308885	-0.398865657	8:31:32	-0.356653692	-0.321152796	-0.39781035
8:31:36	-0.356188437	-0.333713731	-0.396755042	8:31:40	-0.355723182	-0.34499169	-0.395699735
8:31:44	-0.355257928	-0.35626964	-0.394644427	8:31:48	-0.354792673	-0.358539368	-0.393589119
8:31:52	-0.354327418	-0.360809086	-0.392533812	8:31:56	-0.353862163	-0.363078805	-0.391478504
8:32:00	-0.353333252	-0.365310596	-0.390423197	8:32:04	-0.352826455	-0.367555553	-0.389367889
8:32:08	-0.352319659	-0.369800509	-0.388312582	8:32:12	-0.351812863	-0.372045465	-0.387257274
8:32:16	-0.351306066	-0.370681345	-0.386201967	8:32:20	-0.35079927	-0.365708129	-0.385146659
8:32:24	-0.350292474	-0.360734914	-0.384091352	8:32:28	-0.349785677	-0.348567989	-0.383036044
8:32:32	-0.349278881	-0.336401073	-0.381980737	8:32:36	-0.348772084	-0.328473943	-0.380925429
8:32:40	-0.348265288	-0.324786616	-0.379870122	8:32:44	-0.347758492	-0.321099281	-0.378814814
8:32:48	-0.347251695	-0.310555206	-0.377759507	8:32:52	-0.346744899	-0.300011131	-0.376704199
8:32:56	-0.346574319	-0.294431527	-0.376104436	8:33:00	-0.346473988	-0.293657874	-0.375599855
8:33:04	-0.346605994	-0.290629096	-0.375095274	8:33:08	-0.346737999	-0.280419471	-0.374590693
8:33:12	-0.346870005	-0.270209841	-0.374086112	8:33:16	-0.347002011	-0.261570585	-0.37358153
8:33:20	-0.347134017	-0.254501696	-0.373076949	8:33:24	-0.347266022	-0.247432808	-0.372572368
8:33:28	-0.347398028	-0.252319019	-0.372067787	8:33:32	-0.347530034	-0.257205229	-0.371563206

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
8:33:36	-0.34766204	-0.258775427	-0.371058625	8:33:40	-0.347794045	-0.257029621	-0.370554044
8:33:44	-0.347926051	-0.255283814	-0.370049463	8:33:48	-0.348058057	-0.258817962	-0.369544882
8:33:52	-0.348190063	-0.26235211	-0.369040301	8:33:56	-0.348322068	-0.259448387	-0.36853572
8:34:00	-0.348454074	-0.250106794	-0.368031139	8:34:04	-0.348526	-0.240729388	-0.367526558
8:34:08	-0.348597926	-0.242390167	-0.367021977	8:34:12	-0.348669853	-0.244050946	-0.366517396
8:34:16	-0.348741779	-0.239644064	-0.366012814	8:34:20	-0.348813705	-0.229169521	-0.365508233
8:34:24	-0.348885631	-0.218694978	-0.365003652	8:34:28	-0.348957557	-0.200220393	-0.364499071
8:34:32	-0.349029483	-0.181745808	-0.36399449	8:34:36	-0.349101409	-0.166204211	-0.363489909
8:34:40	-0.349173336	-0.153595605	-0.362985328	8:34:44	-0.349245262	-0.140987	-0.362480747
8:34:48	-0.349298066	-0.139480564	-0.361976166	8:34:52	-0.348058702	-0.137203885	-0.361471585
8:34:56	-0.346819337	-0.136496896	-0.360967004	8:35:00	-0.345579973	-0.1373596	-0.360462423
8:35:04	-0.344023496	-0.137877327	-0.359957842	8:35:08	-0.34246702	-0.137927198	-0.359453261
8:35:12	-0.340910543	-0.137977074	-0.35894868	8:35:16	-0.339354067	-0.138026945	-0.358444099
8:35:20	-0.337797591	-0.129639164	-0.357939517	8:35:24	-0.336241114	-0.121251388	-0.357434936
8:35:28	-0.334684638	-0.118692975	-0.356930355	8:35:32	-0.333128161	-0.116134552	-0.356425774
8:35:36	-0.331571685	-0.116790377	-0.355921193	8:35:40	-0.330015209	-0.118517627	-0.355416612
8:35:44	-0.328458732	-0.121219076	-0.354912031	8:35:48	-0.326902256	-0.126843173	-0.35440745
8:35:52	-0.325345779	-0.132467261	-0.353902869	8:35:56	-0.323789303	-0.141070992	-0.353398288
8:36:00	-0.322232826	-0.150667938	-0.352893707	8:36:04	-0.320365576	-0.15697077	-0.352389126
8:36:08	-0.319801273	-0.154723675	-0.353649929	8:36:12	-0.318749371	-0.15218593	-0.355722686
8:36:16	-0.313543009	-0.151413576	-0.357795444	8:36:20	-0.308336647	-0.152055155	-0.359868201
8:36:24	-0.303130285	-0.151833411	-0.361940959	8:36:28	-0.297923924	-0.149021703	-0.364013716
8:36:32	-0.292717562	-0.146209992	-0.366086473	8:36:36	-0.2875112	-0.1403109	-0.368159231
8:36:40	-0.282304838	-0.133382679	-0.370231988	8:36:44	-0.276952087	-0.124184773	-0.372304746
8:36:48	-0.326269635	-0.141027697	-0.374377503	8:36:52	-0.341443984	-0.13751839	-0.376450261
8:36:56	-0.299924989	-0.102465767	-0.378523018	8:37:00	-0.270121112	-0.075146583	-0.380595775
8:37:04	-0.277867978	-0.072718622	-0.382668533	8:37:08	-0.285614844	-0.077814093	-0.38474129
8:37:12	-0.29336171	-0.082909564	-0.386814048	8:37:16	-0.301108576	-0.078808434	-0.388868605
8:37:20	-0.308855442	-0.071641775	-0.390959563	8:37:24	-0.315540841	-0.069595286	-0.39303232
8:37:28	-0.31904746	-0.082912632	-0.395105077	8:37:32	-0.322554078	-0.096229978	-0.397177835
8:37:36	-0.326060697	-0.110657539	-0.399250592	8:37:40	-0.351758839	-0.138683197	-0.431390982
8:37:44	-0.330166993	-0.144801416	-0.399457449	8:37:48	-0.308575147	-0.169763798	-0.367523916
8:37:52	-0.286983301	-0.194726183	-0.335590384	8:37:56	-0.26768002	-0.210005057	-0.306757662
8:38:00	-0.270607243	-0.238535183	-0.308047871	8:38:04	-0.272767004	-0.266146612	-0.30933808
8:38:08	-0.274926765	-0.29237434	-0.310628289	8:38:12	-0.277086526	-0.318602067	-0.311918498
8:38:16	-0.279246287	-0.323649811	-0.313208707	8:38:20	-0.281406048	-0.321637577	-0.314498916
8:38:24	-0.283565809	-0.319625344	-0.315789126	8:38:28	-0.28572557	-0.317613101	-0.317079335
8:38:32	-0.287885331	-0.315600868	-0.318369544	8:38:36	-0.290045092	-0.318360064	-0.319659753
8:38:40	-0.292204853	-0.322709744	-0.320949962	8:38:44	-0.294364614	-0.32838062	-0.322240171
8:38:48	-0.296524375	-0.338015049	-0.32353038	8:38:52	-0.298684136	-0.347649479	-0.324820589
8:38:56	-0.300843897	-0.350064742	-0.326110798	8:39:00	-0.303003658	-0.350073581	-0.327401007
8:39:04	-0.305562397	-0.3528415	-0.328691216	8:39:08	-0.308121136	-0.36317315	-0.329981425
8:39:12	-0.310679876	-0.3735048	-0.331271635	8:39:16	-0.313238615	-0.379185046	-0.332561844
8:39:20	-0.315797355	-0.383314808	-0.333852053	8:39:24	-0.318356094	-0.382894407	-0.335142262
8:39:28	-0.320914833	-0.377923879	-0.336432471	8:39:32	-0.323473573	-0.372953334	-0.33772268
8:39:36	-0.326032312	-0.364665888	-0.339012889	8:39:40	-0.328591052	-0.355272803	-0.340303098
8:39:44	-0.331149791	-0.346393321	-0.341593307	8:39:48	-0.33370853	-0.338027418	-0.342883516
8:39:52	-0.333523467	-0.328025975	-0.340456105	8:39:56	-0.331831116	-0.309475738	-0.335986447
8:40:00	-0.330138765	-0.288375386	-0.33151679	8:40:04	-0.328746347	-0.278812251	-0.327047132
8:40:08	-0.341390756	-0.288974664	-0.322577475	8:40:12	-0.339169299	-0.290275773	-0.318107817
8:40:16	-0.336947843	-0.296824443	-0.31363816	8:40:20	-0.334726386	-0.305122314	-0.309168502
8:40:24	-0.33250493	-0.304539725	-0.304698845	8:40:28	-0.330283473	-0.295076687	-0.300229187
8:40:32	-0.328062016	-0.285613648	-0.29575953	8:40:36	-0.32584056	-0.26758264	-0.291289872
8:40:40	-0.323619103	-0.246695645	-0.286820215	8:40:44	-0.321397647	-0.225310995	-0.282350557
8:40:48	-0.31917619	-0.202433385	-0.2778809	8:40:52	-0.316954733	-0.179555776	-0.273411242
8:40:56	-0.314733277	-0.162433736	-0.268941585	8:41:00	-0.308425459	-0.144794402	-0.264471927
8:41:04	-0.295099061	-0.123687489	-0.26000227	8:41:08	-0.281772663	-0.104728839	-0.255532612

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
8:41:12	-0.268446265	-0.085770189	-0.251062955	8:41:16	-0.255119867	-0.069090254	-0.246593297
8:41:20	-0.269291068	-0.069560771	-0.279380554	8:41:24	-0.274879181	-0.066366002	-0.300538454
8:41:28	-0.271236419	-0.062021683	-0.309189302	8:41:32	-0.267593657	-0.057677364	-0.31784015
8:41:36	-0.263950895	-0.04101993	-0.326490998	8:41:40	-0.260308133	-0.020258121	-0.335141845
8:41:44	-0.256665371	-0.005268775	-0.343792693	8:41:48	-0.253022609	-0.007596825	-0.352443541
8:41:52	-0.257668554	-0.014865644	-0.361094388	8:41:56	-0.268727515	-0.028501637	-0.369745236
8:42:00	-0.279786475	-0.042985797	-0.378396084	8:42:04	-0.290434745	-0.058857512	-0.387046932
8:42:08	-0.301083014	-0.079626326	-0.395697779	8:42:12	-0.311731283	-0.100395148	-0.404348627
8:42:16	-0.322379552	-0.116710244	-0.412999475	8:42:20	-0.333027821	-0.131540753	-0.421650322
8:42:24	-0.34367609	-0.145823478	-0.43030117	8:42:28	-0.354324359	-0.158462844	-0.438952018
8:42:32	-0.364972628	-0.17110221	-0.447602865	8:42:36	-0.37443523	-0.185015768	-0.454647234
8:42:40	-0.375595431	-0.194640715	-0.450442554	8:42:44	-0.346599764	-0.187334515	-0.446237874
8:42:48	-0.352652898	-0.204053262	-0.442033194	8:42:52	-0.358706033	-0.220772009	-0.437828514
8:42:56	-0.364759168	-0.232810597	-0.433623833	8:43:00	-0.370812302	-0.243289132	-0.429419153
8:43:04	-0.377117121	-0.254087562	-0.425214473	8:43:08	-0.369708228	-0.257221061	-0.421009793
8:43:12	-0.324101045	-0.237585156	-0.416805113	8:43:16	-0.317790753	-0.242127341	-0.412600433
8:43:20	-0.31148046	-0.246920804	-0.408395752	8:43:24	-0.305170168	-0.251273422	-0.404191072
8:43:28	-0.298859875	-0.254303497	-0.399986392	8:43:32	-0.292549583	-0.257333582	-0.395781712
8:43:36	-0.314439628	-0.278829939	-0.421038932	8:43:40	-0.306304664	-0.282981006	-0.40476674
8:43:44	-0.2981697	-0.286374951	-0.388494549	8:43:48	-0.290034736	-0.28749751	-0.372222357
8:43:52	-0.281899772	-0.288620059	-0.355950165	8:43:56	-0.284463247	-0.281049	-0.354173451
8:44:00	-0.287367313	-0.273680953	-0.352858208	8:44:04	-0.290357063	-0.264639489	-0.351542966
8:44:08	-0.293346813	-0.2504245	-0.350227723	8:44:12	-0.296336562	-0.236209516	-0.348912481
8:44:16	-0.299326312	-0.226261871	-0.347597238	8:44:20	-0.302316061	-0.217736676	-0.346281996
8:44:24	-0.304605042	-0.210820994	-0.344966753	8:44:28	-0.299328738	-0.205477453	-0.343651511
8:44:32	-0.294052434	-0.200133913	-0.342336268	8:44:36	-0.28877613	-0.191327774	-0.341021025
8:44:40	-0.283499826	-0.181367435	-0.339705783	8:44:44	-0.278223522	-0.17193542	-0.33839054
8:44:48	-0.272947218	-0.164088378	-0.337075298	8:44:52	-0.267670914	-0.156241337	-0.335760055
8:44:56	-0.26239461	-0.142356246	-0.334444813	8:45:00	-0.757118306	-0.626458473	-0.83312957
8:45:04	-0.752150675	-0.612609088	-0.831814328	8:45:08	-0.747183045	-0.604352881	-0.830499085
8:45:12	-0.242215415	-0.096096673	-0.329183843	8:45:16	-0.237247785	-0.086879701	-0.3278686
8:45:20	-0.232280155	-0.077342481	-0.326553358	8:45:24	-0.227312524	-0.068831181	-0.325238115
8:45:28	-0.222344894	-0.063397633	-0.323922873	8:45:32	-0.217377264	-0.057964085	-0.32260763
8:45:36	-0.215376924	-0.053227096	-0.325312814	8:45:40	-0.214233938	-0.047928973	-0.32917964
8:45:44	-0.217418599	-0.045210494	-0.333046466	8:45:48	-0.221397444	-0.048507284	-0.336913291
8:45:52	-0.22537629	-0.051804064	-0.340780117	8:45:56	-0.229355135	-0.05090078	-0.344646943
8:46:00	-0.23333398	-0.045797423	-0.348513768	8:46:04	-0.237003781	-0.04050985	-0.352380594
8:46:08	-0.240673582	-0.033753687	-0.356247419	8:46:12	-0.244343383	-0.026997523	-0.360114245
8:46:16	-0.248013184	-0.025407779	-0.363981071	8:46:20	-0.251682984	-0.028984446	-0.367847896
8:46:24	-0.255352785	-0.032561113	-0.371714722	8:46:28	-0.259022586	-0.051378624	-0.375581547
8:46:32	-0.262692387	-0.070196135	-0.379448373	8:46:36	-0.266362188	-0.089925797	-0.383315199
8:46:40	-0.270031989	-0.110567606	-0.387182024	8:46:44	-0.27370179	-0.131209416	-0.39104885
8:46:48	-0.277371591	-0.154470538	-0.394915676	8:46:52	-0.281041392	-0.17773166	-0.398782501
8:46:56	-0.284711193	-0.194826395	-0.402649327	8:47:00	-0.288380994	-0.205754744	-0.406516152
8:47:04	-0.291302799	-0.216237224	-0.410382978	8:47:08	-0.289604783	-0.214105802	-0.407990338
8:47:12	-0.286660197	-0.211231319	-0.403908701	8:47:16	-0.28371561	-0.210073027	-0.399827064
8:47:20	-0.280771024	-0.210630933	-0.395745427	8:47:24	-0.277826437	-0.211188835	-0.391663789
8:47:28	-0.274881851	-0.215503274	-0.387582152	8:47:32	-0.271937264	-0.219817713	-0.383500515
8:47:36	-0.268992678	-0.218420627	-0.379418878	8:47:40	-0.266048091	-0.211312016	-0.375337241
8:47:44	-0.263103505	-0.204203405	-0.371255603	8:47:48	-0.260158918	-0.197094794	-0.367173966
8:47:52	-0.257936717	-0.190416783	-0.3640711	8:47:56	-0.257488232	-0.180165985	-0.363371468
8:48:00	-0.257039747	-0.165285109	-0.362671836	8:48:04	-0.257599411	-0.151005177	-0.361972204
8:48:08	-0.258159075	-0.149611516	-0.361272572	8:48:12	-0.258718739	-0.148217854	-0.36057294
8:48:16	-0.269486994	-0.151227729	-0.359873307	8:48:20	-0.268370034	-0.145471366	-0.359173675
8:48:24	-0.267253073	-0.139715002	-0.358474043	8:48:28	-0.266136113	-0.13395864	-0.357774411
8:48:32	-0.265019153	-0.128202277	-0.357074779	8:48:36	-0.263902193	-0.120510777	-0.356375147
8:48:40	-0.262785233	-0.110884136	-0.355675515	8:48:44	-0.261668272	-0.101257498	-0.354975883

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
8:48:48	-0.260551312	-0.106462023	-0.354276251	8:48:52	-0.259434352	-0.111666553	-0.353576619
8:48:56	-0.258317392	-0.112257404	-0.352876987	8:49:00	-0.257200432	-0.108234578	-0.352177355
8:49:04	-0.255618749	-0.103934739	-0.351477723	8:49:08	-0.254037066	-0.089444179	-0.350778091
8:49:12	-0.252455383	-0.074953623	-0.350078459	8:49:16	-0.2508737	-0.069522421	-0.349378826
8:49:20	-0.249292017	-0.067111014	-0.348679194	8:49:24	-0.247710334	-0.064699607	-0.347979562
8:49:28	-0.246128652	-0.063460733	-0.34727993	8:49:32	-0.244546969	-0.062221858	-0.346580298
8:49:36	-0.242965286	-0.061570649	-0.345880666	8:49:40	-0.241383603	-0.061507123	-0.345181034
8:49:44	-0.23980192	-0.061443588	-0.344481402	8:49:48	-0.238220237	-0.0586299	-0.34378177
8:49:52	-0.236638554	-0.055816202	-0.343082138	8:49:56	-0.234213591	-0.045530471	-0.342382506
8:50:00	-0.231773656	-0.028266428	-0.341682874	8:50:04	-0.229649215	-0.011190456	-0.340983242
8:50:08	-0.227524774	0.001567148	-0.34028361	8:50:12	-0.225400333	0.014324751	-0.339583978
8:50:16	-0.223275893	0.028008598	-0.338884345	8:50:20	-0.221151452	0.042618687	-0.338184713
8:50:24	-0.219027011	0.057228776	-0.337485081	8:50:28	-0.216902571	0.06261529	-0.336785449
8:50:32	-0.21477813	0.068001803	-0.336085817	8:50:36	-0.212653689	0.076618615	-0.335386185
8:50:40	-0.210529249	0.088465742	-0.334686553	8:50:44	-0.208404808	0.10031287	-0.333986921
8:50:48	-0.206280367	0.119513678	-0.333287289	8:50:52	-0.204155927	0.138714503	-0.332587657
8:50:56	-0.202031486	0.160481831	-0.331888025	8:51:00	-0.207867995	0.180070298	-0.341974805
8:51:04	-0.21706915	0.197653134	-0.3523296	8:51:08	-0.227918808	0.203644881	-0.362684394
8:51:12	-0.238768466	0.209636629	-0.373039189	8:51:16	-0.249618124	0.209444733	-0.383393984
8:51:20	-0.260467783	0.203069192	-0.393748779	8:51:24	-0.271317441	0.196693652	-0.404103574
8:51:28	-0.282167099	0.193776295	-0.414458369	8:51:32	-0.293016757	0.190858902	-0.424813164
8:51:36	-0.303866415	0.185434342	-0.435167959	8:51:40	-0.314716073	0.177502613	-0.445522754
8:51:44	-0.298906408	0.185462094	-0.419756428	8:51:48	-0.276701874	0.19385493	-0.385325597
8:51:52	-0.266996211	0.194797348	-0.367829675	8:51:56	-0.272036234	0.179625562	-0.370312908
8:52:00	-0.277076258	0.157129211	-0.37279614	8:52:04	-0.28286448	0.13418687	-0.375279373
8:52:08	-0.288652703	0.09586465	-0.377762606	8:52:12	-0.294440925	0.057542429	-0.380245839
8:52:16	-0.300229148	0.02663182	-0.382729072	8:52:20	-0.30601737	-0.001808234	-0.385212304
8:52:24	-0.311805593	-0.030248306	-0.387695537	8:52:28	-0.317593816	-0.061920142	-0.39017877
8:52:32	-0.328793596	-0.096817723	-0.392662003	8:52:36	-0.340319702	-0.124543741	-0.395145235
8:52:40	-0.351845808	-0.144903679	-0.397628468	8:52:44	-0.363371914	-0.165263617	-0.400111701
8:52:48	-0.373295236	-0.187162178	-0.400423296	8:52:52	-0.380625346	-0.207514965	-0.39722131
8:52:56	-0.387955456	-0.226150236	-0.394019324	8:53:00	-0.395285566	-0.244213	-0.390817337
8:53:04	-0.401897742	-0.261847815	-0.387615351	8:53:08	-0.40355476	-0.280044625	-0.384413365
8:53:12	-0.39010393	-0.289235883	-0.381211378	8:53:16	-0.303511645	-0.245723448	-0.378009392
8:53:20	-0.313604124	-0.250738098	-0.374807406	8:53:24	-0.332550612	-0.261030485	-0.371605419
8:53:28	-0.282882291	-0.228758388	-0.368403433	8:53:32	-0.290794972	-0.22581666	-0.365201447
8:53:36	-0.304678054	-0.229555458	-0.36199946	8:53:40	-0.287251758	-0.217752879	-0.358797474
8:53:44	-0.269825461	-0.2059503	-0.355595488	8:53:48	-0.252399165	-0.186736882	-0.352393501
8:53:52	-0.269189464	-0.187919446	-0.349191515	8:53:56	-0.286715865	-0.190273217	-0.345989529
8:54:00	-0.304242266	-0.193359415	-0.342787542	8:54:04	-0.322587692	-0.196933822	-0.339585556
8:54:08	-0.324691307	-0.198871387	-0.33638357	8:54:12	-0.32018229	-0.196867267	-0.333181583
8:54:16	-0.315673274	-0.198863936	-0.329979597	8:54:20	-0.311164258	-0.204861397	-0.326777611
8:54:24	-0.306655242	-0.210858856	-0.323575624	8:54:28	-0.302146226	-0.225472365	-0.320373638
8:54:32	-0.29763721	-0.240085876	-0.317171652	8:54:36	-0.293128194	-0.257388688	-0.313969665
8:54:40	-0.299400719	-0.282014652	-0.310767679	8:54:44	-0.293650431	-0.299473994	-0.307565693
8:54:48	-0.287900143	-0.310700697	-0.304363706	8:54:52	-0.282149854	-0.321927408	-0.30116172
8:54:56	-0.285477041	-0.334779369	-0.310258943	8:55:00	-0.293902165	-0.346884437	-0.326263437
8:55:04	-0.301688954	-0.358609003	-0.342267932	8:55:08	-0.234973903	-0.329610229	-0.257328753
8:55:12	-0.23569817	-0.340810987	-0.26376413	8:55:16	-0.236422438	-0.357811814	-0.270199507
8:55:20	-0.237146705	-0.380612692	-0.276634883	8:55:24	-0.237870972	-0.403413588	-0.28307026
8:55:28	-0.238595239	-0.427372031	-0.289505636	8:55:32	-0.239319507	-0.451330457	-0.295941013
8:55:36	-0.240043774	-0.468578391	-0.30237639	8:55:40	-0.240768041	-0.483589536	-0.308811766
8:55:44	-0.241492308	-0.495893198	-0.315247143	8:55:48	-0.242216576	-0.500074589	-0.32168252
8:55:52	-0.242940843	-0.504256016	-0.328117896	8:55:56	-0.24366511	-0.511693357	-0.33453273
8:56:00	-0.244389377	-0.52021598	-0.34098865	8:56:04	-0.243851923	-0.526300746	-0.347424026
8:56:08	-0.243314468	-0.527328079	-0.353859403	8:56:12	-0.242777013	-0.528355412	-0.360294779
8:56:16	-0.242239559	-0.531647176	-0.366730156	8:56:20	-0.240737595	-0.535118833	-0.371858705

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
8:56:24	-0.241024274	-0.54221614	-0.370979582	8:56:28	-0.247261741	-0.560539128	-0.37010046
8:56:32	-0.253499207	-0.578862115	-0.369221337	8:56:36	-0.259736674	-0.586572896	-0.368342215
8:56:40	-0.265974141	-0.590746262	-0.367463092	8:56:44	-0.272211608	-0.593371506	-0.36658397
8:56:48	-0.278449074	-0.591352204	-0.365704847	8:56:52	-0.284686541	-0.589332938	-0.364825725
8:56:56	-0.290924008	-0.58108629	-0.363946602	8:57:00	-0.292129177	-0.567764163	-0.363067479
8:57:04	-0.295598434	-0.551987703	-0.362188357	8:57:08	-0.299067691	-0.524799553	-0.361309234
8:57:12	-0.302536948	-0.497611404	-0.360430112	8:57:16	-0.239291308	-0.429464983	-0.359550989
8:57:20	-0.248001584	-0.403813488	-0.358671867	8:57:24	-0.25671186	-0.384917429	-0.357792744
8:57:28	-0.265422136	-0.372776789	-0.356913622	8:57:32	-0.274132413	-0.360636149	-0.356034499
8:57:36	-0.287588674	-0.339583062	-0.355153377	8:57:40	-0.322696863	-0.32752255	-0.354276254
8:57:44	-0.317364744	-0.294434633	-0.353397132	8:57:48	-0.312032625	-0.270582043	-0.352518009
8:57:52	-0.306700506	-0.246729457	-0.351638887	8:57:56	-0.301368387	-0.228460979	-0.350759764
8:58:00	-0.296036268	-0.210192499	-0.349880642	8:58:04	-0.288966863	-0.190216124	-0.349001519
8:58:08	-0.281897458	-0.168222763	-0.348122397	8:58:12	-0.274828053	-0.146229402	-0.347243274
8:58:16	-0.267758648	-0.124617728	-0.346364151	8:58:20	-0.260689243	-0.103133281	-0.345485029
8:58:24	-0.253619838	-0.083783828	-0.344605906	8:58:28	-0.246550433	-0.070839349	-0.343726784
8:58:32	-0.244403636	-0.06082916	-0.342847661	8:58:36	-0.248416493	-0.048985986	-0.341968539
8:58:40	-0.252429349	-0.035307922	-0.341089416	8:58:44	-0.256442205	-0.018293212	-0.340210294
8:58:48	-0.260455062	0.008731464	-0.339331171	8:58:52	-0.264467918	0.03575614	-0.338452049
8:58:56	-0.268480775	0.051269199	-0.337572926	8:59:00	-0.272493631	0.062945084	-0.336693804
8:59:04	-0.276479067	0.071977741	-0.335142293	8:59:08	-0.278760653	0.074047412	-0.33128221
8:59:12	-0.281042238	0.076117084	-0.327422127	8:59:16	-0.283323823	0.076228552	-0.323562043
8:59:20	-0.285605409	0.075687256	-0.31970196	8:59:24	-0.287886994	0.078213	-0.315841877
8:59:28	-0.29016858	0.089939812	-0.311981793	8:59:32	-0.292450165	0.101666625	-0.30812171
8:59:36	-0.294731751	0.110077104	-0.304261626	8:59:40	-0.292776808	0.119907451	-0.300401543
8:59:44	-0.287039739	0.131731461	-0.29654146	8:59:48	-0.27745739	0.145065118	-0.287471349
8:59:52	-0.267634627	0.158542083	-0.278075495	8:59:56	-0.257811863	0.187088775	-0.268679642
9:00:00	0.252010901	0.720658684	0.240716211	9:00:04	0.247221277	0.740864734	0.230985655
9:00:08	0.242347725	0.747059689	0.221141383	9:00:12	-0.262525828	0.253254644	-0.28870289
9:00:16	-0.267399381	0.257043264	-0.298547163	9:00:20	-0.272272934	0.260029772	-0.308391435
9:00:24	-0.277146487	0.260161563	-0.318235708	9:00:28	-0.282020039	0.251729133	-0.328079981
9:00:32	-0.286893592	0.243296703	-0.337924254	9:00:36	-0.291767145	0.226690449	-0.347768526
9:00:40	-0.296640698	0.207359552	-0.357612799	9:00:44	-0.301514251	0.188867682	-0.367457072
9:00:48	-0.294215631	0.1801485	-0.360809084	9:00:52	-0.285579913	0.172226342	-0.35234944
9:00:56	-0.276944195	0.164703073	-0.343889797	9:01:00	-0.268308476	0.157312826	-0.335430153
9:01:04	-0.259694816	0.153351981	-0.32697051	9:01:08	-0.251081156	0.159718859	-0.318510866
9:01:12	-0.242467495	0.166085772	-0.310051223	9:01:16	-0.233853835	0.17296573	-0.301591579
9:01:20	-0.224314052	0.180568738	-0.293131936	9:01:24	-0.213377232	0.187429658	-0.284672292
9:01:28	-0.202440412	0.189565984	-0.276212649	9:01:32	-0.206477128	0.182776817	-0.267753005
9:01:36	-0.223276825	0.160746929	-0.259293362	9:01:40	-0.240076523	0.136172726	-0.250833718
9:01:44	-0.256876221	0.110805685	-0.242374075	9:01:48	-0.273675918	0.083060128	-0.233914431
9:01:52	-0.290475616	0.05531457	-0.225454788	9:01:56	-0.282039054	0.047774467	-0.216995145
9:02:00	-0.276303232	0.040345345	-0.215702562	9:02:04	-0.277120999	0.027533926	-0.223999602
9:02:08	-0.277938766	0.010295117	-0.232296642	9:02:12	-0.278756533	-0.006943691	-0.240593682
9:02:16	-0.2795743	-0.030634498	-0.248890722	9:02:20	-0.280392067	-0.056475979	-0.257187762
9:02:24	-0.274836196	-0.076311565	-0.265484803	9:02:28	-0.266763118	-0.088026701	-0.273781843
9:02:32	-0.258690039	-0.099741837	-0.282078883	9:02:36	-0.250616961	-0.111456969	-0.290375923
9:02:40	-0.258556622	-0.132717051	-0.298672963	9:02:44	-0.286475799	-0.164565389	-0.306970003
9:02:48	-0.295414106	-0.18113586	-0.315267043	9:02:52	-0.297109361	-0.19338886	-0.323564083
9:02:56	-0.298804615	-0.198617098	-0.331861124	9:03:00	-0.295138159	-0.198307715	-0.332893502
9:03:04	-0.288154397	-0.197724777	-0.330068883	9:03:08	-0.281170635	-0.202253361	-0.327244264
9:03:12	-0.274186873	-0.206781944	-0.324419645	9:03:16	-0.267203111	-0.193864649	-0.321595026
9:03:20	-0.260219348	-0.175132058	-0.318770407	9:03:24	-0.253235586	-0.156399467	-0.315945788
9:03:28	-0.246251824	-0.142619352	-0.313121169	9:03:32	-0.239268062	-0.133791714	-0.31029655
9:03:36	-0.2322843	-0.130707203	-0.307471931	9:03:40	-0.225300538	-0.129537069	-0.304647312
9:03:44	-0.218316776	-0.128219135	-0.301822693	9:03:48	-0.211333014	-0.126457798	-0.298998074
9:03:52	-0.204349251	-0.124696462	-0.296173455	9:03:56	-0.195066698	-0.109302394	-0.290234169

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
9:04:00	-0.185368371	-0.089573001	-0.283731544	9:04:04	-0.176997443	-0.068459559	-0.27722892
9:04:08	-0.17071756	-0.042066673	-0.270726295	9:04:12	-0.164437677	-0.015673786	-0.264223671
9:04:16	-0.158157795	0.000633268	-0.257721046	9:04:20	-0.156878372	0.01059769	-0.257993621
9:04:24	-0.15593059	0.018225814	-0.258715541	9:04:28	-0.154982808	0.019438109	-0.25943746
9:04:32	-0.156219558	0.019348238	-0.260159379	9:04:36	-0.158651	0.003377324	-0.260881299
9:04:40	-0.161082442	-0.017649895	-0.261603218	9:04:44	-0.163513884	-0.039496498	-0.262325138
9:04:48	-0.165945327	-0.063801266	-0.263047057	9:04:52	-0.168376769	-0.088106035	-0.263768977
9:04:56	-0.170808211	-0.112006516	-0.264490896	9:05:00	-0.173239653	-0.135772234	-0.265212816
9:05:04	-0.174774318	-0.155192804	-0.265934735	9:05:08	-0.176308984	-0.163181583	-0.266656655
9:05:12	-0.17784365	-0.171170362	-0.267378574	9:05:16	-0.179378315	-0.172933542	-0.268100493
9:05:20	-0.180912981	-0.172621524	-0.268822413	9:05:24	-0.182447646	-0.17147675	-0.269544332
9:05:28	-0.183982312	-0.167833722	-0.270266252	9:05:32	-0.185516977	-0.164190689	-0.270988171
9:05:36	-0.187051643	-0.155352094	-0.271710091	9:05:40	-0.188586309	-0.141317929	-0.27243201
9:05:44	-0.190120974	-0.127283766	-0.27315393	9:05:48	-0.19165564	-0.119932821	-0.273875849
9:05:52	-0.193190305	-0.112581875	-0.274597769	9:05:56	-0.194724971	-0.114710093	-0.275319688
9:06:00	-0.196259637	-0.126317474	-0.276041607	9:06:04	-0.198425188	-0.138300917	-0.276763527
9:06:08	-0.200590739	-0.179405007	-0.277485446	9:06:12	-0.202782914	-0.220524967	-0.278207366
9:06:16	-0.211958249	-0.264539684	-0.278929285	9:06:20	-0.215729166	-0.304065099	-0.279651205
9:06:24	-0.217349082	-0.342308352	-0.280373124	9:06:28	-0.218968997	-0.358245535	-0.281095044
9:06:32	-0.220588913	-0.374182717	-0.281816963	9:06:36	-0.222208828	-0.392760107	-0.282538883
9:06:40	-0.223828743	-0.41397767	-0.283260802	9:06:44	-0.225448659	-0.435195232	-0.283982721
9:06:48	-0.227068574	-0.442404457	-0.284704641	9:06:52	-0.22868849	-0.449613681	-0.28542656
9:06:56	-0.230308405	-0.459247503	-0.28614848	9:07:00	-0.23192832	-0.471305923	-0.286870399
9:07:04	-0.232902443	-0.482979431	-0.287592319	9:07:08	-0.233876566	-0.481643705	-0.288314238
9:07:12	-0.234850688	-0.480307944	-0.289036158	9:07:16	-0.235824811	-0.48056557	-0.289758077
9:07:20	-0.236798934	-0.482416548	-0.290479997	9:07:24	-0.237773056	-0.484267525	-0.291201916
9:07:28	-0.238747179	-0.484740033	-0.291923835	9:07:32	-0.239721302	-0.485212506	-0.292645755
9:07:36	-0.240695424	-0.482013831	-0.293367674	9:07:40	-0.241669547	-0.475143939	-0.294089594
9:07:44	-0.240227749	-0.466833954	-0.291538145	9:07:48	-0.237744296	-0.459800218	-0.287575343
9:07:52	-0.235260843	-0.452766517	-0.283612541	9:07:56	-0.232777389	-0.444821665	-0.279649738
9:08:00	-0.230293936	-0.435965697	-0.275686936	9:08:04	-0.22881384	-0.427707797	-0.271724134
9:08:08	-0.227333744	-0.412882144	-0.267761331	9:08:12	-0.225853648	-0.398056491	-0.263798529
9:08:16	-0.228854115	-0.385200957	-0.26590651	9:08:20	-0.232895319	-0.372732237	-0.269424601
9:08:24	-0.236936523	-0.3602635	-0.272942692	9:08:28	-0.240977727	-0.340080992	-0.276460783
9:08:32	-0.245018931	-0.319898483	-0.279978874	9:08:36	-0.249060135	-0.299340855	-0.283496965
9:08:40	-0.253101339	-0.278408099	-0.287015056	9:08:44	-0.257142543	-0.257475351	-0.290533147
9:08:48	-0.261183747	-0.224123851	-0.294051238	9:08:52	-0.265224951	-0.190772349	-0.297569329
9:08:56	-0.269266155	-0.156579091	-0.30108742	9:09:00	-0.273307359	-0.122105245	-0.304605511
9:09:04	-0.276823132	-0.087318202	-0.308123602	9:09:08	-0.280338906	-0.062128019	-0.311641693
9:09:12	-0.283325013	-0.036622109	-0.315159784	9:09:16	-0.281598557	-0.008612339	-0.318677875
9:09:20	-0.2798721	0.019092217	-0.322195966	9:09:24	-0.278145644	0.046796772	-0.325714057
9:09:28	-0.276419188	0.071143781	-0.329232148	9:09:32	-0.274692731	0.09549079	-0.332750239
9:09:36	-0.272799487	0.110188767	-0.336268329	9:09:40	-0.270902963	0.115140212	-0.33978642
9:09:44	-0.271437015	0.118642829	-0.346597736	9:09:48	-0.294417773	0.094161838	-0.371689856
9:09:52	-0.320511176	0.067825448	-0.391578545	9:09:56	-0.329915138	0.058939622	-0.388854458
9:10:00	-0.3393191	0.057556043	-0.38613037	9:10:04	-0.360737104	0.049011062	-0.383406283
9:10:08	-0.337323908	0.065055475	-0.380682196	9:10:12	-0.325497846	0.074192994	-0.377958109
9:10:16	-0.327880537	0.071078507	-0.375234021	9:10:20	-0.330263229	0.064181666	-0.372509934
9:10:24	-0.33264592	0.057284825	-0.369785847	9:10:28	-0.335028612	0.053736399	-0.36706176
9:10:32	-0.337411303	0.050187956	-0.364337673	9:10:36	-0.339793994	0.051124407	-0.361613585
9:10:40	-0.342176686	0.056545717	-0.358889498	9:10:44	-0.344559377	0.061967027	-0.356165411
9:10:48	-0.346942069	0.05644512	-0.353441324	9:10:52	-0.34932476	0.050923214	-0.350717236
9:10:56	-0.35137855	0.046418658	-0.347993149	9:11:00	-0.353043498	0.042967183	-0.345269062
9:11:04	-0.355526731	0.03902794	-0.342544975	9:11:08	-0.358009965	0.02554248	-0.339820887
9:11:12	-0.360493198	0.012057019	-0.3370968	9:11:16	-0.362976431	0.000951602	-0.334372713
9:11:20	-0.365202082	-0.00762023	-0.331648626	9:11:24	-0.361376229	-0.011625454	-0.328924538
9:11:28	-0.357550377	-0.012752513	-0.326200451	9:11:32	-0.353724525	-0.013879554	-0.323476364

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
9:11:36	-0.349898673	-0.020013078	-0.320752277	9:11:40	-0.346072821	-0.031153087	-0.318028189
9:11:44	-0.342246969	-0.042293078	-0.315304102	9:11:48	-0.39271699	-0.083511485	-0.312580015
9:11:52	-0.392739849	-0.09465912	-0.309855928	9:11:56	-0.38966783	-0.10670407	-0.302938543
9:12:00	-0.374912103	-0.114526677	-0.280190726	9:12:04	-0.347978671	-0.115090342	-0.241217276
9:12:08	-0.345706961	-0.110815453	-0.235658368	9:12:12	-0.347531011	-0.108981984	-0.235648867
9:12:16	-0.349355061	-0.107732112	-0.235639365	9:12:20	-0.351179111	-0.107065838	-0.235629864
9:12:24	-0.35300316	-0.106399554	-0.235620363	9:12:28	-0.350453511	-0.108434837	-0.235610862
9:12:32	-0.340346014	-0.105965005	-0.235601361	9:12:36	-0.330238516	-0.10073539	-0.23559186
9:12:40	-0.320196868	-0.092785254	-0.235582359	9:12:44	-0.323602383	-0.092850764	-0.235572857
9:12:48	-0.327007898	-0.100486675	-0.235563356	9:12:52	-0.330413414	-0.108122595	-0.235553855
9:12:56	-0.333818929	-0.12170373	-0.235544354	9:13:00	-0.337224444	-0.14123008	-0.235534853
9:13:04	-0.339996133	-0.16037862	-0.235525352	9:13:08	-0.342767821	-0.164497295	-0.235515851
9:13:12	-0.34553951	-0.168615964	-0.235506349	9:13:16	-0.348311199	-0.175140896	-0.235496848
9:13:20	-0.351082888	-0.184072088	-0.235487347	9:13:24	-0.353854576	-0.19300328	-0.235477846
9:13:28	-0.356626265	-0.201934472	-0.235468345	9:13:32	-0.359397954	-0.218689887	-0.235458844
9:13:36	-0.362169642	-0.23403411	-0.235449342	9:13:40	-0.364941331	-0.245144765	-0.235439841
9:13:44	-0.36771302	-0.256255419	-0.23543034	9:13:48	-0.370484708	-0.270119885	-0.235420839
9:13:52	-0.373256397	-0.28398435	-0.235411338	9:13:56	-0.373893679	-0.29629828	-0.235401837
9:14:00	-0.37284192	-0.307327155	-0.235392336	9:14:04	-0.372699504	-0.318898066	-0.235382834
9:14:08	-0.372557089	-0.326969438	-0.235373333	9:14:12	-0.372414673	-0.335040809	-0.235363832
9:14:16	-0.372272257	-0.347713958	-0.235354331	9:14:20	-0.372129842	-0.364988885	-0.23534483
9:14:24	-0.371987426	-0.382263811	-0.235335329	9:14:28	-0.371845011	-0.394426438	-0.235325828
9:14:32	-0.371702595	-0.406589065	-0.235316326	9:14:36	-0.371560179	-0.414676576	-0.235306825
9:14:40	-0.371417764	-0.418688989	-0.235297324	9:14:44	-0.371275348	-0.422701383	-0.235287823
9:14:48	-0.371132932	-0.424252905	-0.235278322	9:14:52	-0.370990517	-0.425804444	-0.235268821
9:14:56	-0.370848101	-0.426306978	-0.23525932	9:15:00	-0.870705685	-0.925760542	-0.735249818
9:15:04	-0.869813386	-0.924767111	-0.735240317	9:15:08	-0.868921086	-0.934140361	-0.735230816
9:15:12	-0.35629088	-0.436516809	-0.235221315	9:15:16	-0.352423703	-0.444116781	-0.235211814
9:15:20	-0.348556525	-0.451716735	-0.235202313	9:15:24	-0.344689348	-0.459316707	-0.235192811
9:15:28	-0.340822171	-0.452440365	-0.23518331	9:15:32	-0.336954993	-0.44556404	-0.235173809
9:15:36	-0.333087816	-0.436040846	-0.235164308	9:15:40	-0.340834966	-0.430793903	-0.235154807
9:15:44	-0.337854581	-0.419152442	-0.235145306	9:15:48	-0.334874196	-0.396839352	-0.235135805
9:15:52	-0.331893811	-0.374526244	-0.235126303	9:15:56	-0.328913426	-0.363459987	-0.235116802
9:16:00	-0.32593304	-0.363640545	-0.235107301	9:16:04	-0.322868901	-0.363771196	-0.2350978
9:16:08	-0.324075522	-0.355550713	-0.240874817	9:16:12	-0.328610036	-0.349313936	-0.251160848
9:16:16	-0.333144551	-0.339319453	-0.261446878	9:16:20	-0.32732791	-0.319397075	-0.271732909
9:16:24	-0.321443377	-0.299434228	-0.282018939	9:16:28	-0.316802355	-0.277830825	-0.29230497
9:16:32	-0.325139514	-0.263963514	-0.302591	9:16:36	-0.333476672	-0.260913574	-0.312877031
9:16:40	-0.33391169	-0.256759077	-0.312456331	9:16:44	-0.320385672	-0.244282627	-0.293119612
9:16:48	-0.306859653	-0.2263402	-0.273782892	9:16:52	-0.293333635	-0.208397772	-0.254446172
9:16:56	-0.279807616	-0.191403849	-0.235109453	9:17:00	-0.266281597	-0.175358428	-0.215772733
9:17:04	-0.25348982	-0.159750679	-0.196436013	9:17:08	-0.255189084	-0.146648863	-0.196733427
9:17:12	-0.260806552	-0.135882628	-0.202339673	9:17:16	-0.26642402	-0.118893653	-0.20794592
9:17:20	-0.255131273	-0.08560202	-0.213552166	9:17:24	-0.233832269	-0.046345816	-0.219158413
9:17:28	-0.246242615	-0.040785537	-0.224764659	9:17:32	-0.258652961	-0.035225268	-0.230370906
9:17:36	-0.271063307	-0.033388444	-0.235977153	9:17:40	-0.283473654	-0.035275075	-0.241583399
9:17:44	-0.295884	-0.036381658	-0.247189646	9:17:48	-0.308294346	-0.035148062	-0.252795892
9:17:52	-0.320704692	-0.033914465	-0.258402139	9:17:56	-0.321807052	-0.021432738	-0.264008385
9:18:00	-0.318022193	-0.004535294	-0.269614632	9:18:04	-0.310405369	0.014646325	-0.270351761
9:18:08	-0.301315725	0.031602535	-0.269093343	9:18:12	-0.284569571	0.053122672	-0.267834925
9:18:16	-0.282835763	0.059910848	-0.266576507	9:18:20	-0.281101954	0.06091569	-0.26531809
9:18:24	-0.279368146	0.06192055	-0.264059672	9:18:28	-0.277634338	0.056109857	-0.262801254
9:18:32	-0.275900529	0.050299164	-0.261542836	9:18:36	-0.274166721	0.044933886	-0.260284418
9:18:40	-0.272432913	0.040014057	-0.259026	9:18:44	-0.270699104	0.035094228	-0.257767582
9:18:48	-0.268965296	0.032104819	-0.256509164	9:18:52	-0.267231488	0.02911541	-0.255250746
9:18:56	-0.265497679	0.026126	-0.253992329	9:19:00	-0.263763871	0.023136591	-0.252733911
9:19:04	-0.261624647	0.021503347	-0.251475493	9:19:08	-0.259485423	0.023213616	-0.250217075

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
9:19:12	-0.257346199	0.024923885	-0.248958657	9:19:16	-0.255206976	0.03021781	-0.247700239
9:19:20	-0.253067752	0.039095408	-0.246441821	9:19:24	-0.250928528	0.047973006	-0.245183403
9:19:28	-0.248789304	0.059900271	-0.243924985	9:19:32	-0.24665008	0.071827518	-0.242666567
9:19:36	-0.244510856	0.073272879	-0.24140815	9:19:40	-0.242371632	0.064236321	-0.240149732
9:19:44	-0.240232409	0.055199762	-0.238891314	9:19:48	-0.238093185	0.052485643	-0.237632896
9:19:52	-0.235953961	0.049771524	-0.236374478	9:19:56	-0.233814737	0.053439783	-0.23511606
9:20:00	-0.231675513	0.059235525	-0.233857642	9:20:04	-0.22991344	0.064806436	-0.232599224
9:20:08	-0.228151367	0.071096443	-0.231340806	9:20:12	-0.226389295	0.077386469	-0.230082388
9:20:16	-0.224627222	0.077862498	-0.228823971	9:20:20	-0.222908237	0.072498847	-0.227565553
9:20:24	-0.221266833	0.067088951	-0.226307135	9:20:28	-0.219625428	0.062266321	-0.225048717
9:20:32	-0.217984023	0.057443691	-0.223790299	9:20:36	-0.216342619	0.047656555	-0.222531881
9:20:40	-0.214701214	0.032904896	-0.221273463	9:20:44	-0.209512552	0.02026771	-0.215208812
9:20:48	-0.201848552	0.016669464	-0.205790289	9:20:52	-0.194184553	0.013071217	-0.196371766
9:20:56	-0.186520553	0.007964054	-0.186953243	9:21:00	-0.184173291	-0.001821249	-0.184271505
9:21:04	-0.187188157	-0.014802843	-0.185275787	9:21:08	-0.190203022	-0.017156845	-0.186280068
9:21:12	-0.193217887	-0.019510838	-0.18728435	9:21:16	-0.196232752	-0.025237496	-0.188288631
9:21:20	-0.199247617	-0.034336809	-0.189292913	9:21:24	-0.202262482	-0.043436122	-0.190297194
9:21:28	-0.205277348	-0.047696588	-0.191301476	9:21:32	-0.208292213	-0.051957045	-0.192305758
9:21:36	-0.211307078	-0.052563929	-0.193310039	9:21:40	-0.214321943	-0.049517226	-0.194314321
9:21:44	-0.217336808	-0.046470528	-0.195318602	9:21:48	-0.220351673	-0.052685129	-0.196322884
9:21:52	-0.224990174	-0.059867553	-0.197327165	9:21:56	-0.229792887	-0.069773086	-0.198331447
9:22:00	-0.2345956	-0.082303837	-0.199335729	9:22:04	-0.239521607	-0.094908082	-0.20034001
9:22:08	-0.244447614	-0.113430271	-0.201344292	9:22:12	-0.249373621	-0.13195246	-0.202348573
9:22:16	-0.254299628	-0.148897142	-0.203352855	9:22:20	-0.259225635	-0.164264316	-0.204357137
9:22:24	-0.264151642	-0.179631491	-0.205361418	9:22:28	-0.269077649	-0.183378513	-0.2063657
9:22:32	-0.273640276	-0.186908929	-0.207369981	9:22:36	-0.259201969	-0.181103348	-0.208374263
9:22:40	-0.252431516	-0.18185862	-0.209378544	9:22:44	-0.245661063	-0.182613891	-0.210382826
9:22:48	-0.248193171	-0.184910675	-0.211387108	9:22:52	-0.254340757	-0.18936259	-0.212391389
9:22:56	-0.260982966	-0.190827455	-0.213395671	9:23:00	-0.267419724	-0.18888796	-0.214036017
9:23:04	-0.271173741	-0.185349326	-0.211214651	9:23:08	-0.274927758	-0.181810692	-0.208393284
9:23:12	-0.278681775	-0.178272058	-0.205571918	9:23:16	-0.282435792	-0.175826439	-0.202750551
9:23:20	-0.283012182	-0.172579702	-0.199929185	9:23:24	-0.27994772	-0.167162708	-0.197107818
9:23:28	-0.276883257	-0.161745715	-0.194286452	9:23:32	-0.273818794	-0.146131395	-0.191465086
9:23:36	-0.270754331	-0.128158183	-0.188643719	9:23:40	-0.267689868	-0.103108291	-0.185822353
9:23:44	-0.264625405	-0.078058398	-0.183000986	9:23:48	-0.261560942	-0.062685663	-0.18017962
9:23:52	-0.25849648	-0.047312928	-0.177358253	9:23:56	-0.255432017	-0.030273331	-0.174536887
9:24:00	-0.252367554	-0.011566863	-0.17171552	9:24:04	-0.248995393	0.007323019	-0.168894154
9:24:08	-0.245623232	0.024743281	-0.166072787	9:24:12	-0.242251071	0.042163525	-0.163251421
9:24:16	-0.23887891	0.052466571	-0.160430055	9:24:20	-0.23550675	0.055652385	-0.157608688
9:24:24	-0.232134589	0.058838199	-0.154787322	9:24:28	-0.228762428	0.068791566	-0.151965955
9:24:32	-0.225390267	0.078744914	-0.149144589	9:24:36	-0.222018106	0.087192243	-0.146323222
9:24:40	-0.218645945	0.094133515	-0.143501856	9:24:44	-0.189960347	0.116163752	-0.106382929
9:24:48	-0.189704688	0.123943315	-0.107784159	9:24:52	-0.18944903	0.131722895	-0.109185388
9:24:56	-0.189193371	0.142254246	-0.110586618	9:25:00	-0.188937712	0.155537402	-0.111987848
9:25:04	-0.189015952	0.168621509	-0.113389077	9:25:08	-0.189094191	0.179810157	-0.114790307
9:25:12	-0.189172431	0.190998806	-0.116191537	9:25:16	-0.18925067	0.201443469	-0.117592767
9:25:20	-0.18932891	0.211144217	-0.118993996	9:25:24	-0.189407149	0.22084493	-0.120395226
9:25:28	-0.189485389	0.23435006	-0.121796456	9:25:32	-0.189563628	0.247855191	-0.123197685
9:25:36	-0.189641868	0.258703787	-0.124598915	9:25:40	-0.189720107	0.26689585	-0.126000145
9:25:44	-0.189798347	0.275087913	-0.127401374	9:25:48	-0.189876587	0.279511053	-0.128802604
9:25:52	-0.189954826	0.283934192	-0.130203834	9:25:56	-0.190033066	0.291975788	-0.131605063
9:26:00	-0.190111305	0.303635841	-0.133006293	9:26:04	-0.190511309	0.315104095	-0.134407523
9:26:08	-0.190911314	0.322344847	-0.135808752	9:26:12	-0.191311318	0.329585599	-0.137209982
9:26:16	-0.191711322	0.33308411	-0.138611212	9:26:20	-0.192111327	0.332840415	-0.140012441
9:26:24	-0.192511331	0.33259672	-0.141413671	9:26:28	-0.192911335	0.325608514	-0.142814901
9:26:32	-0.19331134	0.318620308	-0.14421613	9:26:36	-0.193711344	0.307673736	-0.14561736
9:26:40	-0.194111348	0.292768832	-0.14701859	9:26:44	-0.194511353	0.277863928	-0.148419819

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
9:26:48	-0.194911357	0.270972114	-0.149821049	9:26:52	-0.195311361	0.264080334	-0.151222279
9:26:56	-0.195711366	0.250912428	-0.152623508	9:27:00	-0.194328688	0.232531058	-0.151609355
9:27:04	-0.192506507	0.214411671	-0.150542173	9:27:08	-0.190684325	0.193564193	-0.14947499
9:27:12	-0.188862143	0.172716716	-0.148407807	9:27:16	-0.187039962	0.153900401	-0.147340624
9:27:20	-0.18521778	0.137115232	-0.146273441	9:27:24	-0.183395598	0.120330062	-0.145206258
9:27:28	-0.181573417	0.117675825	-0.144139075	9:27:32	-0.179751235	0.115021588	-0.143071892
9:27:36	-0.188254394	0.109285247	-0.142004709	9:27:40	-0.186269228	0.112873505	-0.140937526
9:27:44	-0.184284063	0.116461782	-0.139870344	9:27:48	-0.182298898	0.10817359	-0.138803161
9:27:52	-0.180313732	0.099885399	-0.137735978	9:27:56	-0.178328567	0.089062824	-0.136668795
9:28:00	-0.176343401	0.075705902	-0.135601612	9:28:04	-0.174551272	0.062233913	-0.134534429
9:28:08	-0.172759143	0.046480919	-0.133467246	9:28:12	-0.170967014	0.030727925	-0.132400063
9:28:16	-0.169174885	0.015444896	-0.13133288	9:28:20	-0.167382756	0.000318534	-0.130265697
9:28:24	-0.165590626	-0.013631787	-0.129198514	9:28:28	-0.164471191	-0.024454918	-0.128131332
9:28:32	-0.163991366	-0.035659312	-0.127064149	9:28:36	-0.163511541	-0.045370701	-0.125996966
9:28:40	-0.163031716	-0.053589088	-0.124929783	9:28:44	-0.162551891	-0.061807474	-0.1238626
9:28:48	-0.162072066	-0.06008694	-0.122795417	9:28:52	-0.161592241	-0.058366407	-0.121728234
9:28:56	-0.161739179	-0.057353462	-0.121510262	9:29:00	-0.16274478	-0.057186343	-0.122455705
9:29:04	-0.163626458	-0.056945355	-0.123401148	9:29:08	-0.164508137	-0.053061147	-0.124346591
9:29:12	-0.165389815	-0.049176938	-0.125292033	9:29:16	-0.166271493	-0.045028889	-0.126237476
9:29:20	-0.167153172	-0.040616998	-0.127182919	9:29:24	-0.16803485	-0.036205107	-0.128128362
9:29:28	-0.168916529	-0.047423085	-0.129073805	9:29:32	-0.169798207	-0.058641063	-0.130019248
9:29:36	-0.170679886	-0.072347115	-0.13096469	9:29:40	-0.171561564	-0.088541241	-0.131910133
9:29:44	-0.172443243	-0.104735368	-0.132855576	9:29:48	-0.173324921	-0.113170561	-0.133801019
9:29:52	-0.1742066	-0.121605755	-0.134746462	9:29:56	-0.175088278	-0.126122665	-0.135691904
9:30:00	0.324030043	0.373278708	0.363362653	9:30:04	0.323963433	0.373165932	0.36241721
9:30:08	0.323896823	0.375992381	0.361471767	9:30:12	-0.176169787	-0.12118117	-0.139473676
9:30:16	-0.176236397	-0.127993545	-0.140419118	9:30:20	-0.176303008	-0.144444747	-0.141364561
9:30:24	-0.176369618	-0.160895946	-0.142310004	9:30:28	-0.176436228	-0.182206564	-0.143255447
9:30:32	-0.176502838	-0.203517182	-0.14420089	9:30:36	-0.176569449	-0.219311736	-0.145146332
9:30:40	-0.176636059	-0.229590243	-0.146091775	9:30:44	-0.176702669	-0.239868741	-0.147037218
9:30:48	-0.175763983	-0.238947116	-0.146620569	9:30:52	-0.174607771	-0.237895827	-0.145909192
9:30:56	-0.173451559	-0.233949007	-0.145197814	9:31:00	-0.17235457	-0.22714194	-0.144486437
9:31:04	-0.174327349	-0.222164714	-0.143775059	9:31:08	-0.176300127	-0.207046534	-0.143063681
9:31:12	-0.178272906	-0.191928363	-0.142352304	9:31:16	-0.180245685	-0.179218175	-0.141640926
9:31:20	-0.182218463	-0.168915984	-0.140929549	9:31:24	-0.184191242	-0.158613789	-0.140218171
9:31:28	-0.186164021	-0.17046757	-0.139506794	9:31:32	-0.188136799	-0.182321356	-0.138795416
9:31:36	-0.190109578	-0.19285136	-0.138084039	9:31:40	-0.192082357	-0.202057597	-0.137372661
9:31:44	-0.189422984	-0.208502671	-0.136661283	9:31:48	-0.18649043	-0.214784906	-0.135949906
9:31:52	-0.183557875	-0.221067149	-0.135238528	9:31:56	-0.18062532	-0.229722118	-0.134527151
9:32:00	-0.177692766	-0.240749811	-0.133815773	9:32:04	-0.174904872	-0.251863734	-0.133104396
9:32:08	-0.172116978	-0.261410854	-0.132393018	9:32:12	-0.169329084	-0.270957975	-0.13168164
9:32:16	-0.166541191	-0.278002813	-0.130970263	9:32:20	-0.163753297	-0.282545369	-0.130258885
9:32:24	-0.160965403	-0.287087924	-0.129547508	9:32:28	-0.15817751	-0.293581594	-0.12883613
9:32:32	-0.122059291	-0.280207593	-0.08296499	9:32:36	-0.121742719	-0.290151094	-0.085602044
9:32:40	-0.121426147	-0.302071309	-0.088239098	9:32:44	-0.121781182	-0.314391858	-0.090876152
9:32:48	-0.123246736	-0.324768075	-0.093513206	9:32:52	-0.12471229	-0.335144275	-0.09615026
9:32:56	-0.126177844	-0.343798453	-0.098787313	9:33:00	-0.127643398	-0.350730593	-0.101424367
9:33:04	-0.129054185	-0.357630086	-0.104061421	9:33:08	-0.130464972	-0.358160631	-0.106698475
9:33:12	-0.131875758	-0.358691177	-0.109335529	9:33:16	-0.133286545	-0.355539064	-0.111972583
9:33:20	-0.134697332	-0.351159375	-0.114609636	9:33:24	-0.136108119	-0.346779703	-0.11724669
9:33:28	-0.137518906	-0.33428206	-0.119883744	9:33:32	-0.138929692	-0.321784399	-0.122520798
9:33:36	-0.140340479	-0.31357416	-0.125157852	9:33:40	-0.141751266	-0.318226152	-0.127794906
9:33:44	-0.143162053	-0.322878144	-0.13043196	9:33:48	-0.144572839	-0.338738278	-0.133069013
9:33:52	-0.145983626	-0.354598411	-0.135706067	9:33:56	-0.147394413	-0.362581356	-0.138343121
9:34:00	-0.1488052	-0.362687112	-0.140980175	9:34:04	-0.149776199	-0.362530718	-0.143617229
9:34:08	-0.150747199	-0.356606977	-0.146254283	9:34:12	-0.151718198	-0.350683236	-0.148891337
9:34:16	-0.152689197	-0.343311193	-0.15152839	9:34:20	-0.153661789	-0.334491778	-0.154165444

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
9:34:24	-0.1564384	-0.32674771	-0.156802498	9:34:28	-0.15921501	-0.336504184	-0.159439552
9:34:32	-0.161991621	-0.34626064	-0.162076606	9:34:36	-0.164768231	-0.355432602	-0.16471366
9:34:40	-0.168079174	-0.364338559	-0.168074689	9:34:44	-0.171641458	-0.373394337	-0.171776264
9:34:48	-0.175203742	-0.373924976	-0.175477839	9:34:52	-0.178766027	-0.374455597	-0.179179414
9:34:56	-0.182328311	-0.370904423	-0.18288099	9:35:00	-0.185890595	-0.363271453	-0.186582565
9:35:04	-0.189955457	-0.355938062	-0.19028414	9:35:08	-0.194020319	-0.35717479	-0.193985716
9:35:12	-0.198085181	-0.358411517	-0.197687291	9:35:16	-0.202150042	-0.367121837	-0.201388866
9:35:20	-0.206214904	-0.383305732	-0.205090442	9:35:24	-0.2091961	-0.39884367	-0.207323741
9:35:28	-0.209410783	-0.413504285	-0.205808651	9:35:32	-0.209625466	-0.428164882	-0.204293561
9:35:36	-0.209840149	-0.439594364	-0.202778471	9:35:40	-0.210054832	-0.449946773	-0.201263381
9:35:44	-0.210269515	-0.460299181	-0.199748291	9:35:48	-0.210484198	-0.466469707	-0.1982332
9:35:52	-0.210698881	-0.472640233	-0.19671811	9:35:56	-0.210913564	-0.475729863	-0.19520302
9:36:00	-0.211128247	-0.47573856	-0.19368793	9:36:04	-0.211250245	-0.475692008	-0.19217284
9:36:08	-0.211372243	-0.484407506	-0.19065775	9:36:12	-0.211494241	-0.493123003	-0.18914266
9:36:16	-0.211616238	-0.496567856	-0.187627569	9:36:20	-0.211738236	-0.494742063	-0.186112479
9:36:24	-0.211860234	-0.49291627	-0.184597389	9:36:28	-0.211982232	-0.497355733	-0.183082299
9:36:32	-0.21210423	-0.501795195	-0.181567209	9:36:36	-0.212226227	-0.504155299	-0.180052119
9:36:40	-0.212348225	-0.504436045	-0.178537029	9:36:44	-0.212470223	-0.507588135	-0.177021938
9:36:48	-0.201465514	-0.512721836	-0.175506848	9:36:52	-0.187825105	-0.516284437	-0.173991758
9:36:56	-0.174184695	-0.519847038	-0.172476668	9:37:00	-0.160544286	-0.523409639	-0.170961578
9:37:04	-0.151201874	-0.52953421	-0.169446488	9:37:08	-0.150403368	-0.542350317	-0.167931398
9:37:12	-0.149604862	-0.555166423	-0.166416308	9:37:16	-0.148806357	-0.561817431	-0.164901217
9:37:20	-0.148007851	-0.562303413	-0.163386127	9:37:24	-0.147209345	-0.562789395	-0.161871037
9:37:28	-0.146410839	-0.571599845	-0.160355947	9:37:32	-0.145612333	-0.580410295	-0.158840857
9:37:36	-0.144813827	-0.586216734	-0.157325767	9:37:40	-0.144015321	-0.589019161	-0.155810677
9:37:44	-0.143216815	-0.591821589	-0.154295586	9:37:48	-0.142418309	-0.576642692	-0.152780496
9:37:52	-0.141619803	-0.561463759	-0.151265406	9:37:56	-0.140821297	-0.548606779	-0.149750316
9:38:00	-0.140022791	-0.538071682	-0.148235226	9:38:04	-0.139132011	-0.527481616	-0.146720136
9:38:08	-0.138241231	-0.516891515	-0.145205046	9:38:12	-0.137350451	-0.506301415	-0.143689955
9:38:16	-0.136459671	-0.496210431	-0.142174865	9:38:20	-0.135568891	-0.486618529	-0.140659775
9:38:24	-0.134678111	-0.477026591	-0.139144685	9:38:28	-0.13378733	-0.467434689	-0.137629595
9:38:32	-0.13289655	-0.457842786	-0.136114505	9:38:36	-0.145425329	-0.461442058	-0.152781779
9:38:40	-0.154028916	-0.464432257	-0.16413075	9:38:44	-0.118545467	-0.441142857	-0.115745528
9:38:48	-0.105917765	-0.426182075	-0.098327905	9:38:52	-0.108078155	-0.42003621	-0.100946891
9:38:56	-0.110238544	-0.420091968	-0.103568877	9:39:00	-0.112398934	-0.426349276	-0.106184863
9:39:04	-0.114671926	-0.43267374	-0.108803849	9:39:08	-0.116944917	-0.443731822	-0.111422836
9:39:12	-0.119217909	-0.454789904	-0.114041822	9:39:16	-0.121490901	-0.458078274	-0.116660808
9:39:20	-0.123763892	-0.453596931	-0.119279794	9:39:24	-0.126036884	-0.447646625	-0.12189878
9:39:28	-0.128309875	-0.437289359	-0.124517767	9:39:32	-0.130582867	-0.426932092	-0.127136753
9:39:36	-0.132855859	-0.415434402	-0.129755739	9:39:40	-0.13512885	-0.402796361	-0.132374725
9:39:44	-0.137401842	-0.39015832	-0.134993711	9:39:48	-0.139674834	-0.382519692	-0.137612698
9:39:52	-0.137923783	-0.37248236	-0.140231684	9:39:56	-0.135817343	-0.359753713	-0.14285067
9:40:00	-0.133710904	-0.34454554	-0.145469656	9:40:04	-0.131155868	-0.329069983	-0.148088642
9:40:08	-0.128600832	-0.306494319	-0.150707629	9:40:12	-0.126045796	-0.283918655	-0.153326615
9:40:16	-0.13165257	-0.264650865	-0.155945601	9:40:20	-0.214774232	-0.290031245	-0.158564587
9:40:24	-0.233985257	-0.277315467	-0.161183573	9:40:28	-0.229170043	-0.256207949	-0.163802559
9:40:32	-0.234344861	-0.241055326	-0.166421546	9:40:36	-0.239519679	-0.226686507	-0.169040532
9:40:40	-0.244694497	-0.213101481	-0.171659518	9:40:44	-0.249869315	-0.199516459	-0.174278504
9:40:48	-0.255044132	-0.175038448	-0.17689749	9:40:52	-0.255464445	-0.14772635	-0.179516477
9:40:56	-0.25144754	-0.121427716	-0.182135463	9:41:00	-0.247430635	-0.098787501	-0.184754449
9:41:04	-0.243831157	-0.076396112	-0.187373435	9:41:08	-0.24023168	-0.061856473	-0.189992421
9:41:12	-0.236632202	-0.047316829	-0.192611408	9:41:16	-0.233032724	-0.029676996	-0.195230394
9:41:20	-0.229433246	-0.008936956	-0.19784938	9:41:24	-0.225833768	0.011803076	-0.200468366
9:41:28	-0.205660724	0.041032079	-0.203087352	9:41:32	-0.170232085	0.079354696	-0.205706338
9:41:36	-0.17543318	0.099138059	-0.208325325	9:41:40	-0.180634274	0.124600904	-0.210944311
9:41:44	-0.184585432	0.144130159	-0.211869739	9:41:48	-0.185060186	0.145695671	-0.208084935
9:41:52	-0.18553494	0.147261184	-0.204300131	9:41:56	-0.186009694	0.156887057	-0.200515328

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
9:42:00	-0.186484449	0.174573273	-0.196730524	9:42:04	-0.187466036	0.191957374	-0.19294572
9:42:08	-0.222643824	0.184333	-0.189160917	9:42:12	-0.342246806	0.126384041	-0.185376113
9:42:16	-0.326276523	0.150712015	-0.181591309	9:42:20	-0.310306241	0.176503765	-0.177806505
9:42:24	-0.294335958	0.202295515	-0.174021702	9:42:28	-0.276466854	0.222224022	-0.167664156
9:42:32	-0.256084392	0.243650704	-0.157901223	9:42:36	-0.152423932	0.314718109	-0.148138289
9:42:40	-0.149612907	0.325670729	-0.138375356	9:42:44	-0.151723637	0.333689568	-0.135280982
9:42:48	-0.159167369	0.336797002	-0.139412374	9:42:52	-0.1666111	0.3399044	-0.143543765
9:42:56	-0.174054832	0.334500232	-0.147675157	9:43:00	-0.213745438	0.301362565	-0.151806549
9:43:04	-0.291663234	0.245438298	-0.15593794	9:43:08	-0.33654086	0.199210399	-0.160069332
9:43:12	-0.310944154	0.194991156	-0.164200724	9:43:16	-0.285347449	0.193482132	-0.168332115
9:43:20	-0.259750743	0.194683398	-0.172463507	9:43:24	-0.250710764	0.186015419	-0.176594898
9:43:28	-0.268135513	0.159233113	-0.18072629	9:43:32	-0.285560263	0.132450807	-0.184857682
9:43:36	-0.302985012	0.110066863	-0.188989073	9:43:40	-0.312326779	0.105696166	-0.193120465
9:43:44	-0.320000361	0.102319848	-0.197251857	9:43:48	-0.327673943	0.096766767	-0.201383248
9:43:52	-0.362523964	0.07501425	-0.20551464	9:43:56	-0.413612744	0.044932196	-0.209646032
9:44:00	-0.438941643	0.031555379	-0.213777423	9:44:04	-0.438452086	0.032825285	-0.217908815
9:44:08	-0.437962528	0.031865473	-0.222040207	9:44:12	-0.437472971	0.03090566	-0.226171598
9:44:16	-0.408023317	0.049905728	-0.23030299	9:44:20	-0.391620915	0.063825745	-0.234434382
9:44:24	-0.360174494	0.086713268	-0.218182404	9:44:28	-0.342877391	0.095374919	-0.198060218
9:44:32	-0.334540015	0.098695816	-0.177938031	9:44:36	-0.326202638	0.096597359	-0.157815845
9:44:40	-0.317865261	0.089079532	-0.137693658	9:44:44	-0.309527884	0.081561686	-0.117571472
9:44:48	-0.301190508	0.066649514	-0.097449285	9:44:52	-0.294093343	0.050998071	-0.079007481
9:44:56	-0.29706971	0.03170885	-0.074214457	9:45:00	-0.800046077	-0.485213473	-0.569421434
9:45:04	-0.802851208	-0.502033743	-0.564628411	9:45:08	-0.805656339	-0.517427082	-0.559835387
9:45:12	-0.30846147	-0.032820438	-0.055042364	9:45:16	-0.311266602	-0.044866666	-0.05024934
9:45:20	-0.314071733	-0.053565793	-0.045456317	9:45:24	-0.316876864	-0.062264921	-0.040663293
9:45:28	-0.319681995	-0.07732907	-0.03587027	9:45:32	-0.322487126	-0.09239322	-0.031077247
9:45:36	-0.31966298	-0.105409495	-0.026284223	9:45:40	-0.321282559	-0.122382275	-0.027666308
9:45:44	-0.34990685	-0.155452144	-0.065637486	9:45:48	-0.37853114	-0.194933534	-0.103608665
9:45:52	-0.407155431	-0.234414925	-0.141579843	9:45:56	-0.435779722	-0.274429358	-0.179551022
9:46:00	-0.455559001	-0.309704462	-0.205537961	9:46:04	-0.441515114	-0.324818099	-0.186605251
9:46:08	-0.427471226	-0.331534907	-0.167672541	9:46:12	-0.413427338	-0.338251712	-0.148739832
9:46:16	-0.399383451	-0.338403828	-0.129807122	9:46:20	-0.407701895	-0.345321095	-0.141173474
9:46:24	-0.416378149	-0.352451647	-0.15302463	9:46:28	-0.425054403	-0.367964501	-0.164875785
9:46:32	-0.399414104	-0.36302178	-0.130230921	9:46:36	-0.366318211	-0.356199391	-0.085484361
9:46:40	-0.34825141	-0.359190438	-0.061100945	9:46:44	-0.35757048	-0.380746627	-0.07382306
9:46:48	-0.36688955	-0.40902537	-0.086545176	9:46:52	-0.37620862	-0.437304113	-0.099267292
9:46:56	-0.385527689	-0.453224202	-0.111989408	9:47:00	-0.394846759	-0.456785618	-0.124711524
9:47:04	-0.404767226	-0.460705535	-0.13743364	9:47:08	-0.414883665	-0.466751207	-0.150155756
9:47:12	-0.425229757	-0.472933771	-0.162877871	9:47:16	-0.435575849	-0.477169343	-0.175599987
9:47:20	-0.44592194	-0.479457902	-0.188322103	9:47:24	-0.456268032	-0.48174648	-0.201044219
9:47:28	-0.466614124	-0.491211944	-0.213766335	9:47:32	-0.476960216	-0.500677408	-0.226488451
9:47:36	-0.487306308	-0.519602469	-0.239210567	9:47:40	-0.4976524	-0.547987128	-0.251932682
9:47:44	-0.507998491	-0.576371787	-0.264654798	9:47:48	-0.512205829	-0.608329062	-0.269059423
9:47:52	-0.512448892	-0.637923348	-0.268092792	9:47:56	-0.512691955	-0.661556013	-0.26712616
9:48:00	-0.512935017	-0.679227128	-0.266159529	9:48:04	-0.514283319	-0.697557058	-0.265192897
9:48:08	-0.508892265	-0.711869764	-0.264226265	9:48:12	-0.496513872	-0.722017424	-0.263259634
9:48:16	-0.484135478	-0.72998834	-0.262293002	9:48:20	-0.471757085	-0.735782512	-0.261326371
9:48:24	-0.459378691	-0.741576683	-0.260359739	9:48:28	-0.447000298	-0.737333834	-0.259393107
9:48:32	-0.434621904	-0.733090984	-0.258426476	9:48:36	-0.422243511	-0.728848099	-0.257459844
9:48:40	-0.409865117	-0.724605249	-0.256493212	9:48:44	-0.397486724	-0.720362399	-0.255526581
9:48:48	-0.38510833	-0.708225981	-0.254559949	9:48:52	-0.372729937	-0.696089564	-0.253593318
9:48:56	-0.360351543	-0.681740979	-0.252626686	9:49:00	-0.34797315	-0.665180191	-0.251660054
9:49:04	-0.335160912	-0.648360866	-0.250693423	9:49:08	-0.339717434	-0.641894719	-0.249726791
9:49:12	-0.344273956	-0.635428643	-0.24876016	9:49:16	-0.348830479	-0.627321464	-0.247793528
9:49:20	-0.353387001	-0.617573217	-0.246826896	9:49:24	-0.357943523	-0.60782497	-0.245860265
9:49:28	-0.362500045	-0.587096574	-0.244893633	9:49:32	-0.367056568	-0.566368177	-0.243927002

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
9:49:36	-0.370126799	-0.543533107	-0.241960145	9:49:40	-0.336555911	-0.497636114	-0.190796375
9:49:44	-0.333055002	-0.469663351	-0.180374874	9:49:48	-0.307558088	-0.43919734	-0.169953373
9:49:52	-0.277855313	-0.406224298	-0.159531873	9:49:56	-0.26325638	-0.379732546	-0.149110372
9:50:00	-0.248657448	-0.350718952	-0.138688871	9:50:04	-0.234767658	-0.322128066	-0.12826737
9:50:08	-0.220877868	-0.294863565	-0.11784587	9:50:12	-0.206988078	-0.267599072	-0.107424369
9:50:16	-0.195772548	-0.250429226	-0.100626264	9:50:20	-0.198808923	-0.25025528	-0.113138281
9:50:24	-0.201845299	-0.250081343	-0.125650298	9:50:28	-0.204881674	-0.244716346	-0.138162314
9:50:32	-0.18949616	-0.228370357	-0.125714235	9:50:36	-0.163924129	-0.20778788	-0.099464288
9:50:40	-0.138352097	-0.189040958	-0.07321434	9:50:44	-0.112780065	-0.170294028	-0.046964393
9:50:48	-0.087208034	-0.15282747	-0.020714446	9:50:52	-0.061636002	-0.135360913	0.005535501
9:50:56	-0.0726897	-0.137167131	-0.017839307	9:51:00	-0.083612232	-0.1363359	-0.041036398
9:51:04	-0.094621563	-0.135556418	-0.064233488	9:51:08	-0.105630894	-0.134161034	-0.087430578
9:51:12	-0.116640225	-0.132765654	-0.110627669	9:51:16	-0.127649556	-0.131963308	-0.133824759
9:51:20	-0.138658888	-0.131753998	-0.15702185	9:51:24	-0.162027482	-0.138911852	-0.18021894
9:51:28	-0.210153478	-0.164850875	-0.20341603	9:51:32	-0.200643865	-0.156434205	-0.226613121
9:51:36	-0.229537731	-0.171250622	-0.249810211	9:51:40	-0.258430759	-0.18640791	-0.273007302
9:51:44	-0.231043789	-0.168017565	-0.2199707	9:51:48	-0.190554178	-0.132825433	-0.149181131
9:51:52	-0.150064567	-0.097633303	-0.078391562	9:51:56	-0.347036794	-0.197624206	-0.329342638
9:52:00	-0.425518987	-0.220620748	-0.30571753	9:52:04	-0.488629184	-0.234454283	-0.282092423
9:52:08	-0.326952488	-0.106911737	-0.258467315	9:52:12	-0.327461795	-0.076045762	-0.234842208
9:52:16	-0.327971102	-0.044573664	-0.2112171	9:52:20	-0.328480409	-0.012495435	-0.187591993
9:52:24	-0.342897668	0.011292462	-0.18281098	9:52:28	-0.357933842	0.028735086	-0.178868545
9:52:32	-0.367492755	0.049442601	-0.174926109	9:52:36	-0.358735898	0.072951865	-0.170983674
9:52:40	-0.34997904	0.088345093	-0.167041238	9:52:44	-0.341222182	0.103738321	-0.163098802
9:52:48	-0.332465324	0.124578722	-0.159156367	9:52:52	-0.323708466	0.145419158	-0.155213931
9:52:56	-0.314951609	0.161957659	-0.151271496	9:53:00	-0.306194751	0.174194295	-0.14732906
9:53:04	-0.297042185	0.186666771	-0.143386625	9:53:08	-0.287889619	0.190485136	-0.139444189
9:53:12	-0.278737053	0.194303537	-0.135501754	9:53:16	-0.269584488	0.199026517	-0.131559318
9:53:20	-0.260431922	0.204654111	-0.127616883	9:53:24	-0.251279356	0.210281705	-0.123674447
9:53:28	-0.242126791	0.21532285	-0.119732011	9:53:32	-0.24213268	0.214904818	-0.115789576
9:53:36	-0.248104937	0.211492544	-0.114264956	9:53:40	-0.254286115	0.209642565	-0.113023408
9:53:44	-0.260467294	0.207792585	-0.11178186	9:53:48	-0.266648472	0.205125643	-0.110540311
9:53:52	-0.27282965	0.202458736	-0.109298763	9:53:56	-0.279010828	0.194020894	-0.108057214
9:54:00	-0.285192007	0.179812118	-0.106815666	9:54:04	-0.292221487	0.165097683	-0.105574118
9:54:08	-0.299250967	0.153256652	-0.104332569	9:54:12	-0.306280447	0.141415621	-0.103091021
9:54:16	-0.313309927	0.13252982	-0.101849473	9:54:20	-0.320339407	0.126593919	-0.100607924
9:54:24	-0.327368887	0.120668818	-0.099366376	9:54:28	-0.334398367	0.115996591	-0.098124828
9:54:32	-0.341427847	0.111324329	-0.096883279	9:54:36	-0.348457327	0.109121289	-0.095641731
9:54:40	-0.355486807	0.109387471	-0.094400183	9:54:44	-0.362516287	0.109653618	-0.093158634
9:54:48	-0.369545767	0.105391258	-0.091917086	9:54:52	-0.360640897	0.110627118	-0.090675537
9:54:56	-0.274516022	0.159752227	-0.089433989	9:55:00	-0.25697614	0.165854487	-0.088192441
9:55:04	-0.259110861	0.160229022	-0.086950892	9:55:08	-0.261245582	0.152174055	-0.085709344
9:55:12	-0.263380303	0.144119089	-0.084467796	9:55:16	-0.265515024	0.125907136	-0.083226247
9:55:20	-0.267649745	0.09753825	-0.081984699	9:55:24	-0.269784466	0.069169346	-0.080743151
9:55:28	-0.271919187	0.041383018	-0.079501602	9:55:32	-0.274053909	0.013596673	-0.078260054
9:55:36	-0.27618863	-0.011821514	-0.077018505	9:55:40	-0.278827092	-0.03517184	-0.075610605
9:55:44	-0.282688289	-0.059251011	-0.072428231	9:55:48	-0.286549485	-0.071277612	-0.069245857
9:55:52	-0.290410682	-0.083304214	-0.066063483	9:55:56	-0.294271878	-0.097570243	-0.062881109
9:56:00	-0.298133075	-0.114075699	-0.059698735	9:56:04	-0.302004516	-0.130587262	-0.056516361
9:56:08	-0.305875958	-0.143587356	-0.053333987	9:56:12	-0.3097474	-0.156587448	-0.050151613
9:56:16	-0.313618841	-0.166868963	-0.046969239	9:56:20	-0.317490283	-0.174431897	-0.043786865
9:56:24	-0.321361725	-0.181994831	-0.040604491	9:56:28	-0.325233166	-0.184580979	-0.037422117
9:56:32	-0.329104608	-0.187167127	-0.034239744	9:56:36	-0.33297605	-0.179260123	-0.03105737
9:56:40	-0.336847492	-0.160859966	-0.027874996	9:56:44	-0.340718933	-0.142459808	-0.024692622
9:56:48	-0.344590375	-0.137319059	-0.021510248	9:56:52	-0.340498454	-0.127431472	-0.018327874
9:56:56	-0.327741131	-0.111488874	-0.0151455	9:57:00	-0.314983809	-0.094656566	-0.011963126
9:57:04	-0.302891121	-0.078220445	-0.008780752	9:57:08	-0.290798432	-0.061784324	-0.005598378

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
9:57:12	-0.278705744	-0.045348195	-0.002416004	9:57:16	-0.266613056	-0.025024473	0.00076637
9:57:20	-0.254520368	-0.00081315	0.003948744	9:57:24	-0.242427679	0.023398172	0.007131118
9:57:28	-0.230334991	0.040197564	0.010313492	9:57:32	-0.224869896	0.053046367	0.013495866
9:57:36	-0.228974425	0.050646016	0.01667824	9:57:40	-0.232420404	0.039093401	0.019860614
9:57:44	-0.234022314	0.028640008	0.023042987	9:57:48	-0.235624223	0.015107725	0.026225361
9:57:52	-0.237226133	0.001575451	0.029407735	9:57:56	-0.238828043	-0.01116052	0.032590109
9:58:00	-0.232318889	-0.0182653	0.035772483	9:58:04	-0.225472478	-0.025169047	0.038954857
9:58:08	-0.218626068	-0.030862893	0.042137231	9:58:12	-0.211779657	-0.036556739	0.045319605
9:58:16	-0.204933247	-0.041705387	0.048501979	9:58:20	-0.198086836	-0.046308836	0.051684353
9:58:24	-0.191240426	-0.050912284	0.054866727	9:58:28	-0.184394015	-0.058737095	0.058049101
9:58:32	-0.186183555	-0.071709663	0.049530495	9:58:36	-0.188130622	-0.077876998	0.040798452
9:58:40	-0.190077689	-0.077145206	0.03206641	9:58:44	-0.192024756	-0.076413413	0.023334368
9:58:48	-0.257822586	-0.128288947	-0.060608352	9:58:52	-0.328441311	-0.183038144	-0.183690771
9:58:56	-0.319698244	-0.189303218	-0.199244694	9:59:00	-0.318538267	-0.198910667	-0.192759627
9:59:04	-0.332935006	-0.217791234	-0.186274561	9:59:08	-0.347331745	-0.221679488	-0.179789495
9:59:12	-0.361728484	-0.225567744	-0.173304428	9:59:16	-0.375658727	-0.231308996	-0.166187301
9:59:20	-0.387123709	-0.237711811	-0.155729951	9:59:24	-0.39858869	-0.244114627	-0.145272602
9:59:28	-0.409243763	-0.245443023	-0.133717896	9:59:32	-0.416611706	-0.244812011	-0.117709407
9:59:36	-0.423979649	-0.237077323	-0.101700919	9:59:40	-0.441678683	-0.228397161	-0.099989592
9:59:44	-0.427244381	-0.200562816	-0.103439694	9:59:48	-0.41281008	-0.173407709	-0.106889795
9:59:52	-0.369247109	-0.128889454	-0.110339896	9:59:56	-0.316898819	-0.07988114	-0.113789998
10:00:00	0.197634283	0.405750297	0.382759901	10:00:04	0.1188972	0.350111834	0.3793098
10:00:08	0.136413354	0.364347189	0.375859698	10:00:12	-0.35031081	-0.123945043	-0.127590403
10:00:16	-0.337034974	-0.112237267	-0.131040505	10:00:20	-0.323759137	-0.1005295	-0.134490606
10:00:24	-0.310483301	-0.088821732	-0.137940707	10:00:28	-0.297207465	-0.087740188	-0.141390809
10:00:32	-0.230210109	-0.054636069	-0.14484091	10:00:36	-0.283415451	-0.101268645	-0.148291011
10:00:40	-0.336620793	-0.150596458	-0.151741113	10:00:44	-0.389826135	-0.199924274	-0.155191214
10:00:48	-0.409114404	-0.224719807	-0.158641316	10:00:52	-0.318065913	-0.183745309	-0.162091417
10:00:56	-0.240634139	-0.146426756	-0.165541518	10:01:00	-0.2808047	-0.174748362	-0.16899162
10:01:04	-0.320253185	-0.20263955	-0.172441721	10:01:08	-0.35970167	-0.217776136	-0.175891822
10:01:12	-0.399150155	-0.232912723	-0.179341924	10:01:16	-0.43859864	-0.25182384	-0.182792025
10:01:20	-0.478047125	-0.274509491	-0.186242126	10:01:24	-0.471342626	-0.269684062	-0.189692228
10:01:28	-0.443884269	-0.260131941	-0.193142329	10:01:32	-0.416425912	-0.25057982	-0.196592431
10:01:36	-0.388967555	-0.241953464	-0.200042532	10:01:40	-0.349549257	-0.22650656	-0.187287928
10:01:44	-0.304743466	-0.207848255	-0.167233726	10:01:48	-0.266535142	-0.198135069	-0.147179525
10:01:52	-0.245618152	-0.198728979	-0.127125323	10:01:56	-0.224701162	-0.195147629	-0.107071122
10:02:00	-0.203784173	-0.190174531	-0.08701692	10:02:04	-0.183578846	-0.185625639	-0.066962719
10:02:08	-0.16337352	-0.178622433	-0.046908518	10:02:12	-0.149828687	-0.175589445	-0.035878719
10:02:16	-0.214507676	-0.228064302	-0.076644865	10:02:20	-0.275246747	-0.28707048	-0.117411011
10:02:24	-0.335985818	-0.34607665	-0.158177157	10:02:28	-0.369317617	-0.390709063	-0.161808775
10:02:32	-0.397968921	-0.432551514	-0.159098718	10:02:36	-0.426620224	-0.475907979	-0.156388661
10:02:40	-0.425647071	-0.50311978	-0.153678604	10:02:44	-0.364401998	-0.494155398	-0.150968546
10:02:48	-0.303156924	-0.484443903	-0.148258489	10:02:52	-0.26786053	-0.490200014	-0.145548432
10:02:56	-0.31586067	-0.547673506	-0.142838375	10:03:00	-0.36386081	-0.607212606	-0.140128318
10:03:04	-0.398728741	-0.6589238	-0.137262889	10:03:08	-0.383071274	-0.658066486	-0.123387322
10:03:12	-0.367413807	-0.657209172	-0.109511754	10:03:16	-0.35175634	-0.649403977	-0.095636187
10:03:20	-0.336098873	-0.634650828	-0.081760619	10:03:24	-0.321885489	-0.620758475	-0.069841661
10:03:28	-0.323901649	-0.608742557	-0.079912359	10:03:32	-0.324449341	-0.588053526	-0.089983057
10:03:36	-0.341653946	-0.570903141	-0.100053755	10:03:40	-0.354691788	-0.544878765	-0.104478843
10:03:44	-0.36440786	-0.516874297	-0.104403214	10:03:48	-0.374123932	-0.482208031	-0.104327585
10:03:52	-0.383840004	-0.447541783	-0.104251956	10:03:56	-0.38918332	-0.41063483	-0.104176327
10:04:00	-0.377817029	-0.364133387	-0.104100698	10:04:04	-0.366846478	-0.317867838	-0.104025068
10:04:08	-0.355875927	-0.287777033	-0.103949439	10:04:12	-0.344905376	-0.257686236	-0.10387381
10:04:16	-0.333934825	-0.236458894	-0.103798181	10:04:20	-0.322964273	-0.224095014	-0.103722552
10:04:24	-0.282498167	-0.194149291	-0.103646923	10:04:28	-0.285232362	-0.188723862	-0.103571293
10:04:32	-0.28131989	-0.17933646	-0.103495664	10:04:36	-0.277407418	-0.166229943	-0.103420035
10:04:40	-0.273494946	-0.149404313	-0.103344406	10:04:44	-0.269582474	-0.132578683	-0.103268777

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
10:04:48	-0.265670002	-0.124125815	-0.103193148	10:04:52	-0.26175753	-0.115672945	-0.103117518
10:04:56	-0.258247063	-0.105816112	-0.103041889	10:05:00	-0.25603592	-0.095090195	-0.10296626
10:05:04	-0.253414582	-0.084119763	-0.102890631	10:05:08	-0.250793244	-0.064962423	-0.102815002
10:05:12	-0.248171906	-0.045805092	-0.102739373	10:05:16	-0.245550568	-0.031840961	-0.102663743
10:05:20	-0.242929231	-0.019607903	-0.102588114	10:05:24	-0.240307893	-0.007374845	-0.102512485
10:05:28	-0.237686555	0.008630744	-0.102436856	10:05:32	-0.235065217	0.024636305	-0.102361227
10:05:36	-0.232443879	0.037970393	-0.102285598	10:05:40	-0.229822541	0.04863299	-0.102209968
10:05:44	-0.227201204	0.059295568	-0.102134339	10:05:48	-0.224579866	0.066617672	-0.10205871
10:05:52	-0.221958528	0.073939776	-0.101983081	10:05:56	-0.21933719	0.080370306	-0.101907452
10:06:00	-0.216715852	0.086503631	-0.101831823	10:06:04	-0.213619682	0.092919997	-0.101756194
10:06:08	-0.210523512	0.102349505	-0.101680564	10:06:12	-0.207427342	0.111779031	-0.101604935
10:06:16	-0.204331172	0.124778889	-0.101529306	10:06:20	-0.201235001	0.141349115	-0.101453677
10:06:24	-0.198138831	0.157919323	-0.101378048	10:06:28	-0.195042661	0.176663078	-0.101302419
10:06:32	-0.191946491	0.195406832	-0.101226789	10:06:36	-0.188850321	0.20667687	-0.10115116
10:06:40	-0.185754151	0.21047312	-0.101075531	10:06:44	-0.191318108	0.209107238	-0.100999902
10:06:48	-0.204821931	0.191377121	-0.100924273	10:06:52	-0.218325755	0.173646969	-0.100848644
10:06:56	-0.226465893	0.154178477	-0.100773014	10:07:00	-0.222689299	0.136877797	-0.100697385
10:07:04	-0.219579521	0.119179638	-0.100621756	10:07:08	-0.216469743	0.108779308	-0.100546127
10:07:12	-0.213359965	0.098378995	-0.100470498	10:07:16	-0.2112674	0.089066238	-0.101773106
10:07:20	-0.209246965	0.081404385	-0.103173443	10:07:24	-0.207603437	0.073517863	-0.104573781
10:07:28	-0.206003868	0.062890141	-0.105974118	10:07:32	-0.204404299	0.052262402	-0.107374455
10:07:36	-0.202804729	0.036484853	-0.108774792	10:07:40	-0.209575212	0.010568209	-0.110175129
10:07:44	-0.221486755	-0.018412932	-0.111575467	10:07:48	-0.229950179	-0.046675052	-0.112975804
10:07:52	-0.234791768	-0.072778249	-0.114376141	10:07:56	-0.239633357	-0.100693179	-0.115776478
10:08:00	-0.244474946	-0.13041984	-0.117176816	10:08:04	-0.24898518	-0.159948986	-0.118577153
10:08:08	-0.253495415	-0.190927963	-0.11997749	10:08:12	-0.194720638	-0.184183722	-0.121377827
10:08:16	-0.198677185	-0.207278655	-0.122778165	10:08:20	-0.202633731	-0.227855585	-0.124178502
10:08:24	-0.206590278	-0.248432514	-0.125578839	10:08:28	-0.210546825	-0.260572532	-0.126979176
10:08:32	-0.214503372	-0.27271256	-0.128379513	10:08:36	-0.218459919	-0.285292886	-0.129779851
10:08:40	-0.222416465	-0.298313501	-0.131180188	10:08:44	-0.226373012	-0.311334116	-0.132580525
10:08:48	-0.230329559	-0.343416968	-0.133980862	10:08:52	-0.234286106	-0.375499837	-0.1353812
10:08:56	-0.238242653	-0.390268481	-0.136781537	10:09:00	-0.2421992	-0.399265747	-0.138181874
10:09:04	-0.246286535	-0.408340955	-0.139582211	10:09:08	-0.25037387	-0.438273186	-0.140982549
10:09:12	-0.254461205	-0.468205416	-0.142382886	10:09:16	-0.25854854	-0.490494081	-0.143783223
10:09:20	-0.263350114	-0.50556491	-0.146151293	10:09:24	-0.269227022	-0.521276729	-0.14997635
10:09:28	-0.27510393	-0.536988548	-0.153801406	10:09:32	-0.280980838	-0.552700367	-0.157626463
10:09:36	-0.286857746	-0.560745544	-0.161451519	10:09:40	-0.292734654	-0.561124115	-0.165276576
10:09:44	-0.298611562	-0.561502687	-0.169101632	10:09:48	-0.30448847	-0.550228679	-0.172926689
10:09:52	-0.310365378	-0.538954636	-0.176751745	10:09:56	-0.316242286	-0.53391039	-0.180576802
10:10:00	-0.322119194	-0.530942695	-0.184401858	10:10:04	-0.328253504	-0.528128434	-0.188226915
10:10:08	-0.334387815	-0.517665545	-0.192051971	10:10:12	-0.340522126	-0.507202656	-0.195877027
10:10:16	-0.346656436	-0.495641198	-0.199702084	10:10:20	-0.352790747	-0.482981153	-0.20352714
10:10:24	-0.358925058	-0.47032109	-0.207352197	10:10:28	-0.365059369	-0.459980493	-0.211177253
10:10:32	-0.371193679	-0.449639879	-0.21500231	10:10:36	-0.37732799	-0.436991363	-0.218827366
10:10:40	-0.374977744	-0.416977415	-0.211156568	10:10:44	-0.368692119	-0.394617649	-0.198153666
10:10:48	-0.362406495	-0.36493069	-0.185150763	10:10:52	-0.35612087	-0.335243721	-0.172147861
10:10:56	-0.349835246	-0.306019408	-0.159144959	10:11:00	-0.343549621	-0.276949315	-0.146142057
10:11:04	-0.337159277	-0.247816795	-0.133139154	10:11:08	-0.330768933	-0.216021644	-0.120136252
10:11:12	-0.324378589	-0.184226492	-0.10713335	10:11:16	-0.317988245	-0.168181186	-0.094130447
10:11:20	-0.312254422	-0.157777169	-0.081127545	10:11:24	-0.332279763	-0.162727791	-0.08249748
10:11:28	-0.359326982	-0.165549755	-0.093381461	10:11:32	-0.386374201	-0.168371719	-0.104265443
10:11:36	-0.413421419	-0.167017317	-0.115149425	10:11:40	-0.364227204	-0.116040217	-0.027820287
10:11:44	-0.343006264	-0.081737552	-0.014989988	10:11:48	-0.321785323	-0.042807439	-0.002159689
10:11:52	-0.300564383	-0.003877327	0.01067061	10:11:56	-0.279343442	0.031587976	0.023500909
10:12:00	-0.29434859	0.041994659	-0.012752069	10:12:04	-0.283706981	0.067688977	-0.014833268
10:12:08	-0.273065371	0.089712663	-0.016914468	10:12:12	-0.262423761	0.11173635	-0.018995667
10:12:16	-0.251782151	0.129162851	-0.021076867	10:12:20	-0.241140541	0.141992131	-0.023158066

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
10:12:24	-0.230498931	0.154821429	-0.025239265	10:12:28	-0.219857321	0.172236081	-0.027320465
10:12:32	-0.222400279	0.181791582	-0.029401664	10:12:36	-0.202516495	0.204715351	-0.031482864
10:12:40	-0.18263271	0.227639084	-0.033564063	10:12:44	-0.233743231	0.206732152	-0.035645262
10:12:48	-0.265257559	0.192969955	-0.037726462	10:12:52	-0.225484628	0.221700952	-0.039807661
10:12:56	-0.133885637	0.280611408	-0.041888861	10:13:00	-0.131916272	0.28538178	-0.04397006
10:13:04	-0.130152619	0.29002953	-0.04605126	10:13:08	-0.128388965	0.29467728	-0.048132459
10:13:12	-0.126625312	0.299325031	-0.050213658	10:13:16	-0.124861659	0.310380047	-0.052294858
10:13:20	-0.124120915	0.32723259	-0.054376057	10:13:24	-0.132108006	0.338882641	-0.056457257
10:13:28	-0.140095098	0.349190603	-0.058538456	10:13:32	-0.14808219	0.359498531	-0.060619656
10:13:36	-0.156069281	0.362217235	-0.062700855	10:13:40	-0.164056373	0.357346681	-0.064782054
10:13:44	-0.172043464	0.352476127	-0.066863254	10:13:48	-0.174061795	0.338333328	-0.068944453
10:13:52	-0.17358767	0.325676244	-0.071025653	10:13:56	-0.173113544	0.310064073	-0.073106852
10:14:00	-0.172639419	0.29149678	-0.075188052	10:14:04	-0.172191873	0.272913642	-0.077269251
10:14:08	-0.171744327	0.256010051	-0.07935045	10:14:12	-0.197080959	0.223736876	-0.08143165
10:14:16	-0.20021222	0.213813376	-0.083512849	10:14:20	-0.203343481	0.213003276	-0.085594049
10:14:24	-0.206474742	0.21219314	-0.087675248	10:14:28	-0.209606002	0.199396733	-0.089756448
10:14:32	-0.212737263	0.186600327	-0.091837647	10:14:36	-0.215868524	0.179056694	-0.093918846
10:14:40	-0.218999785	0.176765799	-0.096000046	10:14:44	-0.222131046	0.174474904	-0.098081245
10:14:48	-0.225262307	0.173647359	-0.1001162445	10:14:52	-0.228393568	-0.172819849	-0.102243644
10:14:56	-0.231524828	0.17041526	-0.104324844	10:15:00	-0.734656089	-0.333566337	-0.606406043
10:15:04	-0.73799883	-0.337674029	-0.608487242	10:15:08	-0.741341572	-0.350201445	-0.610568442
10:15:12	-0.244684313	0.137271157	-0.112649641	10:15:16	-0.248027054	0.124743742	-0.114730841
10:15:20	-0.251369795	0.112216344	-0.11681204	10:15:24	-0.254712536	0.099688928	-0.118893239
10:15:28	-0.258235947	0.084698468	-0.120974439	10:15:32	-0.265887825	0.067247092	-0.123055638
10:15:36	-0.283000909	0.044438159	-0.13795597	10:15:40	-0.302689146	0.020376356	-0.156345415
10:15:44	-0.322377383	-0.003685447	-0.174734859	10:15:48	-0.34206562	-0.042802391	-0.193124304
10:15:52	-0.361753857	-0.081919317	-0.211513748	10:15:56	-0.362129036	-0.108092478	-0.203735638
10:16:00	-0.359049054	-0.131728884	-0.191276077	10:16:04	-0.355767204	-0.155244965	-0.178816516
10:16:08	-0.353658954	-0.177395988	-0.167947084	10:16:12	-0.35392972	-0.200965106	-0.160301017
10:16:16	-0.354200487	-0.220467557	-0.15265495	10:16:20	-0.354471253	-0.235903342	-0.145008883
10:16:24	-0.359421108	-0.254128258	-0.137362815	10:16:28	-0.375044987	-0.264026242	-0.129716748
10:16:32	-0.390668866	-0.273924221	-0.122070681	10:16:36	-0.406292744	-0.288443092	-0.114424614
10:16:40	-0.421916623	-0.307582856	-0.106778547	10:16:44	-0.437540502	-0.32672262	-0.09913248
10:16:48	-0.453164381	-0.351771528	-0.091486413	10:16:52	-0.46878826	-0.376820422	-0.083840346
10:16:56	-0.484412139	-0.399352822	-0.076194279	10:17:00	-0.502938559	-0.42109887	-0.072480909
10:17:04	-0.525235692	-0.445092581	-0.073842945	10:17:08	-0.547532824	-0.478276239	-0.075204981
10:17:12	-0.36272112	-0.388005529	-0.076567017	10:17:16	-0.353031052	-0.394250023	-0.077929053
10:17:20	-0.427115936	-0.442559358	-0.079291089	10:17:24	-0.499230147	-0.489694005	-0.080653125
10:17:28	-0.460395364	-0.479314657	-0.082015162	10:17:32	-0.465116569	-0.494898357	-0.083377198
10:17:36	-0.479784209	-0.52141522	-0.084739234	10:17:40	-0.460991872	-0.532991318	-0.08610127
10:17:44	-0.452562999	-0.550744934	-0.087463306	10:17:48	-0.444134127	-0.565295362	-0.088825342
10:17:52	-0.405831981	-0.562038794	-0.090187378	10:17:56	-0.358773204	-0.55170186	-0.091549414
10:18:00	-0.311714427	-0.539504286	-0.09291145	10:18:04	-0.228485962	-0.505746522	-0.094273486
10:18:08	-0.250770421	-0.528192407	-0.095635522	10:18:12	-0.241977805	-0.532113695	-0.096997558
10:18:16	-0.270026576	-0.563183424	-0.098359594	10:18:20	-0.320909812	-0.613052249	-0.09972163
10:18:24	-0.372582217	-0.663391486	-0.101083666	10:18:28	-0.312903222	-0.614979744	-0.102445702
10:18:32	-0.314614535	-0.603161814	-0.103807738	10:18:36	-0.316325849	-0.605361513	-0.105169774
10:18:40	-0.318037162	-0.621578842	-0.10653181	10:18:44	-0.319748476	-0.637796206	-0.107893846
10:18:48	-0.321459789	-0.643901759	-0.109255883	10:18:52	-0.323171102	-0.650007312	-0.110617919
10:18:56	-0.324882416	-0.654424082	-0.111979955	10:19:00	-0.326593729	-0.658277923	-0.113341991
10:19:04	-0.328226885	-0.662085212	-0.114704027	10:19:08	-0.329860041	-0.654064087	-0.116066063
10:19:12	-0.331493197	-0.646042926	-0.117428099	10:19:16	-0.333126352	-0.633474179	-0.118790135
10:19:20	-0.334824799	-0.616396693	-0.120240634	10:19:24	-0.336645341	-0.599391988	-0.121856563
10:19:28	-0.338465884	-0.57475752	-0.123472493	10:19:32	-0.340286426	-0.550123087	-0.125088422
10:19:36	-0.342106969	-0.531466797	-0.126704351	10:19:40	-0.343927511	-0.518788684	-0.12832028
10:19:44	-0.345748054	-0.506110572	-0.129936209	10:19:48	-0.347568596	-0.491212706	-0.131552138
10:19:52	-0.349389138	-0.476314841	-0.133168068	10:19:56	-0.351209681	-0.457740606	-0.134783997

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
10:20:00	-0.353030223	-0.435490001	-0.136399926	10:20:04	-0.354374723	-0.412955652	-0.138015855
10:20:08	-0.355719222	-0.387205981	-0.139631784	10:20:12	-0.357063722	-0.361456328	-0.141247713
10:20:16	-0.358408221	-0.341995548	-0.142863643	10:20:20	-0.359752721	-0.32882365	-0.144479572
10:20:24	-0.353765048	-0.311281167	-0.146095501	10:20:28	-0.329651198	-0.294847662	-0.14771143
10:20:32	-0.305537348	-0.278414157	-0.149327359	10:20:36	-0.284544796	-0.2649005	-0.150943288
10:20:40	-0.295177323	-0.271297373	-0.152559218	10:20:44	-0.30580985	-0.277694245	-0.154175147
10:20:48	-0.316442377	-0.27682562	-0.155791076	10:20:52	-0.371995518	-0.302733486	-0.218270626
10:20:56	-0.377058702	-0.298545067	-0.212340567	10:21:00	-0.382121885	-0.294356648	-0.206410508
10:21:04	-0.373361309	-0.281928099	-0.20048045	10:21:08	-0.373971874	-0.270217495	-0.194602523
10:21:12	-0.375973737	-0.259336219	-0.190609686	10:21:16	-0.3779756	-0.25045115	-0.18661685
10:21:20	-0.379977462	-0.243562286	-0.182624013	10:21:24	-0.381979325	-0.23667342	-0.178631176
10:21:28	-0.383981188	-0.239524238	-0.174638339	10:21:32	-0.38598305	-0.242375056	-0.170645503
10:21:36	-0.387984913	-0.245225874	-0.166652666	10:21:40	-0.389986776	-0.248076691	-0.162659829
10:21:44	-0.391988638	-0.250927509	-0.158666993	10:21:48	-0.393990501	-0.258794974	-0.154674156
10:21:52	-0.395992364	-0.266662441	-0.150681319	10:21:56	-0.397994226	-0.273499242	-0.146688482
10:22:00	-0.399996089	-0.279305379	-0.142695646	10:22:04	-0.401778765	-0.284980863	-0.138702809
10:22:08	-0.403561441	-0.286715594	-0.134709972	10:22:12	-0.405344117	-0.288450324	-0.130717135
10:22:16	-0.392731488	-0.281980027	-0.126274299	10:22:20	-0.352777214	-0.25958758	-0.122731462
10:22:24	-0.31282294	-0.237195133	-0.118738625	10:22:28	-0.282423242	-0.217528669	-0.114745789
10:22:32	-0.274793739	-0.211435165	-0.110752952	10:22:36	-0.267164235	-0.20534166	-0.106760115
10:22:40	-0.259534731	-0.199248156	-0.102767278	10:22:44	-0.251905228	-0.193154651	-0.098774442
10:22:48	-0.244275724	-0.179889952	-0.094781605	10:22:52	-0.236646221	-0.166625252	-0.090788768
10:22:56	-0.229016717	-0.161062528	-0.086795931	10:23:00	-0.221387213	-0.16320178	-0.082803095
10:23:04	-0.214775097	-0.165947482	-0.078810258	10:23:08	-0.227492449	-0.17114191	-0.10100721
10:23:12	-0.332125719	-0.231125992	-0.079279016	10:23:16	-0.321612475	-0.223766584	-0.057550822
10:23:20	-0.311099232	-0.217700737	-0.035822628	10:23:24	-0.300585988	-0.21163489	-0.014094434
10:23:28	-0.301185445	-0.210962272	-0.008077482	10:23:32	-0.291549029	-0.204188212	-0.015636024
10:23:36	-0.281912614	-0.199774722	-0.023194565	10:23:40	-0.272276199	-0.197721801	-0.030753107
10:23:44	-0.262639784	-0.195668879	-0.038311649	10:23:48	-0.253003369	-0.204443169	-0.045870191
10:23:52	-0.243366953	-0.213217459	-0.053428733	10:23:56	-0.233730538	-0.217431332	-0.060987274
10:24:00	-0.224094123	-0.217084779	-0.068545816	10:24:04	-0.239885019	-0.231895061	-0.076104358
10:24:08	-0.263196223	-0.242092466	-0.0836629	10:24:12	-0.286507426	-0.25228987	-0.091221442
10:24:16	-0.30981863	-0.26754938	-0.098779983	10:24:20	-0.333129834	-0.287870986	-0.106338525
10:24:24	-0.356441037	-0.308192601	-0.113897067	10:24:28	-0.379752241	-0.33130148	-0.121455609
10:24:32	-0.403063445	-0.354410359	-0.129014151	10:24:36	-0.419026484	-0.372651328	-0.136572692
10:24:40	-0.41092964	-0.376062782	-0.144131234	10:24:44	-0.402832797	-0.379474245	-0.151689776
10:24:48	-0.393069039	-0.369307881	-0.15698979	10:24:52	-0.382951847	-0.358930841	-0.16181093
10:24:56	-0.372834654	-0.347596914	-0.166632069	10:25:00	-0.362717462	-0.335306082	-0.171453209
10:25:04	-0.353528075	-0.323568301	-0.176274349	10:25:08	-0.344338688	-0.306405562	-0.181095489
10:25:12	-0.333463427	-0.288237908	-0.183632412	10:25:16	-0.317734275	-0.264476122	-0.179592726
10:25:20	-0.513148238	-0.363872674	-0.175553039	10:25:24	-0.503316342	-0.340925352	-0.171513352
10:25:28	-0.493484446	-0.338035964	-0.167473665	10:25:32	-0.48365255	-0.335146572	-0.163433978
10:25:36	-0.473820654	-0.325946945	-0.159394291	10:25:40	-0.463988758	-0.310437079	-0.155354605
10:25:44	-0.455412646	-0.295675765	-0.151314918	10:25:48	-0.455455719	-0.280211994	-0.147275231
10:25:52	-0.455498792	-0.264748223	-0.143235544	10:25:56	-0.455541865	-0.250349591	-0.139195857
10:26:00	-0.455584938	-0.237016094	-0.135156171	10:26:04	-0.455189271	-0.223421074	-0.131116484
10:26:08	-0.454793605	-0.232026054	-0.127076797	10:26:12	-0.454397938	-0.240631034	-0.12303711
10:26:16	-0.454002271	-0.251646446	-0.118997423	10:26:20	-0.453606605	-0.265072289	-0.114957736
10:26:24	-0.453210938	-0.278498132	-0.11091805	10:26:28	-0.452815272	-0.271600255	-0.106878363
10:26:32	-0.452419605	-0.264702378	-0.102838676	10:26:36	-0.453727082	-0.256792564	-0.098798989
10:26:40	-0.45896878	-0.249200724	-0.094759302	10:26:44	-0.474199238	-0.24756303	-0.090719615
10:26:48	-0.474442477	-0.241829234	-0.086679929	10:26:52	-0.474685715	-0.236095436	-0.082640242
10:26:56	-0.474928953	-0.235816223	-0.078600555	10:27:00	-0.475172192	-0.237355201	-0.074560868
10:27:04	-0.498945466	-0.252920073	-0.102875458	10:27:08	-0.49417113	-0.249590224	-0.092646537
10:27:12	-0.489396793	-0.246260374	-0.082417616	10:27:16	-0.484622456	-0.244787917	-0.072188695
10:27:20	-0.479848119	-0.243934596	-0.061959774	10:27:24	-0.475073782	-0.243081274	-0.051730853
10:27:28	-0.426587131	-0.201945439	-0.041501932	10:27:32	-0.488309466	-0.226503474	-0.031273011

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
10:27:36	-0.472819998	-0.214828226	-0.017495521	10:27:40	-0.455525063	-0.211868236	-0.001271776
10:27:44	-0.459028941	-0.221306096	0.014951969	10:27:48	-0.475401034	-0.24246427	0.031175713
10:27:52	-0.487726764	-0.261210466	0.047399458	10:27:56	-0.440948765	-0.253456233	0.063623203
10:28:00	-0.394170766	-0.254432384	0.079846948	10:28:04	-0.346998004	-0.252329329	0.096070692
10:28:08	-0.299825241	-0.241694588	0.112294437	10:28:12	-0.252652479	-0.231059842	0.128518182
10:28:16	-0.205479716	-0.211872804	0.144741927	10:28:20	-0.23229633	-0.228237395	0.160965671
10:28:24	-0.164245823	-0.188053156	0.054226426	10:28:28	-0.228343938	-0.231167083	-0.01642705
10:28:32	-0.292442054	-0.274281009	-0.087080527	10:28:36	-0.345545986	-0.303497279	-0.142837818
10:28:40	-0.376894953	-0.312401548	-0.169118976	10:28:44	-0.376341607	-0.302289343	-0.152175208
10:28:48	-0.362056653	-0.283991944	-0.116626275	10:28:52	-0.347771699	-0.26569454	-0.081077342
10:28:56	-0.333486746	-0.245017336	-0.045528409	10:29:00	-0.319201792	-0.223546868	-0.009979476
10:29:04	-0.251621329	-0.170307773	0.025569457	10:29:08	-0.214101006	-0.13868824	0.016596424
10:29:12	-0.243355022	-0.146871857	-0.023997082	10:29:16	-0.279540315	-0.157076132	-0.064590588
10:29:20	-0.304502503	-0.158479521	-0.105184094	10:29:24	-0.329464692	-0.159882912	-0.145777599
10:29:28	-0.354426881	-0.170529599	-0.186371105	10:29:32	-0.360626817	-0.169992391	-0.20154335
10:29:36	-0.50698147	-0.254061767	-0.175678868	10:29:40	-0.481170348	-0.236568309	-0.149814385
10:29:44	-0.455359227	-0.219074851	-0.123949902	10:29:48	-0.429548106	-0.205284632	-0.09808542
10:29:52	-0.403736985	-0.191494413	-0.072220937	10:29:56	-0.377925863	-0.177704194	-0.046356454
10:30:00	0.147885258	0.336086025	0.479508029	10:30:04	0.151454669	0.336618306	0.476393009
10:30:08	0.154840326	0.339573234	0.473029018	10:30:12	-0.341774017	-0.157471838	-0.030334973
10:30:16	-0.33838836	-0.150779483	-0.033698964	10:30:20	-0.335002702	-0.140349692	-0.037062955
10:30:24	-0.331617045	-0.129919905	-0.040426946	10:30:28	-0.328231388	-0.127456225	-0.043790937
10:30:32	-0.324845731	-0.124992544	-0.047154928	10:30:36	-0.321460074	-0.126222868	-0.050518919
10:30:40	-0.318074417	-0.13114719	-0.05388291	10:30:44	-0.31468876	-0.137206787	-0.057246901
10:30:48	-0.312491294	-0.147380463	-0.06222079	10:30:52	-0.399814811	-0.210916206	-0.074973005
10:30:56	-0.385965647	-0.212448552	-0.08772522	10:31:00	-0.370183054	-0.211132477	-0.098006499
10:31:04	-0.343061169	-0.203057226	-0.099439858	10:31:08	-0.315939283	-0.201582043	-0.100873216
10:31:12	-0.288817398	-0.200106861	-0.102306574	10:31:16	-0.261695512	-0.200290083	-0.103739933
10:31:20	-0.386151509	-0.29248494	-0.105173291	10:31:24	-0.379862835	-0.306744922	-0.106606649
10:31:28	-0.373574161	-0.317117583	-0.108040008	10:31:32	-0.367285488	-0.327490244	-0.109473366
10:31:36	-0.360996814	-0.336579929	-0.110906724	10:31:40	-0.35470814	-0.344386639	-0.112340083
10:31:44	-0.348419466	-0.35219334	-0.113773441	10:31:48	-0.342130793	-0.350991817	-0.115206799
10:31:52	-0.340636317	-0.352648033	-0.116640158	10:31:56	-0.357821492	-0.3654389	-0.118073516
10:32:00	-0.375006668	-0.378229784	-0.119506874	10:32:04	-0.39193707	-0.390868784	-0.120940233
10:32:08	-0.408867472	-0.403507784	-0.122373591	10:32:12	-0.397877955	-0.399504153	-0.123806949
10:32:16	-0.384800091	-0.390646614	-0.125240308	10:32:20	-0.371722227	-0.378179979	-0.126673666
10:32:24	-0.358644362	-0.365713345	-0.128107025	10:32:28	-0.345566498	-0.346053002	-0.129540383
10:32:32	-0.332525323	-0.326414537	-0.131023452	10:32:36	-0.319495238	-0.311022469	-0.132521548
10:32:40	-0.306465154	-0.299870204	-0.134019643	10:32:44	-0.293435069	-0.288717931	-0.135517739
10:32:48	-0.287404532	-0.27488124	-0.137015834	10:32:52	-0.296983858	-0.270349346	-0.13851393
10:32:56	-0.306563184	-0.27058151	-0.140012025	10:33:00	-0.299548411	-0.265686265	-0.141510121
10:33:04	-0.299511406	-0.262556743	-0.143008216	10:33:08	-0.299474401	-0.252246373	-0.144506312
10:33:12	-0.299437397	-0.241935999	-0.146004407	10:33:16	-0.299400392	-0.233195997	-0.147502503
10:33:20	-0.299363387	-0.226026365	-0.149000598	10:33:24	-0.299326382	-0.218856732	-0.150498694
10:33:28	-0.299289378	-0.223642198	-0.151996789	10:33:32	-0.299252373	-0.228427664	-0.153494885
10:33:36	-0.299215368	-0.229897117	-0.15499298	10:33:40	-0.299178363	-0.228050566	-0.156491076
10:33:44	-0.299141358	-0.226204015	-0.157989171	10:33:48	-0.299104354	-0.229637419	-0.159487267
10:33:52	-0.299067349	-0.233070822	-0.160985362	10:33:56	-0.299030344	-0.230066354	-0.162483458
10:34:00	-0.293524278	-0.217363994	-0.156571439	10:34:04	-0.287234546	-0.204194502	-0.149475815
10:34:08	-0.280944814	-0.202063195	-0.142380191	10:34:12	-0.274655082	-0.199931888	-0.135284567
10:34:16	-0.26836535	-0.191732921	-0.128188943	10:34:20	-0.262075617	-0.177466292	-0.12109332
10:34:24	-0.255785885	-0.163199663	-0.113997696	10:34:28	-0.249496153	-0.140932992	-0.106902072
10:34:32	-0.243206421	-0.118666321	-0.099806448	10:34:36	-0.236916689	-0.099332638	-0.092710824
10:34:40	-0.230626957	-0.082931947	-0.0856152	10:34:44	-0.224337225	-0.066531256	-0.078519576
10:34:48	-0.218047493	-0.061244132	-0.071423953	10:34:52	-0.214780112	-0.057758584	-0.068423359
10:34:56	-0.212639735	-0.056514515	-0.066949759	10:35:00	-0.210499358	-0.05684014	-0.065476159
10:35:04	-0.208395115	-0.057031351	-0.06400256	10:35:08	-0.206290872	-0.056754707	-0.06252896

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
10:35:12	-0.204186629	-0.056478068	-0.061055361	10:35:16	-0.202082385	-0.056201423	-0.059581761
10:35:20	-0.199978142	-0.047487127	-0.058108162	10:35:24	-0.197873899	-0.038772836	-0.056634562
10:35:28	-0.195769656	-0.035887907	-0.055160963	10:35:32	-0.193665412	-0.033002969	-0.053687363
10:35:36	-0.191561169	-0.033332279	-0.052213764	10:35:40	-0.189456926	-0.034733014	-0.050740164
10:35:44	-0.187352683	-0.037107947	-0.049266565	10:35:48	-0.185248439	-0.042405529	-0.047792965
10:35:52	-0.183144196	-0.047703102	-0.046319366	10:35:56	-0.181039953	-0.055980317	-0.044845766
10:36:00	-0.155409033	-0.051226861	-0.043372167	10:36:04	-0.167968509	-0.066129241	-0.041898567
10:36:08	-0.180527984	-0.071705027	-0.040424968	10:36:12	-0.183803013	-0.071746498	-0.038951368
10:36:16	-0.164589335	-0.0626246	-0.037477769	10:36:20	-0.158511304	-0.06274659	-0.036004169
10:36:24	-0.160283748	-0.066684805	-0.03453057	10:36:28	-0.162056192	-0.068033054	-0.03305697
10:36:32	-0.163828637	-0.069381302	-0.031583371	10:36:36	-0.176210368	-0.0739662	-0.044484455
10:36:40	-0.201110682	-0.084984101	-0.074347156	10:36:44	-0.226010995	-0.093819578	-0.104209858
10:36:48	-0.247043383	-0.093802157	-0.128831848	10:36:52	-0.248062365	-0.081855054	-0.126337371
10:36:56	-0.249081347	-0.07215866	-0.123842893	10:37:00	-0.250100328	-0.063212504	-0.121348416
10:37:04	-0.251389704	-0.056935334	-0.118853938	10:37:08	-0.252679081	-0.058181595	-0.116359461
10:37:12	-0.253968457	-0.059427856	-0.113864983	10:37:16	-0.255257833	-0.051477517	-0.111370506
10:37:20	-0.251133461	-0.037234596	-0.108876028	10:37:24	-0.246808084	-0.028624755	-0.106381551
10:37:28	-0.242482708	-0.037273571	-0.103887073	10:37:32	-0.238157332	-0.045922386	-0.101392596
10:37:36	-0.258805739	-0.070567901	-0.098898118	10:37:40	-0.290636396	-0.102249056	-0.096403641
10:37:44	-0.322467053	-0.1402116	-0.093909163	10:37:48	-0.354297709	-0.197018309	-0.091414686
10:37:52	-0.386128366	-0.253825019	-0.088920208	10:37:56	-0.417959023	-0.299584041	-0.086425731
10:38:00	-0.44978968	-0.345343056	-0.083931253	10:38:04	-0.481751229	-0.390718869	-0.081436776
10:38:08	-0.505937275	-0.430076124	-0.078942298	10:38:12	-0.481538553	-0.440472752	-0.076447821
10:38:16	-0.457139831	-0.429689395	-0.073953343	10:38:20	-0.435344234	-0.413397743	-0.074985879
10:38:24	-0.426137857	-0.404610331	-0.09307574	10:38:28	-0.416931479	-0.39582291	-0.111165601
10:38:32	-0.407725102	-0.387035498	-0.129255462	10:38:36	-0.383949564	-0.374335065	-0.127605346
10:38:40	-0.358472211	-0.362210689	-0.123649415	10:38:44	-0.332994859	-0.35140751	-0.119693485
10:38:48	-0.324116503	-0.354462289	-0.115737554	10:38:52	-0.40050528	-0.408343485	-0.111781624
10:38:56	-0.476894056	-0.455005513	-0.107825693	10:39:00	-0.55138506	-0.498129885	-0.103869763
10:39:04	-0.553853325	-0.500843874	-0.099913832	10:39:08	-0.556321591	-0.511121593	-0.095957902
10:39:12	-0.519266292	-0.497839929	-0.092001971	10:39:16	-0.469260559	-0.472187309	-0.088046041
10:39:20	-0.419254825	-0.444984202	-0.08409011	10:39:24	-0.369249092	-0.413230934	-0.08013418
10:39:28	-0.372350929	-0.408584139	-0.076178249	10:39:32	-0.260036716	-0.335139607	-0.072222319
10:39:36	-0.339957771	-0.372966639	-0.068266388	10:39:40	-0.381627573	-0.386887051	-0.064310458
10:39:44	-0.40147638	-0.388313911	-0.060354527	10:39:48	-0.378212512	-0.364555551	-0.056398597
10:39:52	-0.361389009	-0.344636193	-0.052442666	10:39:56	-0.373480282	-0.33430216	-0.048486736
10:40:00	-0.385571556	-0.321418014	-0.044530805	10:40:04	-0.398113485	-0.320160927	-0.040574875
10:40:08	-0.415409311	-0.333095977	-0.036618944	10:40:12	-0.346655384	-0.294738112	-0.032663014
10:40:16	-0.279042403	-0.262307908	-0.028707083	10:40:20	-0.22569703	-0.240131605	-0.024751153
10:40:24	-0.261937554	-0.262475607	-0.020795222	10:40:28	-0.206515402	-0.221300458	0.046823762
10:40:32	-0.132238537	-0.168886307	0.139989285	10:40:36	-0.170014884	-0.17469737	0.081332211
10:40:40	-0.199545949	-0.172737561	0.033846793	10:40:44	-0.214393796	-0.161527658	0.00625589
10:40:48	-0.229241644	-0.148824796	-0.021335012	10:40:52	-0.236838022	-0.131799447	-0.036623033
10:40:56	-0.231076344	-0.112567136	-0.033274822	10:41:00	-0.225314667	-0.095253347	-0.029926611
10:41:04	-0.218362405	-0.077945958	-0.0265784	10:41:08	-0.211410144	-0.062786832	-0.023230189
10:41:12	-0.204457883	-0.047627707	-0.019881978	10:41:16	-0.197505621	-0.034747295	-0.016533767
10:41:20	-0.19055336	-0.022626444	-0.013185556	10:41:24	-0.183601098	-0.011956552	-0.009837345
10:41:28	-0.176648837	-0.005639492	-0.006489134	10:41:32	-0.169696575	0.000677569	-0.003140923
10:41:36	-0.162744314	0.019307744	0.000207288	10:41:40	-0.155792053	0.042042294	0.003555499
10:41:44	-0.148839791	0.059004381	0.00690371	10:41:48	-0.14188753	0.058649073	0.010251921
10:41:52	-0.136870772	0.057140041	0.010977689	10:41:56	-0.133018386	0.05239247	0.010125831
10:42:00	-0.137879716	0.041602623	0.009273973	10:42:04	-0.155250245	0.021723872	0.008422114
10:42:08	-0.167371042	7.73076E-05	0.00750256	10:42:12	-0.179491839	-0.021569266	0.006718398
10:42:16	-0.191612636	-0.038762113	0.00586654	10:42:20	-0.203733433	-0.054470372	0.005014681
10:42:24	-0.34671176	-0.147632994	0.004162823	10:42:28	-0.347135481	-0.154177665	0.003310965
10:42:32	-0.339506968	-0.155922524	0.002459107	10:42:36	-0.331878455	-0.159648334	0.001607248
10:42:40	-0.324249941	-0.164034465	0.00075539	10:42:44	-0.316621428	-0.169464894	-9.64682E-05

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
10:42:48	-0.308992915	-0.178028223	-0.000948327	10:42:52	-0.301364402	-0.186591551	-0.001800185
10:42:56	-0.293735888	-0.190474721	-0.002652043	10:43:00	-0.286107375	-0.192797838	-0.003503901
10:43:04	-0.279036794	-0.195623399	-0.00435576	10:43:08	-0.271966212	-0.198958561	-0.005207618
10:43:12	-0.264895631	-0.202293726	-0.006059476	10:43:16	-0.25782505	-0.206382715	-0.006911334
10:43:20	-0.250754468	-0.210722981	-0.007763193	10:43:24	-0.243683887	-0.214622403	-0.008615051
10:43:28	-0.236613306	-0.217199282	-0.009466909	10:43:32	-0.229542725	-0.219776171	-0.010318767
10:43:36	-0.222472143	-0.224009547	-0.011170626	10:43:40	-0.215401562	-0.228795076	-0.012022484
10:43:44	-0.208330981	-0.232823483	-0.012874342	10:43:48	-0.201260399	-0.234580504	-0.0137262
10:43:52	-0.194189818	-0.236337515	-0.014578059	10:43:56	-0.187119237	-0.223023744	-0.015429917
10:44:00	-0.180048655	-0.209709964	-0.016281775	10:44:04	-0.171195259	-0.193608985	-0.017133633
10:44:08	-0.1740244	-0.17929826	-0.017985492	10:44:12	-0.171056202	-0.161531835	-0.01883735
10:44:16	-0.168088004	-0.14803275	-0.019689208	10:44:20	-0.165119805	-0.135956115	-0.020541066
10:44:24	-0.162151607	-0.12590671	-0.021392925	10:44:28	-0.159183409	-0.121938996	-0.022244783
10:44:32	-0.156215211	-0.117971281	-0.023096641	10:44:36	-0.153247013	-0.110540969	-0.0239485
10:44:40	-0.150278815	-0.101956456	-0.024800358	10:44:44	-0.147310616	-0.093900267	-0.025652216
10:44:48	-0.144342418	-0.087429051	-0.026504074	10:44:52	-0.141049513	-0.080764283	-0.027355933
10:44:56	-0.137244122	-0.06775598	-0.027740795	10:45:00	-0.623604512	-0.54687297	-0.514801124
10:45:04	-0.611516885	-0.528779466	-0.501861454	10:45:08	-0.602948623	-0.518376978	-0.493690225
10:45:12	-0.101517955	-0.012229098	0.005797153	10:45:16	-0.101654925	-0.006054899	0.005284531
10:45:20	-0.101791896	0.000439548	0.004771909	10:45:24	-0.101928866	0.005908074	0.004259287
10:45:28	-0.102065837	0.008298848	0.003746665	10:45:32	-0.102202808	0.010689623	0.003234043
10:45:36	-0.102339778	0.014152594	0.002721421	10:45:40	-0.102476749	0.018687755	0.002208799
10:45:44	-0.102613719	0.023222915	0.001696177	10:45:48	-0.102750669	0.022216208	0.001183555
10:45:52	-0.10288766	0.021209509	0.000670933	10:45:56	-0.103024631	0.024402875	0.000158311
10:46:00	-0.103161601	0.031796314	-0.000354311	10:46:04	-0.101913574	0.040015328	-0.000866933
10:46:08	-0.100665546	0.049702933	-0.001379555	10:46:12	-0.099152396	0.059548573	-0.001892177
10:46:16	-0.09743475	0.064349691	-0.002404799	10:46:20	-0.095717104	0.063984398	-0.002917421
10:46:24	-0.093999458	0.063619105	-0.003430043	10:46:28	-0.092281811	0.048012967	-0.003942666
10:46:32	-0.090564165	0.03240683	-0.004455288	10:46:36	-0.088846519	0.015888542	-0.00496791
10:46:40	-0.087128872	-0.001541893	-0.005480532	10:46:44	-0.085411226	-0.01897233	-0.005993154
10:46:48	-0.08369358	-0.039022078	-0.006505776	10:46:52	-0.081975934	-0.059071826	-0.007018398
10:46:56	-0.080258287	-0.072955187	-0.00753102	10:47:00	-0.078540641	-0.080672162	-0.008043642
10:47:04	-0.078048328	-0.08911954	-0.008556264	10:47:08	-0.077779482	-0.087840024	-0.009068886
10:47:12	-0.077510637	-0.086560509	-0.009581508	10:47:16	-0.077241791	-0.086997184	-0.01009413
10:47:20	-0.076972946	-0.089150058	-0.010606752	10:47:24	-0.0767041	-0.091302927	-0.011119374
10:47:28	-0.076435254	-0.097212334	-0.011631996	10:47:32	-0.076166409	-0.103121741	-0.012144618
10:47:36	-0.075897563	-0.103319622	-0.01265724	10:47:40	-0.075628718	-0.097805979	-0.013169862
10:47:44	-0.075359872	-0.092292336	-0.013682484	10:47:48	-0.075091027	-0.086778693	-0.014195106
10:47:52	-0.074822181	-0.081265047	-0.014707728	10:47:56	-0.074553336	-0.071121329	-0.01522035
10:48:00	-0.07428449	-0.056347534	-0.015732972	10:48:04	-0.074819447	-0.042052874	-0.016245594
10:48:08	-0.075354403	-0.040644485	-0.016758216	10:48:12	-0.07588936	-0.039236095	-0.017270838
10:48:16	-0.076424317	-0.03614606	-0.01778346	10:48:20	-0.076959273	-0.031374379	-0.018296082
10:48:24	-0.07749423	-0.026602697	-0.018808704	10:48:28	-0.078029186	-0.021831017	-0.019321326
10:48:32	-0.078564143	-0.017059336	-0.019833948	10:48:36	-0.0790991	-0.010352518	-0.02034657
10:48:40	-0.079634056	-0.001710559	-0.020859192	10:48:44	-0.080169013	0.006931397	-0.021371815
10:48:48	-0.08070397	0.00074219	-0.021884437	10:48:52	-0.081238926	-0.005447022	-0.022397059
10:48:56	-0.081293279	-0.006736074	-0.022258502	10:49:00	-0.081299199	-0.003382581	-0.022054326
10:49:04	-0.081188394	4.04914E-05	-0.021850149	10:49:08	-0.081010969	0.013693996	-0.021645972
10:49:12	-0.080604414	0.027484076	-0.021441795	10:49:16	-0.08019786	0.032214802	-0.021237618
10:49:20	-0.079791305	0.033925733	-0.021033441	10:49:24	-0.079384751	0.035636664	-0.020829264
10:49:28	-0.078978196	0.036175063	-0.020625087	10:49:32	-0.078571642	0.036713461	-0.020420911
10:49:36	-0.078165087	0.036664194	-0.020216734	10:49:40	-0.077758533	0.036027244	-0.020012557
10:49:44	-0.077351979	0.035390304	-0.01980838	10:49:48	-0.076945424	0.037503516	-0.019604203
10:49:52	-0.07653887	0.039616738	-0.019400026	10:49:56	-0.076132315	0.048699327	-0.019195849
10:50:00	-0.076208138	0.064463765	-0.018991672	10:50:04	-0.075703036	0.080574474	-0.018787496
10:50:08	-0.075197935	0.092366815	-0.018583319	10:50:12	-0.074692833	0.104159156	-0.018379142
10:50:16	-0.074187731	0.11687774	-0.018174965	10:50:20	-0.073682629	0.130522566	-0.017970788

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
10:50:24	-0.073177528	0.144167393	-0.017766611	10:50:28	-0.072672426	0.148588643	-0.017562434
10:50:32	-0.072167324	0.153009894	-0.017358257	10:50:36	-0.071662222	0.160661443	-0.01715408
10:50:40	-0.071157121	0.171543307	-0.016949904	10:50:44	-0.070652019	0.182425172	-0.016745727
10:50:48	-0.070146917	0.200660717	-0.01654155	10:50:52	-0.069641815	0.21889628	-0.016337373
10:50:56	-0.069136714	0.239698345	-0.016133196	10:51:00	-0.068631612	0.263066948	-0.015929019
10:51:04	-0.069274347	0.285751325	-0.015724842	10:51:08	-0.069917083	0.297827261	-0.015520665
10:51:12	-0.070559818	0.309903197	-0.015316489	10:51:16	-0.071202553	0.315795489	-0.015112312
10:51:20	-0.071845289	0.315504137	-0.014908135	10:51:24	-0.072488024	0.315212785	-0.014703958
10:51:28	-0.073130759	0.318379616	-0.014499781	10:51:32	-0.073773495	0.321546412	-0.014295604
10:51:36	-0.07441623	0.32220604	-0.014091427	10:51:40	-0.075058965	0.3203585	-0.01388725
10:51:44	-0.075701701	0.31851096	-0.013683074	10:51:48	-0.076344436	0.313284893	-0.013478897
10:51:52	-0.076987172	0.308058791	-0.01327472	10:51:56	-0.077629907	0.29550816	-0.013070543
10:52:00	-0.078272642	0.275632964	-0.012866366	10:52:04	-0.078734059	0.25586585	-0.012662189
10:52:08	-0.079195476	0.220718856	-0.012458012	10:52:12	-0.079656893	0.185571861	-0.012253835
10:52:16	-0.08011831	0.157836478	-0.012049658	10:52:20	-0.080579726	0.132571651	-0.011845482
10:52:24	-0.081041143	0.107306805	-0.011641305	10:52:28	-0.08150256	0.078810196	-0.011437128
10:52:32	-0.081963977	0.050313586	-0.011232951	10:52:36	-0.082425394	0.029183058	-0.011028774
10:52:40	-0.082886811	0.01541861	-0.010824597	10:52:44	-0.083348228	0.001654161	-0.01062042
10:52:48	-0.083938159	-0.01468091	-0.01059037	10:52:52	-0.088507457	-0.03338802	-0.013804912
10:52:56	-0.094568626	-0.051266894	-0.017019453	10:53:00	-0.100629794	-0.068573262	-0.020233994
10:53:04	-0.106304462	-0.085649243	-0.023448536	10:53:08	-0.111979129	-0.106240911	-0.026663077
10:53:12	-0.117653796	-0.126832581	-0.029877619	10:53:16	-0.123328463	-0.138319046	-0.03309216
10:53:20	-0.12900313	-0.140700307	-0.036306701	10:53:24	-0.134677797	-0.143081567	-0.039521243
10:53:28	-0.140352464	-0.143798568	-0.042735784	10:53:32	-0.121301466	-0.124784209	-0.045950326
10:53:36	-0.12729326	-0.123819133	-0.049164867	10:53:40	-0.131695798	-0.125028383	-0.0502261
10:53:44	-0.151544595	-0.135444909	-0.044836012	10:53:48	-0.180553128	-0.143910573	-0.039445924
10:53:52	-0.209561662	-0.152376238	-0.034055835	10:53:56	-0.238570195	-0.16157433	-0.028665747
10:54:00	-0.267578729	-0.171504849	-0.023275659	10:54:04	-0.297355016	-0.181893015	-0.017885571
10:54:08	-0.327131304	-0.200325832	-0.012495482	10:54:12	-0.356907592	-0.21875865	-0.007105394
10:54:16	-0.38668388	-0.241192257	-0.001715306	10:54:20	-0.416460168	-0.267626656	0.003674782
10:54:24	-0.137132381	-0.109808906	0.00906487	10:54:28	-0.161072375	-0.141380429	0.014454959
10:54:32	-0.18501237	-0.172951955	0.019845047	10:54:36	-0.208952365	-0.207212781	0.025235135
10:54:40	-0.232892359	-0.242370049	0.030625223	10:54:44	-0.256832354	-0.277527309	0.036015312
10:54:48	-0.366414056	-0.357501623	0.0414054	10:54:52	-0.354800296	-0.365233211	0.046795488
10:54:56	-0.343186537	-0.369179105	0.052185576	10:55:00	-0.331572777	-0.369339305	0.057575664
10:55:04	-0.319575231	-0.369270736	0.062965753	10:55:08	-0.294688406	-0.365205118	0.068355841
10:55:12	-0.253394831	-0.351359692	0.073745929	10:55:16	-0.366634045	-0.435428935	0.079136017
10:55:20	-0.370608236	-0.460167042	0.084526106	10:55:24	-0.387112147	-0.492373938	0.089916194
10:55:28	-0.340636726	-0.48819738	0.095306282	10:55:32	-0.343778943	-0.513597108	0.10069637
10:55:36	-0.34692116	-0.532286344	0.106086459	10:55:40	-0.359588954	-0.55441684	0.098570198
10:55:44	-0.376730955	-0.576506858	0.084991766	10:55:48	-0.393872956	-0.590474606	0.071413334
10:55:52	-0.411014957	-0.60444239	0.057834902	10:55:56	-0.428156959	-0.621666088	0.04425647
10:56:00	-0.441278039	-0.637578259	0.036126045	10:56:04	-0.453241021	-0.651114341	0.029783646
10:56:08	-0.460862241	-0.657004934	0.023441247	10:56:12	-0.467267124	-0.662170487	0.017098847
10:56:16	-0.473672006	-0.66960047	0.010756448	10:56:20	-0.474631179	-0.674539173	0.011792524
10:56:24	-0.47452341	-0.681401356	0.014274214	10:56:28	-0.474415641	-0.695942047	0.016755904
10:56:32	-0.475450282	-0.71116371	0.019237595	10:56:36	-0.47843699	-0.716936764	0.021719285
10:56:40	-0.481423698	-0.719172404	0.024200976	10:56:44	-0.484410407	-0.719859921	0.026682666
10:56:48	-0.487397115	-0.715902892	0.029164356	10:56:52	-0.501018116	-0.718284836	0.031646047
10:56:56	-0.517567657	-0.716185056	0.034127737	10:57:00	-0.515024751	-0.700628759	0.036609427
10:57:04	-0.511129039	-0.680462155	0.039091118	10:57:08	-0.507233328	-0.648883862	0.041572808
10:57:12	-0.503337616	-0.617305569	0.044054499	10:57:16	-0.499441904	-0.584536721	0.046536189
10:57:20	-0.495546192	-0.551370991	0.049017879	10:57:24	-0.491701798	-0.524991288	0.05149957
10:57:28	-0.48790041	-0.505392639	0.05398126	10:57:32	-0.484099022	-0.48579399	0.056462951
10:57:36	-0.480297634	-0.454453886	0.058944641	10:57:40	-0.476496246	-0.419199978	0.061426331
10:57:44	-0.472694858	-0.387024506	0.063908022	10:57:48	-0.468832471	-0.364048	0.066389712
10:57:52	-0.465049159	-0.341118635	0.068235044	10:57:56	-0.463431022	-0.325064004	0.067146747

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
10:58:00	-0.461812885	-0.309009371	0.066058449	10:58:04	-0.459729046	-0.292004814	0.064970152
10:58:08	-0.457645206	-0.272983271	0.063881855	10:58:12	-0.455561366	-0.253961728	0.062793558
10:58:16	-0.453477526	-0.235321872	0.06170526	10:58:20	-0.451393687	-0.216809244	0.060616963
10:58:24	-0.449309847	-0.200431609	0.059528666	10:58:28	-0.449894368	-0.192049516	0.058440369
10:58:32	-0.450565929	-0.183719307	0.057352071	10:58:36	-0.45123749	-0.169884438	0.056263774
10:58:40	-0.451909051	-0.15421468	0.055175477	10:58:44	-0.452580612	-0.135208276	0.05408718
10:58:48	-0.453252173	-0.106191905	0.052998883	10:58:52	-0.453923734	-0.077175535	0.051910585
10:58:56	-0.454595295	-0.059670781	0.050822288	10:59:00	-0.455266855	-0.046003202	0.049733991
10:59:04	-0.456452906	-0.035301874	0.048645694	10:59:08	-0.457638956	-0.032579171	0.047557396
10:59:12	-0.458825006	-0.029856469	0.046469099	10:59:16	-0.460011057	-0.029091969	0.045380802
10:59:20	-0.461197107	-0.028980233	0.044292505	10:59:24	-0.462383157	-0.025801457	0.043204207
10:59:28	-0.463569208	-0.013421614	0.04211591	10:59:32	-0.464755258	-0.00104177	0.041027613
10:59:36	-0.465941308	0.008021741	0.039939316	10:59:40	-0.467127358	0.015979791	0.038851018
10:59:44	-0.468313409	0.023677036	0.037762721	10:59:48	-0.469499459	0.030591818	0.036674424
10:59:52	-0.470685509	0.0375066	0.035586127	10:59:56	-0.47187156	0.059491108	0.03449783
11:00:00	0.02694239	0.586498834	0.533409532	11:00:04	0.025800446	0.608879209	0.532321235
11:00:08	0.024658503	0.617298519	0.531232938	11:00:12	-0.476483441	0.125717828	0.030144641
11:00:16	-0.477625385	0.131730802	0.029056343	11:00:20	-0.478767329	0.136941664	0.027968046
11:00:24	-0.479254542	0.139688084	0.026879749	11:00:28	-0.479391328	0.134079167	0.025791452
11:00:32	-0.479528115	0.12847025	0.024703154	11:00:36	-0.479664901	0.11468751	0.023614857
11:00:40	-0.479801688	0.098180125	0.02252656	11:00:44	-0.479938475	0.082511768	0.021438263
11:00:48	-0.480075261	0.069360456	0.020349965	11:00:52	-0.480212048	0.056209144	0.019261668
11:00:56	-0.480880048	0.043140072	0.017453622	11:01:00	-0.481635128	0.030152115	0.015527589
11:01:04	-0.48303737	0.020220947	0.013601557	11:01:08	-0.484439611	0.020617501	0.011675524
11:01:12	-0.485841853	0.02101409	0.009749492	11:01:16	-0.487244095	0.021923724	0.007823459
11:01:20	-0.488646336	0.023004361	0.005897427	11:01:24	-0.490048578	0.022510157	0.003971394
11:01:28	-0.491450819	0.01729136	0.002045362	11:01:32	-0.492853061	0.012072563	0.000119329
11:01:36	-0.494255303	-0.000779141	-0.001806704	11:01:40	-0.495657544	-0.016175159	-0.003732736
11:01:44	-0.497059786	-0.032364015	-0.005658769	11:01:48	-0.498462028	-0.050931388	-0.007584801
11:01:52	-0.499864269	-0.06949876	-0.009510834	11:01:56	-0.500420785	-0.082399497	-0.01029098
11:02:00	-0.499571541	-0.092741433	-0.009166439	11:02:04	-0.496565907	-0.103273782	-0.008041899
11:02:08	-0.493560274	-0.118233521	-0.006917359	11:02:12	-0.49055464	-0.13319326	-0.005792818
11:02:16	-0.487549007	-0.154604997	-0.004668278	11:02:20	-0.484543373	-0.178167408	-0.003543737
11:02:24	-0.481537739	-0.199523151	-0.002419197	11:02:28	-0.478532106	-0.214258912	-0.001294656
11:02:32	-0.475526472	-0.228994674	-0.000170116	11:02:36	-0.472520839	-0.243730431	0.000954424
11:02:40	-0.469515205	-0.258466192	0.002078965	11:02:44	-0.466509572	-0.27188073	0.003235505
11:02:48	-0.463503938	-0.281331603	0.004328046	11:02:52	-0.460498305	-0.290782477	0.005452586
11:02:56	-0.457492671	-0.293208589	0.006577127	11:03:00	-0.454487038	-0.293293112	0.007701667
11:03:04	-0.452808423	-0.29587249	0.008826207	11:03:08	-0.451129809	-0.30356339	0.009950748
11:03:12	-0.449451194	-0.31125429	0.011075288	11:03:16	-0.447772579	-0.30149931	0.012199829
11:03:20	-0.446093965	-0.285929036	0.013324369	11:03:24	-0.439076741	-0.267176498	0.01444891
11:03:28	-0.430322904	-0.252341269	0.01557345	11:03:32	-0.421569068	-0.242458517	0.01669799
11:03:36	-0.412815232	-0.238318893	0.017822531	11:03:40	-0.404061396	-0.236093645	0.018947071
11:03:44	-0.39530756	-0.233720597	0.020071612	11:03:48	-0.386553724	-0.230904147	0.021196152
11:03:52	-0.377799887	-0.228087697	0.022320692	11:03:56	-0.369046051	-0.213008789	0.023445233
11:04:00	-0.360292215	-0.193842393	0.024569773	11:04:04	-0.352692942	-0.173188922	0.025694314
11:04:08	-0.345093669	-0.146009569	0.026818854	11:04:12	-0.337494396	-0.118830213	0.027943395
11:04:16	-0.329895124	-0.101736692	0.029067935	11:04:20	-0.322295851	-0.088005105	0.030192475
11:04:24	-0.314696578	-0.07641213	0.031317016	11:04:28	-0.307097305	-0.071234985	0.032441556
11:04:32	-0.299498032	-0.066057839	0.033566097	11:04:36	-0.291898759	-0.0760496	0.034690637
11:04:40	-0.284299486	-0.091097665	0.035815178	11:04:44	-0.276700214	-0.106965115	0.036939718
11:04:48	-0.269100941	-0.125290728	0.038064258	11:04:52	-0.261501668	-0.143616344	0.039188799
11:04:56	-0.253902395	-0.161537671	0.040313339	11:05:00	-0.246303122	-0.179324236	0.04143788
11:05:04	-0.236939907	-0.192248748	0.04256242	11:05:08	-0.227576692	-0.193741469	0.04368696
11:05:12	-0.218213476	-0.19523419	0.044811501	11:05:16	-0.208850261	-0.190501312	0.045936041
11:05:20	-0.199487046	-0.183693236	0.047060582	11:05:24	-0.189512568	-0.175688041	0.049013331
11:05:28	-0.178001323	-0.164268547	0.053048269	11:05:32	-0.184287484	-0.163457807	0.057083208

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
11:05:36	-0.198439343	-0.162140125	0.061118146	11:05:40	-0.212591203	-0.155626874	0.065153085
11:05:44	-0.226743062	-0.149113625	0.069188024	11:05:48	-0.240894921	-0.149283593	0.073222962
11:05:52	-0.255046781	-0.149453561	0.077257901	11:05:56	-0.26919864	-0.159102693	0.081292839
11:06:00	-0.2833505	-0.178230988	0.085327778	11:06:04	-0.299069846	-0.198293637	0.089362717
11:06:08	-0.314789192	-0.247476934	0.093397655	11:06:12	-0.330508538	-0.296660231	0.097432594
11:06:16	-0.346227884	-0.344575732	0.101467532	11:06:20	-0.361947229	-0.391223419	0.105502471
11:06:24	-0.335212515	-0.412564917	0.109537409	11:06:28	-0.299744184	-0.406394371	0.116209745
11:06:32	-0.263174806	-0.399567508	0.124373906	11:06:36	-0.226605429	-0.395380853	0.132538066
11:06:40	-0.190036052	-0.39383437	0.140702227	11:06:44	-0.08994017	-0.354420723	0.148866387
11:06:48	-0.188423668	-0.419368827	0.15666907	11:06:52	-0.218608694	-0.443605271	0.162769687
11:06:56	-0.159127693	-0.416817784	0.168870304	11:07:00	-0.250122648	-0.482151279	0.174970921
11:07:04	-0.176955458	-0.4496303	0.181071538	11:07:08	-0.1147609	-0.410640703	0.17230517
11:07:12	-0.068333708	-0.381049753	0.116420738	11:07:16	-0.100995874	-0.400196131	0.060536306
11:07:20	-0.133658041	-0.42093586	0.004651875	11:07:24	-0.21970184	-0.473495554	-0.051232557
11:07:28	-0.277248411	-0.507690021	-0.088026375	11:07:32	-0.299842922	-0.521050072	-0.083113396
11:07:36	-0.322437434	-0.530738976	-0.078200418	11:07:40	-0.345031946	-0.536756663	-0.073287439
11:07:44	-0.367626458	-0.542774349	-0.06837446	11:07:48	-0.39022097	-0.550689199	-0.063461481
11:07:52	-0.412815482	-0.558604085	-0.058548502	11:07:56	-0.435409994	-0.565607819	-0.053635523
11:08:00	-0.458004505	-0.571700437	-0.048722544	11:08:04	-0.443065584	-0.55541994	-0.043809565
11:08:08	-0.442215849	-0.540970036	-0.038896587	11:08:12	-0.441366114	-0.526520131	-0.033983608
11:08:16	-0.440516379	-0.511369552	-0.029070629	11:08:20	-0.439666644	-0.495985419	-0.02415765
11:08:24	-0.438816909	-0.480601269	-0.019244671	11:08:28	-0.435761593	-0.456188635	-0.011343317
11:08:32	-0.430735454	-0.430601224	-0.000771665	11:08:36	-0.425709315	-0.404638693	0.009799988
11:08:40	-0.420683176	-0.378301034	0.02037164	11:08:44	-0.415657037	-0.351963384	0.030943292
11:08:48	-0.412131701	-0.314101587	0.039481482	11:08:52	-0.409604666	-0.276834859	0.046667062
11:08:56	-0.40707763	-0.238726375	0.053852641	11:09:00	-0.404550594	-0.200337303	0.06103822
11:09:04	-0.401737542	-0.161777745	0.0682238	11:09:08	-0.398924491	-0.132815048	0.075409379
11:09:12	-0.39899203	-0.105569425	0.078692004	11:09:16	-0.400327024	-0.079384538	0.080257334
11:09:20	-0.401662018	-0.053504865	0.081822664	11:09:24	-0.402997012	-0.027625193	0.083387994
11:09:28	-0.399318409	-0.00211454	0.084953324	11:09:32	-0.393307413	0.024786417	0.086518654
11:09:36	-0.387296417	0.041938922	0.088083984	11:09:40	-0.381285422	0.04934294	0.089649313
11:09:44	-0.375274426	0.056746958	0.091214643	11:09:48	-0.36926343	0.049547502	0.092779973
11:09:52	-0.363252434	0.042348046	0.094345303	11:09:56	-0.357241438	0.042650838	0.095910633
11:10:00	-0.351230443	0.050455876	0.097475963	11:10:04	-0.34598113	0.057806869	0.099041293
11:10:08	-0.340731817	0.063024073	0.100606622	11:10:12	-0.421426609	0.017011346	0.102171952
11:10:16	-0.41865763	0.016967689	0.103737282	11:10:20	-0.415888652	0.013141679	0.105302612
11:10:24	-0.413119673	0.009315668	0.106867942	11:10:28	-0.410350695	0.008838073	0.108433272
11:10:32	-0.407581716	0.00836046	0.109998602	11:10:36	-0.404812738	0.012367742	0.111563931
11:10:40	-0.42277377	0.008503045	0.113129261	11:10:44	-0.420569139	0.016658786	0.11465893
11:10:48	-0.419046373	0.013464862	0.115264728	11:10:52	-0.417523608	0.010270938	0.115870526
11:10:56	-0.416000842	0.007898312	0.116476324	11:11:00	-0.414478077	0.006346983	0.117082123
11:11:04	-0.413447169	0.004502465	0.117687921	11:11:08	-0.412416262	-0.006888271	0.118293719
11:11:12	-0.411385354	-0.018279006	0.118899517	11:11:16	-0.410354447	-0.027289698	0.119505315
11:11:20	-0.409323539	-0.033920347	0.120111114	11:11:24	-0.408292632	-0.039591594	0.120716912
11:11:28	-0.407261724	-0.042384676	0.12132271	11:11:32	-0.406230816	-0.04517774	0.121928508
11:11:36	-0.405199909	-0.052977288	0.122534307	11:11:40	-0.404169001	-0.06578332	0.123140105
11:11:44	-0.403138094	-0.078589334	0.123745903	11:11:48	-0.402107186	-0.089108835	0.124351701
11:11:52	-0.401076279	-0.099628337	0.1249575	11:11:56	-0.400045371	-0.112889962	0.125563298
11:12:00	-0.399014464	-0.12889372	0.126169096	11:12:04	-0.397590753	-0.144663334	0.126774894
11:12:08	-0.396167042	-0.140893925	0.127380693	11:12:12	-0.394743331	-0.137124517	0.127986491
11:12:16	-0.39331962	-0.133938705	0.128592289	11:12:20	-0.391693755	-0.131215989	0.129198087
11:12:24	-0.387545125	-0.126989484	0.129803886	11:12:28	-0.383396496	-0.12807164	0.130409684
11:12:32	-0.379247866	-0.129153796	0.131015482	11:12:36	-0.375099237	-0.127476171	0.13162128
11:12:40	-0.370950608	-0.123038772	0.132227079	11:12:44	-0.366801978	-0.118601373	0.132832877
11:12:48	-0.362653349	-0.121734375	0.133438675	11:12:52	-0.360228053	-0.125894639	0.134044473
11:12:56	-0.360674015	-0.13771163	0.134650272	11:13:00	-0.361119978	-0.155473837	0.13525607
11:13:04	-0.352063923	-0.167572043	0.149344404	11:13:08	-0.334900428	-0.159807664	0.174417633

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
11:13:12	-0.348105937	-0.170145772	0.158343438	11:13:16	-0.364248353	-0.184640787	0.138289983
11:13:20	-0.380390769	-0.201542062	0.118236528	11:13:24	-0.396533185	-0.218443337	0.098183073
11:13:28	-0.409026785	-0.23316961	0.083073454	11:13:32	-0.409104832	-0.248319386	0.084785856
11:13:36	-0.409182879	-0.262057972	0.086498258	11:13:40	-0.409260925	-0.271562988	0.08821066
11:13:44	-0.409338972	-0.281068004	0.089923063	11:13:48	-0.409417019	-0.293326831	0.091635465
11:13:52	-0.409495066	-0.305585659	0.093347867	11:13:56	-0.409573113	-0.317566237	0.095060269
11:14:00	-0.409651159	-0.329268572	0.096772672	11:14:04	-0.407899045	-0.339879967	0.098485074
11:14:08	-0.406146931	-0.346991822	0.100197476	11:14:12	-0.404394817	-0.354103677	0.101909878
11:14:16	-0.40274624	-0.365879027	0.103622281	11:14:20	-0.401470975	-0.38247868	0.105334683
11:14:24	-0.400195711	-0.399078332	0.107047085	11:14:28	-0.398920446	-0.410565686	0.108759487
11:14:32	-0.397645181	-0.422053039	0.110471889	11:14:36	-0.396369916	-0.429465276	0.112184292
11:14:40	-0.395094652	-0.432802415	0.113896694	11:14:44	-0.39489568	-0.436781097	0.11415081
11:14:48	-0.394781653	-0.438349541	0.114289834	11:14:52	-0.394667625	-0.439918001	0.114428859
11:14:56	-0.394553597	-0.440437457	0.114567884	11:15:00	-0.89443957	-0.939907942	-0.385293092
11:15:04	-0.89564751	-0.940166432	-0.385154067	11:15:08	-0.896855451	-0.950791603	-0.385015042
11:15:12	-0.398063392	-0.461416756	0.115123982	11:15:16	-0.399271333	-0.472041927	0.115263007
11:15:20	-0.400479274	-0.482667081	0.115402031	11:15:24	-0.401687215	-0.493292252	0.115541056
11:15:28	-0.402895156	-0.489441109	0.115680081	11:15:32	-0.404103097	-0.485589984	0.115819105
11:15:36	-0.404852966	-0.47881894	0.11595813	11:15:40	-0.404690636	-0.468857278	0.116097154
11:15:44	-0.404528305	-0.458895616	0.116236179	11:15:48	-0.404365974	-0.438262324	0.116375204
11:15:52	-0.404203644	-0.417629015	0.116514228	11:15:56	-0.404041313	-0.408242556	0.116653253
11:16:00	-0.403878983	-0.410102913	0.116792277	11:16:04	-0.404528134	-0.412446999	0.116931302
11:16:08	-0.405177285	-0.403894217	0.117070327	11:16:12	-0.405826436	-0.395341434	0.117209351
11:16:16	-0.406475587	-0.383030947	0.117348376	11:16:20	-0.407124738	-0.366962727	0.1174874
11:16:24	-0.407773889	-0.350894508	0.117626425	11:16:28	-0.40842304	-0.332444494	0.11776545
11:16:32	-0.40907219	-0.313994481	0.117904474	11:16:36	-0.409721341	-0.306361839	0.118043499
11:16:40	-0.410370492	-0.302334983	0.118182523	11:16:44	-0.411019643	-0.298308132	0.118321548
11:16:48	-0.411668794	-0.288815304	0.118460573	11:16:52	-0.412317945	-0.279322476	0.118599597
11:16:56	-0.412967096	-0.270778151	0.118738622	11:17:00	-0.413616247	-0.263182329	0.118877646
11:17:04	-0.412576664	-0.25457988	0.119016671	11:17:08	-0.41153708	-0.239845479	0.119155696
11:17:12	-0.410497497	-0.225111079	0.11929472	11:17:16	-0.409457913	-0.20415394	0.119433745
11:17:20	-0.40841833	-0.176974058	0.119572769	11:17:24	-0.407378746	-0.149794181	0.119711794
11:17:28	-0.406370748	-0.136235435	0.119850819	11:17:32	-0.40560522	-0.122821231	0.119989843
11:17:36	-0.404839692	-0.113130473	0.120128868	11:17:40	-0.404074164	-0.10716317	0.120267893
11:17:44	-0.403308636	-0.100415819	0.120409917	11:17:48	-0.402543109	-0.091328288	0.120545942
11:17:52	-0.401777581	-0.082240757	0.120684966	11:17:56	-0.401012053	-0.068645611	0.120823991
11:18:00	-0.400726134	-0.053833831	0.120313186	11:18:04	-0.401567528	-0.039694025	0.119459127
11:18:08	-0.402408923	-0.028657553	0.118605067	11:18:12	-0.403250317	-0.017621081	0.117751008
11:18:16	-0.404091712	-0.012367943	0.116896949	11:18:20	-0.404933106	-0.01289814	0.11604289
11:18:24	-0.405774501	-0.013428319	0.115188831	11:18:28	-0.406615895	-0.02077405	0.114334772
11:18:32	-0.40745729	-0.028119782	0.113480713	11:18:36	-0.408298684	-0.035020099	0.112626653
11:18:40	-0.409140079	-0.041474966	0.111772594	11:18:44	-0.409981473	-0.047929833	0.110918535
11:18:48	-0.410822868	-0.05245428	0.110064476	11:18:52	-0.411664262	-0.056978728	0.109210417
11:18:56	-0.412505657	-0.061503176	0.108356358	11:19:00	-0.413347051	-0.066027624	0.107502299
11:19:04	-0.412954446	-0.068702	0.106648239	11:19:08	-0.412561841	-0.068032863	0.10579418
11:19:12	-0.412169236	-0.067363727	0.104940121	11:19:16	-0.411776631	-0.063110935	0.104086062
11:19:20	-0.411384026	-0.055274469	0.103232003	11:19:24	-0.410991421	-0.047438003	0.102377944
11:19:28	-0.410598816	-0.036551871	0.101523885	11:19:32	-0.410206211	-0.025665757	0.100669825
11:19:36	-0.409813607	-0.025261527	0.099815766	11:19:40	-0.409421002	-0.035339219	0.098961707
11:19:44	-0.409028397	-0.04541691	0.098107648	11:19:48	-0.408635792	-0.049172161	0.097253589
11:19:52	-0.408243187	-0.052927413	0.09639953	11:19:56	-0.407850582	-0.050300286	0.095545471
11:20:00	-0.407457977	-0.045545676	0.094691411	11:20:04	-0.409131926	-0.042022926	0.093837352
11:20:08	-0.410805875	-0.037781077	0.092983293	11:20:12	-0.412479824	-0.033539211	0.092129234
11:20:16	-0.413756501	-0.034874534	0.091813444	11:20:20	-0.414868211	-0.041925518	0.091721171
11:20:24	-0.415979921	-0.048976503	0.091628898	11:20:28	-0.417091631	-0.055440222	0.091536625
11:20:32	-0.418203341	-0.06190394	0.091444352	11:20:36	-0.419315051	-0.073332165	0.091352079
11:20:40	-0.420426761	-0.089724914	0.091259806	11:20:44	-0.421538472	-0.106117654	0.091167533

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
11:20:48	-0.422650182	-0.114946965	0.091075261	11:20:52	-0.423761892	-0.123776276	0.090982988
11:20:56	-0.424873602	-0.134114503	0.090890715	11:21:00	-0.425985312	-0.145961646	0.090798442
11:21:04	-0.425924886	-0.157110106	0.090706169	11:21:08	-0.425864461	-0.157630976	0.090613896
11:21:12	-0.425804035	-0.158151836	0.090521623	11:21:16	-0.42574361	-0.162045361	0.09042935
11:21:20	-0.425683184	-0.169311541	0.090337077	11:21:24	-0.425622759	-0.176577721	0.090244804
11:21:28	-0.425562333	-0.179005053	0.090152531	11:21:32	-0.425501908	-0.181432377	0.090060258
11:21:36	-0.425441482	-0.180206128	0.089967985	11:21:40	-0.425381057	-0.175326292	0.089875712
11:21:44	-0.425320632	-0.170446461	0.089783439	11:21:48	-0.425260206	-0.174827928	0.089691166
11:21:52	-0.425199781	-0.179209396	0.089598893	11:21:56	-0.425139355	-0.186216087	0.08950662
11:22:00	-0.42507893	-0.195847997	0.089414347	11:22:04	-0.424580194	-0.205218637	0.089322074
11:22:08	-0.424081458	-0.220507221	0.089229801	11:22:12	-0.423609555	-0.2358118	0.089137528
11:22:16	-0.423157802	-0.249550882	0.089045256	11:22:20	-0.422706048	-0.261712457	0.088952983
11:22:24	-0.422254295	-0.273874032	0.08886071	11:22:28	-0.421802542	-0.274415454	0.088768437
11:22:32	-0.421350788	-0.274956876	0.088676164	11:22:36	-0.420899035	-0.277488462	0.088583891
11:22:40	-0.420447281	-0.282010213	0.088491618	11:22:44	-0.419995528	-0.286531963	0.088399345
11:22:48	-0.419543774	-0.287050114	0.088307072	11:22:52	-0.419092021	-0.287568264	0.088214799
11:22:56	-0.418640267	-0.284804528	0.088122526	11:23:00	-0.418188514	-0.278758899	0.088030253
11:23:04	-0.418178684	-0.272976693	0.08793798	11:23:08	-0.418168855	-0.267194489	0.087845707
11:23:12	-0.418159025	-0.261412285	0.087753434	11:23:16	-0.413242144	-0.253798078	0.0943098
11:23:20	-0.407240478	-0.246630263	0.102335958	11:23:24	-0.401238811	-0.239462448	0.110362116
11:23:28	-0.395237144	-0.232294632	0.118388274	11:23:32	-0.389235478	-0.214929492	0.126414433
11:23:36	-0.388404652	-0.198287716	0.12743454	11:23:40	-0.388202151	-0.174943794	0.127603321
11:23:44	-0.38799965	-0.151599873	0.127772102	11:23:48	-0.387797148	-0.137933109	0.127940883
11:23:52	-0.387594647	-0.124266345	0.128109664	11:23:56	-0.387392146	-0.108932718	0.128278445
11:24:00	-0.387189645	-0.091932221	0.128447225	11:24:04	-0.38672507	-0.074775506	0.128616006
11:24:08	-0.386260495	-0.059088412	0.128784787	11:24:12	-0.38579592	-0.043401335	0.128953568
11:24:16	-0.385331346	-0.034831455	0.129122349	11:24:20	-0.384866771	-0.033378808	0.12929113
11:24:24	-0.384402196	-0.031926161	0.129459911	11:24:28	-0.383937621	-0.023705961	0.129628692
11:24:32	-0.383473046	-0.01548578	0.129797473	11:24:36	-0.383008471	-0.008771619	0.129966254
11:24:40	-0.382543897	-0.003563513	0.130135035	11:24:44	-0.382079322	0.00164461	0.130303815
11:24:48	-0.381614747	0.009548704	0.130472596	11:24:52	-0.381150172	0.017452816	0.130641377
11:24:56	-0.380685597	0.028108698	0.130810158	11:25:00	-0.380221023	0.041516386	0.130978939
11:25:04	-0.380626094	0.054405673	0.13114772	11:25:08	-0.381031165	0.065399503	0.131316501
11:25:12	-0.381436236	0.076393332	0.131485282	11:25:16	-0.381841307	0.086643176	0.131654063
11:25:20	-0.382246378	0.096149105	0.131822844	11:25:24	-0.382651449	0.105654999	0.131991624
11:25:28	-0.38305652	0.11896531	0.132160405	11:25:32	-0.383461591	0.132275621	0.132329186
11:25:36	-0.383866662	0.142929399	0.132497967	11:25:40	-0.384271733	0.150926642	0.132666748
11:25:44	-0.384676804	0.158923886	0.132835529	11:25:48	-0.385081875	0.163152207	0.13300431
11:25:52	-0.385486946	0.167380527	0.133173091	11:25:56	-0.385892017	0.175227304	0.133341872
11:26:00	-0.386297088	0.186692537	0.133510653	11:26:04	-0.385510653	0.198868009	0.133679433
11:26:08	-0.384724219	0.206815979	0.133848214	11:26:12	-0.383937784	0.214763949	0.134016995
11:26:16	-0.38315135	0.218969677	0.134185776	11:26:20	-0.382364915	0.2194332	0.134354557
11:26:24	-0.381578481	0.219896723	0.134523338	11:26:28	-0.380792046	0.213615735	0.134692119
11:26:32	-0.380005612	0.207334747	0.1348609	11:26:36	-0.379219177	0.197095392	0.135029681
11:26:40	-0.378432743	0.182897706	0.135198462	11:26:44	-0.377646308	0.16870002	0.135367243
11:26:48	-0.376859874	0.162515423	0.135536023	11:26:52	-0.376073439	0.156330862	0.135704804
11:26:56	-0.375287005	0.143870173	0.135873585	11:27:00	-0.37450057	0.125133393	0.136042366
11:27:04	-0.373947529	0.10625749	0.136211147	11:27:08	-0.373394488	0.084653497	0.136379928
11:27:12	-0.372841448	0.063049505	0.136548709	11:27:16	-0.372288407	0.043476675	0.13671749
11:27:20	-0.371737735	0.025933578	0.136886271	11:27:24	-0.37118861	0.008389559	0.137055052
11:27:28	-0.370639486	0.004976472	0.137223832	11:27:32	-0.370090361	0.001563385	0.137392613
11:27:36	-0.369541236	0.00122297	0.137561394	11:27:40	-0.370452543	0.003084686	0.135751414
11:27:44	-0.37468812	0.002964874	0.12943733	11:27:48	-0.378923698	-0.009031405	0.123123246
11:27:52	-0.37699724	-0.018369415	0.122851476	11:27:56	-0.37765962	-0.029755326	0.123685492
11:28:00	-0.376619516	-0.043675586	0.124519508	11:28:04	-0.376379921	-0.058073016	0.125353524
11:28:08	-0.376140327	-0.074751452	0.12618754	11:28:12	-0.375900732	-0.091429888	0.127021556
11:28:16	-0.375661138	-0.107638359	0.127855572	11:28:20	-0.375421543	-0.123690162	0.128689587

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
11:28:24	-0.375181948	-0.138565925	0.129523603	11:28:28	-0.374942354	-0.149913516	0.130357619
11:28:32	-0.374702759	-0.161261107	0.131191635	11:28:36	-0.374463164	-0.171115694	0.132025651
11:28:40	-0.37422357	-0.179477278	0.132859667	11:28:44	-0.373983975	-0.187838862	0.133693683
11:28:48	-0.373744381	-0.186261526	0.134527699	11:28:52	-0.373504786	-0.18468419	0.135361715
11:28:56	-0.373265191	-0.183440839	0.136195731	11:29:00	-0.373025597	-0.182531478	0.137029747
11:29:04	-0.372202322	-0.181274194	0.137863763	11:29:08	-0.371379047	-0.176373689	0.138697779
11:29:12	-0.370555772	-0.171473185	0.139531795	11:29:16	-0.369732497	-0.166308839	0.140365811
11:29:20	-0.368909222	-0.160880651	0.141199827	11:29:24	-0.368085947	-0.155452464	0.142033843
11:29:28	-0.367262672	-0.165654146	0.142867859	11:29:32	-0.366439397	-0.175855828	0.143701875
11:29:36	-0.365616122	-0.188545583	0.144535891	11:29:40	-0.364792847	-0.203723413	0.145369907
11:29:44	-0.363969572	-0.218901243	0.146203923	11:29:48	-0.363146297	-0.226320141	0.147037938
11:29:52	-0.362323022	-0.233739039	0.147871954	11:29:56	-0.361499747	-0.237239652	0.14870597
11:30:00	0.139323528	0.263178017	0.649539986	11:30:04	0.140686201	0.263917214	0.650374002
11:30:08	0.142048873	0.267595637	0.651208018	11:30:12	-0.356588454	-0.228725941	0.152042034
11:30:16	-0.355225781	-0.234686343	0.15287605	11:30:20	-0.353863109	-0.250285571	0.153710066
11:30:24	-0.352500436	-0.265884797	0.154544082	11:30:28	-0.351137764	-0.286343441	0.155378098
11:30:32	-0.349775091	-0.306802086	0.156212114	11:30:36	-0.348412418	-0.321744667	0.15704613
11:30:40	-0.347049746	-0.3311712	0.157880146	11:30:44	-0.345687073	-0.340597725	0.158714162
11:30:48	-0.344324401	-0.339423368	0.159548178	11:30:52	-0.342961728	-0.338249011	0.160382194
11:30:56	-0.341599056	-0.334179123	0.16121621	11:31:00	-0.340236383	-0.327213686	0.162050226
11:31:04	-0.339488546	-0.320614743	0.162884242	11:31:08	-0.33874071	-0.303874847	0.163718258
11:31:12	-0.337992873	-0.287134959	0.164552274	11:31:16	-0.337245036	-0.272803055	0.165386289
11:31:20	-0.3364972	-0.260879147	0.166220305	11:31:24	-0.335749363	-0.248955235	0.167054321
11:31:28	-0.335150119	-0.259275874	0.167687007	11:31:32	-0.334635552	-0.269646991	0.168204963
11:31:36	-0.334120984	-0.278694327	0.168722919	11:31:40	-0.333606416	-0.286417895	0.169240875
11:31:44	-0.333091849	-0.294141454	0.169758831	11:31:48	-0.332577281	-0.301865014	0.170276787
11:31:52	-0.332062714	-0.309588582	0.170794743	11:31:56	-0.331548146	-0.319684875	0.171312699
11:32:00	-0.331033579	-0.332153892	0.171830655	11:32:04	-0.331535242	-0.345228669	0.172348611
11:32:08	-0.332036906	-0.356736644	0.172866568	11:32:12	-0.332538569	-0.368244619	0.173384524
11:32:16	-0.333040233	-0.377250311	0.17390248	11:32:20	-0.333541897	-0.383753721	0.174420436
11:32:24	-0.33404356	-0.39025713	0.174938392	11:32:28	-0.33453371	-0.398704792	0.175456348
11:32:32	-0.335017809	-0.407148864	0.175974304	11:32:36	-0.335501908	-0.417569633	0.17649226
11:32:40	-0.335986008	-0.429967115	0.177010216	11:32:44	-0.336470107	-0.442364598	0.177528172
11:32:48	-0.336954206	-0.452155785	0.178046128	11:32:52	-0.337438305	-0.461946955	0.178564084
11:32:56	-0.337922404	-0.470016103	0.17908204	11:33:00	-0.338406503	-0.476363213	0.179599997
11:33:04	-0.338243432	-0.482324553	0.180117953	11:33:08	-0.33808036	-0.481916946	0.180635909
11:33:12	-0.337917289	-0.481509339	0.181153865	11:33:16	-0.337754218	-0.477419074	0.181671821
11:33:20	-0.337591146	-0.472101232	0.182189777	11:33:24	-0.337428075	-0.466783408	0.182707733
11:33:28	-0.337265004	-0.453347613	0.183225689	11:33:32	-0.337101932	-0.439911799	0.183743645
11:33:36	-0.336938861	-0.430763408	0.184261601	11:33:40	-0.336775789	-0.434477248	0.184779557
11:33:44	-0.336612718	-0.438191087	0.185297513	11:33:48	-0.336449647	-0.453113068	0.18581547
11:33:52	-0.336286575	-0.468035049	0.186333426	11:33:56	-0.336123504	-0.475079842	0.186851382
11:34:00	-0.335960432	-0.474247445	0.187369338	11:34:04	-0.334295217	-0.472519644	0.187887294
11:34:08	-0.332630001	-0.465024496	0.18840525	11:34:12	-0.330964785	-0.457529348	0.188923206
11:34:16	-0.32929957	-0.448585898	0.189441162	11:34:20	-0.327634354	-0.438194127	0.189959118
11:34:24	-0.325969138	-0.427802355	0.190477074	11:34:28	-0.324303923	-0.434911126	0.19099503
11:34:32	-0.322638707	-0.442019878	0.191512986	11:34:36	-0.320973491	-0.448544136	0.192030942
11:34:40	-0.319308276	-0.454483882	0.192548899	11:34:44	-0.317936541	-0.460598568	0.192669213
11:34:48	-0.31707467	-0.458492037	0.192098705	11:34:52	-0.3162128	-0.456385488	0.191528196
11:34:56	-0.315350929	-0.450197144	0.190957688	11:35:00	-0.314489058	-0.439927004	0.19038718
11:35:04	-0.315705735	-0.430895853	0.189816671	11:35:08	-0.316922412	-0.430434822	0.189246163
11:35:12	-0.318139088	-0.429973791	0.188675655	11:35:16	-0.319355765	-0.436986352	0.188105146
11:35:20	-0.320572442	-0.451472488	0.187534638	11:35:24	-0.321789119	-0.465958623	0.18696413
11:35:28	-0.323005795	-0.481216511	0.186393621	11:35:32	-0.324222472	-0.496474381	0.185823113
11:35:36	-0.325439149	-0.508501136	0.185252605	11:35:40	-0.326655826	-0.519450817	0.184682096
11:35:44	-0.327872502	-0.530400499	0.184111588	11:35:48	-0.329089179	-0.537168298	0.18354108
11:35:52	-0.330305856	-0.543936097	0.182970571	11:35:56	-0.331522532	-0.547622999	0.182400063

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
11:36:00	-0.332739209	-0.548228969	0.181829555	11:36:04	-0.331522381	-0.547384364	0.181259046
11:36:08	-0.330305553	-0.555301808	0.180688538	11:36:12	-0.329088724	-0.563219252	0.18011803
11:36:16	-0.327871896	-0.565866051	0.179547521	11:36:20	-0.326655068	-0.563242205	0.178977013
11:36:24	-0.325438239	-0.560618358	0.178406505	11:36:28	-0.324221411	-0.564259767	0.177835996
11:36:32	-0.323004583	-0.567901176	0.177265488	11:36:36	-0.321787755	-0.569463227	0.17669498
11:36:40	-0.320570926	-0.568945919	0.176124471	11:36:44	-0.319354098	-0.571299956	0.175553963
11:36:48	-0.31813727	-0.582268061	0.174983455	11:36:52	-0.316920441	-0.593236166	0.174412946
11:36:56	-0.315703613	-0.604204271	0.173842438	11:37:00	-0.314486785	-0.615172377	0.17327193
11:37:04	-0.314827112	-0.627068678	0.172701421	11:37:08	-0.315167439	-0.640563625	0.172130913
11:37:12	-0.315507767	-0.654058572	0.171560405	11:37:16	-0.315848094	-0.661388422	0.170989896
11:37:20	-0.316188421	-0.662553244	0.170419388	11:37:24	-0.316528748	-0.663718066	0.16984888
11:37:28	-0.316869076	-0.673207357	0.169278371	11:37:32	-0.317209403	-0.682696648	0.168707863
11:37:36	-0.317552439	-0.689183543	0.168137355	11:37:40	-0.317896663	-0.692667134	0.167566846
11:37:44	-0.318240888	-0.696150726	0.166996338	11:37:48	-0.318585112	-0.681652992	0.16642583
11:37:52	-0.318929336	-0.667155223	0.165855321	11:37:56	-0.319273561	-0.654979407	0.165284813
11:38:00	-0.319688965	-0.645167903	0.164617862	11:38:04	-0.321070988	-0.63593262	0.163160372
11:38:08	-0.322453011	-0.626697302	0.161702882	11:38:12	-0.323835034	-0.617461984	0.160245393
11:38:16	-0.325217058	-0.608725783	0.158787903	11:38:20	-0.326599081	-0.600488664	0.157330413
11:38:24	-0.327981104	-0.592251509	0.155872924	11:38:28	-0.329363127	-0.584014389	0.154415434
11:38:32	-0.33074515	-0.57577727	0.152957945	11:38:36	-0.332127173	-0.572732133	0.151500455
11:38:40	-0.333509196	-0.57141767	0.150042965	11:38:44	-0.334891219	-0.570103206	0.148585476
11:38:48	-0.336273242	-0.563493404	0.147127986	11:38:52	-0.337655265	-0.556883567	0.145670496
11:38:56	-0.339037288	-0.556475352	0.144213007	11:39:00	-0.340419311	-0.562268688	0.142755517
11:39:04	-0.340536857	-0.567308324	0.141298027	11:39:08	-0.340654403	-0.577081578	0.139840538
11:39:12	-0.340771948	-0.586854832	0.138383048	11:39:16	-0.340889494	-0.588858374	0.136925558
11:39:20	-0.34100704	-0.583092204	0.135468069	11:39:24	-0.341124585	-0.57585707	0.134010579
11:39:28	-0.341242131	-0.564214975	0.132555309	11:39:32	-0.341359677	-0.552572881	0.1310956
11:39:36	-0.341477222	-0.539790363	0.12963811	11:39:40	-0.341594768	-0.525867494	0.128180621
11:39:44	-0.341712314	-0.511944625	0.126723131	11:39:48	-0.341829859	-0.503021169	0.125265641
11:39:52	-0.341947405	-0.494097678	0.123808152	11:39:56	-0.342064951	-0.482694714	0.122350662
11:40:00	-0.342182496	-0.468812224	0.120893172	11:40:04	-0.342681127	-0.455156911	0.119435683
11:40:08	-0.343179759	-0.4344401491	0.117978193	11:40:12	-0.34367839	-0.413646071	0.116520704
11:40:16	-0.344177021	-0.391333396	0.115063214	11:40:20	-0.343337344	-0.366665724	0.115419018
11:40:24	-0.341654481	-0.341495422	0.116917269	11:40:28	-0.339971617	-0.32225505	0.118415519
11:40:32	-0.338288754	-0.303014669	0.11991377	11:40:36	-0.33660589	-0.284558093	0.12141202
11:40:40	-0.334923027	-0.266885309	0.122910271	11:40:44	-0.333240163	-0.24921253	0.124408522
11:40:48	-0.3315573	-0.220646761	0.125906772	11:40:52	-0.329874436	-0.192080993	0.127405023
11:40:56	-0.328191573	-0.167173645	0.128903274	11:41:00	-0.326508709	-0.145924715	0.130401524
11:41:04	-0.324369773	-0.124403933	0.131899775	11:41:08	-0.322230838	-0.1107349	0.133398026
11:41:12	-0.320091902	-0.097065862	0.134896276	11:41:16	-0.317952966	-0.080296636	0.136394527
11:41:20	-0.315814031	-0.060427202	0.137892778	11:41:24	-0.313675095	-0.040557777	0.139391028
11:41:28	-0.311536159	-0.022078627	0.140889279	11:41:32	-0.309397224	-0.003599486	0.142387529
11:41:36	-0.307258288	0.020559155	0.14388578	11:41:40	-0.305119352	0.050397278	0.145384031
11:41:44	-0.302980417	0.073556744	0.146882281	11:41:48	-0.301134192	0.076505756	0.147983934
11:41:52	-0.299654046	0.079236554	0.14858958	11:41:56	-0.298173901	0.090027712	0.149195226
11:42:00	-0.296693755	0.108879214	0.149800872	11:42:04	-0.297638256	0.126285421	0.150406518
11:42:08	-0.298582757	0.139066979	0.151012164	11:42:12	-0.299527258	0.151848501	0.15161781
11:42:16	-0.300471759	0.166093835	0.152223456	11:42:20	-0.30141626	0.181802944	0.152829102
11:42:24	-0.302360761	0.197512054	0.153434748	11:42:28	-0.303305262	0.206226063	0.154040394
11:42:32	-0.304249763	0.214940073	0.15464604	11:42:36	-0.305194264	0.223654082	0.155251686
11:42:40	-0.306138765	0.232368092	0.155857332	11:42:44	-0.307067618	0.241091429	0.156462978
11:42:48	-0.307990672	0.248085738	0.157068624	11:42:52	-0.308913726	0.255080011	0.15767427
11:42:56	-0.309836779	0.253562718	0.158279916	11:43:00	-0.310759833	0.243533788	0.158885562
11:43:04	-0.310897104	0.233973286	0.159491208	11:43:08	-0.311034375	0.214414419	0.160096854
11:43:12	-0.311171646	0.194855552	0.1607025	11:43:16	-0.311308917	0.178006903	0.161308146
11:43:20	-0.311446188	0.163868544	0.161913792	11:43:24	-0.31158346	0.149730149	0.162519438
11:43:28	-0.311720731	0.133252641	0.163125084	11:43:32	-0.311858002	0.116775132	0.16373073

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
11:43:36	-0.311995273	0.104695986	0.164336376	11:43:40	-0.312132544	0.105811946	0.164942023
11:43:44	-0.312269815	0.106927906	0.165547669	11:43:48	-0.312306829	0.105926865	0.166289154
11:43:52	-0.31087999	0.105798422	0.169014036	11:43:56	-0.309453152	0.107020114	0.171738918
11:44:00	-0.308026313	0.109591977	0.1744638	11:44:04	-0.30554519	0.112049025	0.177188682
11:44:08	-0.303064067	0.112276354	0.179913564	11:44:12	-0.300582943	0.112503684	0.182638446
11:44:16	-0.29810182	0.115428228	0.185363328	11:44:20	-0.295620697	0.121049986	0.18808821
11:44:24	-0.293139574	0.126671745	0.190813092	11:44:28	-0.290658451	0.12650182	0.193537974
11:44:32	-0.288177327	0.126331895	0.196262856	11:44:36	-0.286423673	0.120308984	0.198002079
11:44:40	-0.285244841	0.108524059	0.198962468	11:44:44	-0.284066008	0.096739116	0.199922856
11:44:48	-0.282887176	0.077559847	0.200883244	11:44:52	-0.281708343	0.058380577	0.201843633
11:44:56	-0.280529511	0.041568206	0.202804021	11:45:00	-0.779350679	-0.472877267	-0.29623559
11:45:04	-0.778271181	-0.48738197	-0.295275202	11:45:08	-0.777191683	-0.500459741	-0.294314814
11:45:12	-0.276112186	-0.01353753	0.206645575	11:45:16	-0.275032688	-0.023268192	0.207605963
11:45:20	-0.27395319	-0.029651752	0.208566351	11:45:24	-0.272873693	-0.036035313	0.20952674
11:45:28	-0.271794195	-0.048783895	0.210487128	11:45:32	-0.270714697	-0.061532477	0.211447516
11:45:36	-0.2696352	-0.07558871	0.212407905	11:45:40	-0.268555702	-0.090952612	0.213368293
11:45:44	-0.267476204	-0.106316514	0.214328681	11:45:48	-0.266396707	-0.128091937	0.21528907
11:45:52	-0.265317209	-0.149867359	0.216249458	11:45:56	-0.264237711	-0.172175825	0.217209846
11:46:00	-0.263158213	-0.195017334	0.218170235	11:46:04	-0.261886307	-0.217744152	0.219130623
11:46:08	-0.260614401	-0.232074141	0.220091012	11:46:12	-0.259342495	-0.246404125	0.2210514
11:46:16	-0.258070589	-0.254169422	0.222011788	11:46:20	-0.256798683	-0.25537003	0.222972177
11:46:24	-0.255526777	-0.256570638	0.223932565	11:46:28	-0.254254871	-0.266153547	0.224892953
11:46:32	-0.252982965	-0.275736448	0.225853342	11:46:36	-0.252723143	-0.288487131	0.225442442
11:46:40	-0.252463639	-0.302092832	0.225031111	11:46:44	-0.252204136	-0.317939382	0.22461978
11:46:48	-0.251944632	-0.340508486	0.224208449	11:46:52	-0.251685128	-0.36307759	0.223797117
11:46:56	-0.251425625	-0.37328804	0.223385786	11:47:00	-0.251166121	-0.371139817	0.222974455
11:47:04	-0.251461311	-0.369322255	0.222563124	11:47:08	-0.2517565	-0.369513633	0.222151793
11:47:12	-0.25205169	-0.36970501	0.221740461	11:47:16	-0.252346879	-0.367949394	0.22132913
11:47:20	-0.252642069	-0.364246767	0.220917799	11:47:24	-0.252937259	-0.360544158	0.220506468
11:47:28	-0.253232448	-0.364018434	0.220095137	11:47:32	-0.253527638	-0.367492711	0.219683805
11:47:36	-0.253822827	-0.380426586	0.219272474	11:47:40	-0.254118017	-0.402820057	0.218861143
11:47:44	-0.254413206	-0.425213529	0.218449812	11:47:48	-0.254708396	-0.454838834	0.218038481
11:47:52	-0.255036943	-0.484484076	0.217627149	11:47:56	-0.255375037	-0.508173387	0.217215818
11:48:00	-0.25571313	-0.525901148	0.216804487	11:48:04	-0.256276716	-0.543763322	0.216393156
11:48:08	-0.256840303	-0.561625496	0.215981825	11:48:12	-0.257403889	-0.57948767	0.215570493
11:48:16	-0.257967475	-0.5951731	0.215159162	11:48:20	-0.258531061	-0.608681785	0.214747831
11:48:24	-0.259094648	-0.62219047	0.2143365	11:48:28	-0.259658234	-0.625662133	0.213925168
11:48:32	-0.26022182	-0.629133797	0.213513837	11:48:36	-0.260785406	-0.632605425	0.213102506
11:48:40	-0.261348993	-0.636077089	0.212691175	11:48:44	-0.261912579	-0.639548753	0.212279844
11:48:48	-0.262476165	-0.635126849	0.211868512	11:48:52	-0.263039752	-0.630704945	0.211457181
11:48:56	-0.263806257	-0.62419183	0.210770912	11:49:00	-0.265115329	-0.615789928	0.20934951
11:49:04	-0.265516802	-0.606847092	0.207928108	11:49:08	-0.265918275	-0.597904184	0.206506707
11:49:12	-0.266319747	-0.588961347	0.205085305	11:49:16	-0.26672122	-0.578377407	0.203663903
11:49:20	-0.267122693	-0.5661524	0.202242501	11:49:24	-0.267524165	-0.553927392	0.200821099
11:49:28	-0.267925638	-0.530722235	0.199399697	11:49:32	-0.268327111	-0.507517078	0.197978295
11:49:36	-0.268728583	-0.483091202	0.196556893	11:49:40	-0.269130056	-0.457444607	0.195135491
11:49:44	-0.269531529	-0.431797993	0.193714089	11:49:48	-0.269933001	-0.416769609	0.192292688
11:49:52	-0.270334474	-0.401741243	0.190871286	11:49:56	-0.270735947	-0.384190999	0.189449884
11:50:00	-0.271137419	-0.364118914	0.188028482	11:50:04	-0.273516451	-0.345225621	0.18660708
11:50:08	-0.275895483	-0.327658712	0.185185678	11:50:12	-0.278274515	-0.310091812	0.183764276
11:50:16	-0.280653547	-0.301025473	0.182342874	11:50:20	-0.283032579	-0.300459695	0.180921472
11:50:24	-0.285411611	-0.299893926	0.17950007	11:50:28	-0.287790644	-0.294137098	0.178078669
11:50:32	-0.290169676	-0.288380279	0.176657267	11:50:36	-0.292548708	-0.284458997	0.175235865
11:50:40	-0.29492774	-0.282373271	0.173814463	11:50:44	-0.297306772	-0.280287537	0.172393061
11:50:48	-0.299685804	-0.279482175	0.170971659	11:50:52	-0.300129764	-0.277523347	0.172172116
11:50:56	-0.30046132	-0.272938263	0.17352487	11:51:00	-0.300792876	-0.265793915	0.174877625
11:51:04	-0.300299227	-0.258157685	0.176230379	11:51:08	-0.299805578	-0.249905552	0.177583133

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
11:51:12	-0.299311929	-0.241653424	0.178935888	11:51:16	-0.29881828	-0.233994331	0.180288642
11:51:20	-0.298324631	-0.226928272	0.181641397	11:51:24	-0.297830982	-0.219862213	0.182994151
11:51:28	-0.297337333	-0.216819819	0.184346906	11:51:32	-0.296843684	-0.213777425	0.18569966
11:51:36	-0.296350035	-0.2110764	0.187052415	11:51:40	-0.295856386	-0.208716746	0.188405169
11:51:44	-0.295362737	-0.206357092	0.189757923	11:51:48	-0.294869088	-0.195005934	0.191110678
11:51:52	-0.294375439	-0.183654777	0.192463432	11:51:56	-0.29388179	-0.165939331	0.193816187
11:52:00	-0.293388141	-0.141859599	0.195168941	11:52:04	-0.292276326	-0.117411388	0.196521696
11:52:08	-0.291164512	-0.085579079	0.19787445	11:52:12	-0.290052698	-0.053746779	0.199227205
11:52:16	-0.288940884	-0.021308356	0.200579959	11:52:20	-0.28782907	0.011736198	0.201932714
11:52:24	-0.286717255	0.044780735	0.203285468	11:52:28	-0.285605441	0.071848924	0.204638222
11:52:32	-0.28473609	0.098772567	0.20566246	11:52:36	-0.284022254	0.117487509	0.206475988
11:52:40	-0.283308418	0.128086417	0.207289516	11:52:44	-0.282594581	0.138685325	0.208103044
11:52:48	-0.281880745	0.154731405	0.208916572	11:52:52	-0.281166909	0.170777521	0.2097301
11:52:56	-0.280453073	0.182521701	0.210543628	11:53:00	-0.279716978	0.189977285	0.211357156
11:53:04	-0.279783723	0.196954272	0.212170684	11:53:08	-0.279850469	0.195277149	0.212984212
11:53:12	-0.279917214	0.193600062	0.21379774	11:53:16	-0.279983959	0.192827553	0.214611268
11:53:20	-0.280050704	0.192959659	0.215424796	11:53:24	-0.28011745	0.193091764	0.216238324
11:53:28	-0.280184195	0.192637421	0.217051852	11:53:32	-0.28025094	0.192183114	0.21786538
11:53:36	-0.280317685	0.192291024	0.218678908	11:53:40	-0.280384431	0.194085763	0.219492436
11:53:44	-0.280451176	0.195880503	0.220305964	11:53:48	-0.280517921	0.196858279	0.221119492
11:53:52	-0.280584666	0.197836091	0.22193302	11:53:56	-0.280651412	0.193042968	0.222746548
11:54:00	-0.280718157	0.182478911	0.223560076	11:54:04	-0.280237369	0.17224123	0.224373604
11:54:08	-0.279756581	0.164876953	0.225187132	11:54:12	-0.279275793	0.157512677	0.22600066
11:54:16	-0.278795005	0.15310363	0.226814188	11:54:20	-0.278314217	0.151649883	0.227627716
11:54:24	-0.277833429	0.150196137	0.228441244	11:54:28	-0.277352641	0.150000664	0.229254772
11:54:32	-0.276871853	0.149805156	0.2300683	11:54:36	-0.276391065	0.15207887	0.230881828
11:54:40	-0.275910277	0.156821807	0.231695356	11:54:44	-0.275429489	0.161564709	0.232508884
11:54:48	-0.274948701	0.161779103	0.233322412	11:54:52	-0.274467913	0.161993498	0.23413594
11:54:56	-0.273987126	0.160067494	0.234949468	11:55:00	-0.273506338	0.156001093	0.235762996
11:55:04	-0.272807406	0.152064723	0.236576524	11:55:08	-0.272108475	0.145698853	0.237390052
11:55:12	-0.2711409544	0.139332983	0.23820358	11:55:16	-0.270710613	0.122810126	0.239017108
11:55:20	-0.270011682	0.096130336	0.239830636	11:55:24	-0.26931275	0.069450529	0.240644164
11:55:28	-0.269784266	0.042655612	0.239871835	11:55:32	-0.270292569	0.015838749	0.239049664
11:55:36	-0.270800871	-0.008609955	0.238227493	11:55:40	-0.271309174	-0.030690526	0.237405321
11:55:44	-0.271817476	-0.052771088	0.23658315	11:55:48	-0.272325778	-0.062799081	0.235760979
11:55:52	-0.272834081	-0.072827075	0.234938808	11:55:56	-0.273342383	-0.085094495	0.234116636
11:56:00	-0.273850686	-0.099601343	0.233294465	11:56:04	-0.274854343	-0.114403464	0.232472294
11:56:08	-0.275857999	-0.125694116	0.231650123	11:56:12	-0.276861656	-0.136984766	0.230827952
11:56:16	-0.277865313	-0.145556839	0.23000578	11:56:20	-0.278868969	-0.15141033	0.229183609
11:56:24	-0.279872626	-0.157263822	0.228361438	11:56:28	-0.280876283	-0.158140528	0.227539267
11:56:32	-0.28187994	-0.159017235	0.226717095	11:56:36	-0.282883596	-0.149400788	0.225894924
11:56:40	-0.283887253	-0.129291189	0.225072753	11:56:44	-0.28489091	-0.109181588	0.224250582
11:56:48	-0.285894566	-0.102331397	0.223428411	11:56:52	-0.286898223	-0.095481206	0.222606239
11:56:56	-0.28790188	-0.087741314	0.221784068	11:57:00	-0.288905537	-0.079111712	0.220961897
11:57:04	-0.289524964	-0.070253086	0.220139726	11:57:08	-0.290144391	-0.06139446	0.219317554
11:57:12	-0.290763818	-0.052535826	0.218495383	11:57:16	-0.291383245	-0.039789599	0.217673212
11:57:20	-0.292002673	-0.023155771	0.216851041	11:57:24	-0.2926221	-0.006521944	0.21602887
11:57:28	-0.293241527	0.002699953	0.215206698	11:57:32	-0.293860954	0.011921867	0.214384527
11:57:36	-0.294480381	0.011598931	0.213562356	11:57:40	-0.295099808	0.00173118	0.212740185
11:57:44	-0.295719236	-0.008136571	0.211918013	11:57:48	-0.296338663	-0.021083211	0.211095842
11:57:52	-0.29695809	-0.034029842	0.210273671	11:57:56	-0.297577517	-0.046180171	0.2094515
11:58:00	-0.298196944	-0.057534188	0.208629329	11:58:04	-0.298123337	-0.068475098	0.207807157
11:58:08	-0.298054696	-0.078209067	0.206984986	11:58:12	-0.294578991	-0.085912139	0.210780305
11:58:16	-0.288658274	-0.091612578	0.217888407	11:58:20	-0.282737557	-0.096767818	0.22499651
11:58:24	-0.27681684	-0.101923058	0.232104612	11:58:28	-0.270896123	-0.110299661	0.239212715
11:58:32	-0.264975406	-0.118676263	0.246320817	11:58:36	-0.259644804	-0.120505494	0.252629363
11:58:40	-0.259363031	-0.118445124	0.252097175	11:58:44	-0.259081257	-0.116384754	0.251564988

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
11:58:48	-0.258799484	-0.128871261	0.2510328	11:58:52	-0.25851771	-0.141357769	0.250500613
11:58:56	-0.258235937	-0.15266649	0.249968425	11:59:00	-0.257954163	-0.162797422	0.249436237
11:59:04	-0.258968931	-0.173701204	0.24890405	11:59:08	-0.259983698	-0.169612672	0.248371862
11:59:12	-0.260998466	-0.165524141	0.247839675	11:59:16	-0.262013233	-0.163566678	0.247307487
11:59:20	-0.263028	-0.163740284	0.246775299	11:59:24	-0.264042768	-0.163913889	0.246243112
11:59:28	-0.265057535	-0.159495848	0.245710924	11:59:32	-0.266072303	-0.155077807	0.245178736
11:59:36	-0.26708707	-0.143556089	0.244646549	11:59:40	-0.268101838	-0.124930694	0.244114361
11:59:44	-0.269116605	-0.106305299	0.243582174	11:59:48	-0.270131372	-0.088359143	0.243049986
11:59:52	-0.27114614	-0.070412986	0.242517798	11:59:56	-0.272160907	-0.053213565	0.241985611
12:00:00	0.226824325	-0.076849971	0.741453423	12:00:04	0.228009064	-0.084848276	0.740921236
12:00:08	0.229193803	-0.080347824	0.740389048	12:00:12	-0.269621459	-0.575847372	0.23985686
12:00:16	-0.26843672	-0.571346912	0.239324673	12:00:20	-0.267251981	-0.56684646	0.238792485
12:00:24	-0.266067243	-0.562346008	0.238260297	12:00:28	-0.264882504	-0.56847178	0.23772811
12:00:32	-0.263697765	-0.574597542	0.237195922	12:00:36	-0.262513026	-0.088809034	0.236663735
12:00:40	-0.261328288	-0.105715763	0.236131547	12:00:44	-0.260143549	-0.122622495	0.235599359
12:00:48	-0.25895881	-0.135214385	0.235067172	12:00:52	-0.257774072	-0.147806277	0.234534984
12:00:56	-0.256589333	-0.155937399	0.234002797	12:01:00	-0.755404594	-0.159607753	-0.266529391
12:01:04	-0.75601868	-0.164350358	-0.267061579	12:01:08	-0.756632766	-0.156338361	-0.267593766
12:01:12	-0.757246852	-0.148326364	-0.268125954	12:01:16	-0.757860938	-0.144088898	-0.268658142
12:01:20	-0.758475024	-0.143625966	-0.269190329	12:01:24	-0.75908911	-0.143163032	-0.269722517
12:01:28	-0.759703196	-0.150344459	-0.270254704	12:01:32	-0.760317282	-0.157525886	-0.270786892
12:01:36	-0.260931368	-0.165633077	0.22868092	12:01:40	-0.261545454	-0.174048857	0.228148733
12:01:44	-0.26215954	-0.182464637	0.227616545	12:01:48	-0.262773626	-0.195892888	0.227084358
12:01:52	-0.263387712	-0.209321139	0.22655217	12:01:56	-0.262613896	-0.217746822	0.227900472
12:02:00	-0.261579714	-0.224625557	0.229601547	12:02:04	-0.26100623	-0.231778902	0.231302623
12:02:08	-0.260432746	-0.236477933	0.233003699	12:02:12	-0.259859262	-0.241176965	0.234704774
12:02:16	-0.259285778	-0.254755834	0.23640585	12:02:20	-0.258712294	-0.277214549	0.238106925
12:02:24	-0.25813881	-0.299673255	0.239808001	12:02:28	-0.257565326	-0.324095255	0.241509077
12:02:32	-0.256991841	-0.348517263	0.243210152	12:02:36	-0.256418357	-0.374453285	0.244911228
12:02:40	-0.255844873	-0.401903322	0.246612303	12:02:44	-0.255271389	-0.429104334	0.248313379
12:02:48	-0.254697905	-0.455558233	0.250014455	12:02:52	-0.254124421	-0.482012132	0.25171553
12:02:56	-0.253550937	-0.51053164	0.253416606	12:03:00	-0.252977453	-0.541116756	0.255117681
12:03:04	-0.251111642	-0.570931536	0.256818757	12:03:08	-0.249245832	-0.578295215	0.258519833
12:03:12	-0.247380021	-0.585658894	0.260220908	12:03:16	-0.245531551	-0.586085027	0.261921984
12:03:20	-0.243685249	-0.5795645	0.263623059	12:03:24	-0.241838948	-0.573043973	0.265324135
12:03:28	-0.239992646	-0.558725701	0.267025211	12:03:32	-0.238146345	-0.536609648	0.268726286
12:03:36	-0.236300043	-0.508103313	0.270427362	12:03:40	-0.234453742	-0.473206729	0.272128437
12:03:44	-0.23260744	-0.43831011	0.273829513	12:03:48	-0.231048419	-0.396922936	0.275141348
12:03:52	-0.230057416	-0.355874366	0.275683567	12:03:56	-0.229066413	-0.315191624	0.276225786
12:04:00	-0.22807541	-0.274874729	0.276768005	12:04:04	-0.227498743	-0.234804814	0.277310224
12:04:08	-0.226922077	-0.210909642	0.277852442	12:04:12	-0.226345411	-0.187014479	0.278394661
12:04:16	-0.225768745	-0.171982771	0.27893688	12:04:20	-0.225192079	-0.165814525	0.279479099
12:04:24	-0.224615413	-0.159646279	0.280021318	12:04:28	-0.224038747	-0.152247297	0.280563537
12:04:32	-0.223462081	-0.144848317	0.281105756	12:04:36	-0.222885415	-0.133730222	0.281647975
12:04:40	-0.222308748	-0.118893014	0.282190194	12:04:44	-0.221732082	-0.104055806	0.282732413
12:04:48	-0.221155416	-0.097591361	0.283274632	12:04:52	-0.22057875	-0.091126913	0.283816851
12:04:56	-0.220002084	-0.083018873	0.28435907	12:05:00	-0.219425418	-0.073267242	0.284901288
12:05:04	-0.221458272	-0.065071102	0.285443507	12:05:08	-0.223491126	-0.048688054	0.285985726
12:05:12	-0.22552398	-0.032305015	0.286527945	12:05:16	-0.227556835	-0.021115176	0.287070164
12:05:20	-0.229589689	-0.011656409	0.287612383	12:05:24	-0.231622543	-0.002197642	0.288154602
12:05:28	-0.233655397	0.011033654	0.288696821	12:05:32	-0.235688251	0.024264924	0.28923904
12:05:36	-0.237721105	0.034824721	0.289781259	12:05:40	-0.239753959	0.042713025	0.290323478
12:05:44	-0.241786814	0.050601312	0.290865697	12:05:48	-0.243819668	0.055149125	0.291407916
12:05:52	-0.245852522	0.059696937	0.291950134	12:05:56	-0.247885376	0.063353175	0.292492353
12:06:00	-0.24991823	0.066712209	0.293034572	12:06:04	-0.248611145	0.072062129	0.293576791
12:06:08	-0.247304059	0.080425191	0.29411901	12:06:12	-0.245996974	0.088788271	0.294661229
12:06:16	-0.244689889	0.100721684	0.295203448	12:06:20	-0.243382804	0.116225464	0.295745667

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
12:06:24	-0.242075718	0.131729226	0.296287886	12:06:28	-0.240768633	0.149406535	0.296830105
12:06:32	-0.239461548	0.167083844	0.297372324	12:06:36	-0.238154462	0.177287436	0.297914543
12:06:40	-0.236847377	0.18001724	0.298456762	12:06:44	-0.235540292	0.18274708	0.29899898
12:06:48	-0.234233206	0.173845516	0.299541199	12:06:52	-0.232926121	0.164943917	0.300083418
12:06:56	-0.231619036	0.151106768	0.300625637	12:07:00	-0.23031195	0.132334052	0.301167856
12:07:04	-0.229216598	0.113435126	0.301710075	12:07:08	-0.228128992	0.10182941	0.302241799
12:07:12	-0.2322116	0.087141828	0.295768322	12:07:16	-0.236294208	0.074148146	0.289294844
12:07:20	-0.240376816	0.062848363	0.282821367	12:07:24	-0.244459424	0.051548581	0.276347889
12:07:28	-0.248542032	0.037533801	0.269874411	12:07:32	-0.248586502	0.025926075	0.268872268
12:07:36	-0.248180135	0.009437277	0.26848097	12:07:40	-0.247773769	-0.012201358	0.268089672
12:07:44	-0.247367402	-0.033839985	0.267698374	12:07:48	-0.246961035	-0.05681496	0.267307076
12:07:52	-0.246554669	-0.079789932	0.266915778	12:07:56	-0.246148302	-0.104576637	0.26652448
12:08:00	-0.245741936	-0.131175073	0.266133182	12:08:04	-0.247367792	-0.158984885	0.265741884
12:08:08	-0.248993648	-0.188244529	0.265350587	12:08:12	-0.250619504	-0.21750417	0.264959289
12:08:16	-0.25224536	-0.239209815	0.264567991	12:08:20	-0.253871217	-0.258397455	0.264176693
12:08:24	-0.255491603	-0.277581835	0.263785395	12:08:28	-0.257111602	-0.288329074	0.263394097
12:08:32	-0.2587316	-0.299076321	0.263002799	12:08:36	-0.260351598	-0.310263867	0.262611501
12:08:40	-0.261971597	-0.321891702	0.262202023	12:08:44	-0.263591595	-0.333519537	0.261828905
12:08:48	-0.265211594	-0.364209608	0.261437607	12:08:52	-0.266831592	-0.394899697	0.261046309
12:08:56	-0.26845159	-0.408275561	0.260655011	12:09:00	-0.270071589	-0.415880046	0.260263714
12:09:04	-0.270701046	-0.422894067	0.259872416	12:09:08	-0.271330503	-0.45076511	0.259481118
12:09:12	-0.27195996	-0.478636152	0.25908982	12:09:16	-0.272589417	-0.49886363	0.258698522
12:09:20	-0.273218874	-0.511447525	0.258307224	12:09:24	-0.273848331	-0.524031419	0.257915926
12:09:28	-0.274477788	-0.536615314	0.257524628	12:09:32	-0.275107245	-0.549199209	0.25713333
12:09:36	-0.275736702	-0.554116462	0.256742032	12:09:40	-0.276366159	-0.551367109	0.256350734
12:09:44	-0.276995616	-0.548617756	0.255959436	12:09:48	-0.277625073	-0.534215824	0.255568138
12:09:52	-0.278088077	-0.519714637	0.25540237	12:09:56	-0.277766214	-0.510975399	0.25630003
12:10:00	-0.27744435	-0.504312713	0.257197691	12:10:04	-0.276277726	-0.497146478	0.258095352
12:10:08	-0.275111102	-0.482331616	0.258993012	12:10:12	-0.273944479	-0.467516753	0.259890673
12:10:16	-0.272777855	-0.451603321	0.260788334	12:10:20	-0.271611231	-0.434591302	0.261685995
12:10:24	-0.270444607	-0.417579265	0.262583655	12:10:28	-0.269277984	-0.402886694	0.263481316
12:10:32	-0.26811136	-0.388194106	0.264378977	12:10:36	-0.266944736	-0.371193616	0.265276637
12:10:40	-0.265778112	-0.351885207	0.266174298	12:10:44	-0.264611488	-0.332576799	0.267071959
12:10:48	-0.263444865	-0.305941196	0.26796962	12:10:52	-0.262278241	-0.279305585	0.26886728
12:10:56	-0.261111617	-0.253132629	0.269764941	12:11:00	-0.259944993	-0.227113892	0.270662602
12:11:04	-0.260280392	-0.201990483	0.271560262	12:11:08	-0.26061579	-0.174204443	0.272457923
12:11:12	-0.260951189	-0.146418402	0.273355584	12:11:16	-0.261286588	-0.134382207	0.274253244
12:11:20	-0.261621986	-0.127595959	0.275150905	12:11:24	-0.261957385	-0.120809711	0.276048566
12:11:28	-0.262292783	-0.107709173	0.276946227	12:11:32	-0.262628182	-0.094608635	0.277843887
12:11:36	-0.26296358	-0.077331732	0.278741548	12:11:40	-0.263298979	-0.055878466	0.279639209
12:11:44	-0.263634377	-0.0344252	0.280536869	12:11:48	-0.263969776	-0.008344487	0.28143453
12:11:52	-0.266334594	0.01652652	0.2795825	12:11:56	-0.269907459	0.03721262	0.276093668
12:12:00	-0.273480324	0.054433909	0.272604836	12:12:04	-0.276613596	0.071917234	0.269116004
12:12:08	-0.279746868	0.085729926	0.265627172	12:12:12	-0.282880141	0.099542619	0.26213834
12:12:16	-0.286013413	0.108758126	0.258649508	12:12:20	-0.289146685	0.113376413	0.255160676
12:12:24	-0.292279957	0.117994718	0.251671844	12:12:28	-0.295413229	0.127198376	0.248183012
12:12:32	-0.29554916	0.138188667	0.248755322	12:12:36	-0.294759345	0.149730817	0.250581941
12:12:40	-0.29396953	0.161272932	0.252408559	12:12:44	-0.293179714	0.171302986	0.254235178
12:12:48	-0.292389899	0.176796788	0.256061796	12:12:52	-0.291600084	0.182290554	0.257888415
12:12:56	-0.290810269	0.187071067	0.259715033	12:13:00	-0.290020453	0.191138328	0.261541652
12:13:04	-0.289778646	0.19487893	0.263368271	12:13:08	-0.289536838	0.198619532	0.265194889
12:13:12	-0.28929503	0.202360134	0.267021508	12:13:16	-0.289053222	0.212508002	0.268848126
12:13:20	-0.288811415	0.229063136	0.270674745	12:13:24	-0.288569607	0.245618306	0.272501363
12:13:28	-0.288327799	0.260831388	0.274327982	12:13:32	-0.288074611	0.276051219	0.2761546
12:13:36	-0.287821097	0.28368202	0.277981219	12:13:40	-0.287567584	0.283723563	0.279807837
12:13:44	-0.287314071	0.283765105	0.281634456	12:13:48	-0.287060557	0.270976518	0.283461075
12:13:52	-0.286807044	0.258187931	0.285287693	12:13:56	-0.28655353	0.242444256	0.287114312

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
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12:14:08	-0.280575666	0.191137377	0.292594167	12:14:12	-0.277713491	0.175673073	0.294420786
12:14:16	-0.274851316	0.169322168	0.296247404	12:14:20	-0.27198914	0.172084662	0.298074023
12:14:24	-0.269126965	0.174847121	0.299900641	12:14:28	-0.26626479	0.165623309	0.30172726
12:14:32	-0.263402614	0.156399496	0.303553878	12:14:36	-0.260540439	0.152428458	0.305380497
12:14:40	-0.257678264	0.153710157	0.307207116	12:14:44	-0.254816088	0.154991857	0.309033734
12:14:48	-0.251953913	0.157736906	0.310860353	12:14:52	-0.249091738	0.160481991	0.312686971
12:14:56	-0.246229563	0.161649996	0.31451359	12:15:00	-0.743367387	-0.338759006	-0.183659792
12:15:04	-0.742363104	-0.340275506	-0.181833173	12:15:08	-0.741532177	-0.350315062	-0.180241437
12:15:12	-0.241032027	0.139448228	0.320902125	12:15:16	-0.240531877	0.129211501	0.322045687
12:15:20	-0.240031726	0.118974791	0.323189248	12:15:24	-0.239531576	0.108738063	0.32433281
12:15:28	-0.239031426	0.096145985	0.325476372	12:15:32	-0.238531275	0.083553907	0.326619934
12:15:36	-0.238031125	0.07124395	0.327763495	12:15:40	-0.237530975	0.059216132	0.328907057
12:15:44	-0.237030824	0.047188314	0.330050619	12:15:48	-0.236530674	0.020105354	0.331194181
12:15:52	-0.236030524	-0.006977587	0.332337742	12:15:56	-0.235530373	-0.032628978	0.333481304
12:16:00	-0.235030223	-0.057803182	0.334624866	12:16:04	-0.235949623	-0.083823562	0.335768428
12:16:08	-0.236869023	-0.107779321	0.336911989	12:16:12	-0.237788424	-0.13173508	0.338055551
12:16:16	-0.238707824	-0.151624171	0.339199113	12:16:20	-0.239627224	-0.167446597	0.340342675
12:16:24	-0.240546625	-0.183269021	0.341486236	12:16:28	-0.241466025	-0.184401893	0.342629798
12:16:32	-0.242385425	-0.185534761	0.34377336	12:16:36	-0.243304825	-0.19128852	0.344916922
12:16:40	-0.244224226	-0.201663172	0.346060483	12:16:44	-0.245143626	-0.212037824	0.347204045
12:16:48	-0.246063026	-0.22832162	0.348347607	12:16:52	-0.246982426	-0.244605403	0.349491169
12:16:56	-0.247901827	-0.258372691	0.35063473	12:17:00	-0.248821227	-0.269623467	0.351778292
12:17:04	-0.247490803	-0.279533158	0.352921854	12:17:08	-0.24616038	-0.298632796	0.354065416
12:17:12	-0.244829956	-0.317732434	0.355208977	12:17:16	-0.243499532	-0.328959981	0.356352539
12:17:20	-0.242169109	-0.332315421	0.357496101	12:17:24	-0.240838685	-0.33567086	0.358639663
12:17:28	-0.23928686	-0.347515305	0.360083204	12:17:32	-0.236566509	-0.358663209	0.36311
12:17:36	-0.233846157	-0.374815359	0.366136796	12:17:40	-0.231125805	-0.395971719	0.369163592
12:17:44	-0.228405454	-0.417128096	0.372190389	12:17:48	-0.225685102	-0.435081285	0.375217185
12:17:52	-0.222964751	-0.453034473	0.378243981	12:17:56	-0.220244399	-0.469126987	0.381270777
12:18:00	-0.217524047	-0.483358861	0.384297573	12:18:04	-0.214365435	-0.497329495	0.38732437
12:18:08	-0.211206823	-0.50460916	0.390351166	12:18:12	-0.208048211	-0.51188879	0.393377962
12:18:16	-0.204889599	-0.524356281	0.396404758	12:18:20	-0.201730986	-0.542011598	0.399431554
12:18:24	-0.198815158	-0.559811636	0.402129398	12:18:28	-0.19854134	-0.546810399	0.401247543
12:18:32	-0.198267522	-0.533809163	0.400365688	12:18:36	-0.197993825	-0.534825628	0.399483833
12:18:40	-0.197737567	-0.549870118	0.398601978	12:18:44	-0.197481309	-0.564914643	0.397720123
12:18:48	-0.197225052	-0.569847358	0.396838268	12:18:52	-0.196968794	-0.574780072	0.395956413
12:18:56	-0.196712536	-0.578024003	0.395074558	12:19:00	-0.196456279	-0.580705006	0.394192703
12:19:04	-0.197950547	-0.584429506	0.393310848	12:19:08	-0.199444815	-0.576325592	0.392428993
12:19:12	-0.200939084	-0.568221643	0.391547138	12:19:16	-0.202433352	-0.555570107	0.390665283
12:19:20	-0.203927621	-0.538370915	0.389783428	12:19:24	-0.205421889	-0.521171722	0.388901573
12:19:28	-0.206916157	-0.496342767	0.388019718	12:19:32	-0.208410426	-0.471513848	0.387137863
12:19:36	-0.209904694	-0.452663071	0.386256008	12:19:40	-0.211398963	-0.439790471	0.385374152
12:19:44	-0.212893231	-0.426917872	0.384492297	12:19:48	-0.214387499	-0.411825519	0.383610442
12:19:52	-0.215881768	-0.396733167	0.382728587	12:19:56	-0.217376036	-0.377964445	0.381846732
12:20:00	-0.218870305	-0.355519353	0.380964877	12:20:04	-0.221470336	-0.333733408	0.380083022
12:20:08	-0.224070368	-0.30873214	0.379201167	12:20:12	-0.2266704	-0.28373089	0.378319312
12:20:16	-0.229270431	-0.265018513	0.377437457	12:20:20	-0.231870463	-0.252595019	0.376555602
12:20:24	-0.234470495	-0.240171533	0.375673747	12:20:28	-0.237070527	-0.239661759	0.374791892
12:20:32	-0.239670558	-0.239151984	0.373910037	12:20:36	-0.24227059	-0.239701502	0.373028182
12:20:40	-0.244870622	-0.241310328	0.372146327	12:20:44	-0.247470653	-0.242919154	0.371264442
12:20:48	-0.250070685	-0.237262484	0.370382617	12:20:52	-0.252670717	-0.231605822	0.369500762
12:20:56	-0.255270748	-0.225949156	0.368618907	12:21:00	-0.25787078	-0.22029249	0.367737051
12:21:04	-0.257710826	-0.212990639	0.366855196	12:21:08	-0.257550872	-0.20082074	0.365973341
12:21:12	-0.257390918	-0.188650839	0.365091486	12:21:16	-0.257230964	-0.178477144	0.364209631
12:21:20	-0.257071009	-0.170299654	0.363327776	12:21:24	-0.256911055	-0.162122164	0.362445921
12:21:28	-0.256751101	-0.163684356	0.361564066	12:21:32	-0.256337068	-0.165095096	0.361026466

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
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12:21:44	-0.254651317	-0.169062861	0.360014778	12:21:48	-0.2540894	-0.175402096	0.359677549
12:21:52	-0.253527482	-0.181741333	0.35934032	12:21:56	-0.252965565	-0.187049905	0.359003091
12:22:00	-0.252403648	-0.191327813	0.358665862	12:22:04	-0.250325863	-0.194702136	0.358328633
12:22:08	-0.248248078	-0.194135706	0.357991403	12:22:12	-0.246170293	-0.193569275	0.357654174
12:22:16	-0.244092508	-0.193378635	0.357316945	12:22:20	-0.242014723	-0.193563777	0.356979716
12:22:24	-0.239936938	-0.193748918	0.356642487	12:22:28	-0.237859153	-0.190964707	0.356305257
12:22:32	-0.235781368	-0.188180496	0.355968028	12:22:36	-0.233703583	-0.185396285	0.355630799
12:22:40	-0.231625798	-0.182612073	0.35529357	12:22:44	-0.229548013	-0.179827862	0.354956341
12:22:48	-0.227470229	-0.169872456	0.354619112	12:22:52	-0.225392444	-0.15991705	0.354281882
12:22:56	-0.223314659	-0.157663619	0.353944653	12:23:00	-0.221236874	-0.163112164	0.353607424
12:23:04	-0.221856673	-0.1701687	0.353270195	12:23:08	-0.222476472	-0.168151964	0.352932966
12:23:12	-0.223096272	-0.166135229	0.352595737	12:23:16	-0.223716071	-0.165412055	0.352258507
12:23:20	-0.224335871	-0.165982442	0.351921278	12:23:24	-0.22495567	-0.166552829	0.351584049
12:23:28	-0.225575469	-0.165892338	0.35124682	12:23:32	-0.226195269	-0.165231849	0.350909591
12:23:36	-0.226815068	-0.166931929	0.350572361	12:23:40	-0.227434867	-0.170992578	0.350235132
12:23:44	-0.228054476	-0.175053114	0.349897903	12:23:48	-0.228670373	-0.189938647	0.349560674
12:23:52	-0.229286269	-0.204824181	0.349223445	12:23:56	-0.229902165	-0.215149298	0.348886216
12:24:00	-0.230518061	-0.220913989	0.348548986	12:24:04	-0.23214564	-0.227281737	0.348211757
12:24:08	-0.233773218	-0.224553869	0.347874528	12:24:12	-0.235400797	-0.221826	0.347537299
12:24:16	-0.237028375	-0.224160237	0.34720007	12:24:20	-0.238655954	-0.231556571	0.34686284
12:24:24	-0.240283532	-0.238952913	0.346525611	12:24:28	-0.24191111	-0.249136519	0.346188382
12:24:32	-0.243538689	-0.259320125	0.345851153	12:24:36	-0.245166267	-0.269015948	0.345513924
12:24:40	-0.245516405	-0.277462516	0.346907519	12:24:44	-0.244369161	-0.285016528	0.350329938
12:24:48	-0.243221918	-0.279986335	0.353752358	12:24:52	-0.242074674	-0.274956142	0.357174777
12:24:56	-0.240927431	-0.268969063	0.360597196	12:25:00	-0.239780187	-0.262025079	0.364019615
12:25:04	-0.237240908	-0.254251323	0.367442034	12:25:08	-0.23642473	-0.242079724	0.368529797
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12:25:28	-0.239056845	-0.186375615	0.364873059	12:25:32	-0.239583268	-0.189660657	0.364141711
12:25:36	-0.240109691	-0.186635462	0.363410363	12:25:40	-0.240636114	-0.177300031	0.362679016
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12:25:52	-0.242215383	-0.13761329	0.360484973	12:25:56	-0.242741807	-0.123502775	0.359753625
12:26:00	-0.24326823	-0.110457396	0.359022277	12:26:04	-0.244020037	-0.097546367	0.35829093
12:26:08	-0.244771845	-0.106835338	0.357559582	12:26:12	-0.245523652	-0.11612431	0.356828234
12:26:16	-0.24627546	-0.127823714	0.356096887	12:26:20	-0.247027267	-0.141933548	0.355365539
12:26:24	-0.247779075	-0.156043383	0.354634192	12:26:28	-0.248530882	-0.149829497	0.353902844
12:26:32	-0.24928269	-0.143615612	0.353171496	12:26:36	-0.250034497	-0.135374572	0.352440149
12:26:40	-0.250786305	-0.125106378	0.351708801	12:26:44	-0.251538112	-0.114838184	0.350977453
12:26:48	-0.25228992	-0.109407538	0.350246106	12:26:52	-0.253041727	-0.103976891	0.349514758
12:26:56	-0.253793535	-0.104000828	0.34878341	12:27:00	-0.254545342	-0.105842956	0.348052063
12:27:04	-0.255312535	-0.10769426	0.347320715	12:27:08	-0.256079729	-0.10766763	0.346589367
12:27:12	-0.256846922	-0.107641001	0.34585802	12:27:16	-0.257614115	-0.109471764	0.345126672
12:27:20	-0.258381309	-0.111921663	0.344395324	12:27:24	-0.259148502	-0.114371562	0.343663977
12:27:28	-0.259915695	-0.10259518	0.342932629	12:27:32	-0.260682889	-0.090818799	0.342201281
12:27:36	-0.261450082	-0.088833895	0.341469934	12:27:40	-0.262217275	-0.09664046	0.340738586
12:27:44	-0.262984468	-0.104447025	0.340007238	12:27:48	-0.263751662	-0.116303361	0.339275891
12:27:52	-0.264518855	-0.128159691	0.338544543	12:27:56	-0.265286048	-0.148746411	0.337813195
12:28:00	-0.266053242	-0.178063513	0.337081848	12:28:04	-0.266386972	-0.204278343	0.3363505
12:28:08	-0.266720702	-0.221961485	0.335619153	12:28:12	-0.267054432	-0.239644623	0.334887805
12:28:16	-0.267388162	-0.248775469	0.334156457	12:28:20	-0.267721892	-0.249354023	0.33342511
12:28:24	-0.268055622	-0.249932569	0.332693762	12:28:28	-0.268389352	-0.255037533	0.331962414
12:28:32	-0.268723082	-0.260142498	0.331231067	12:28:36	-0.267841795	-0.257179016	0.332145964
12:28:40	-0.266817088	-0.246785839	0.333255184	12:28:44	-0.26579238	-0.236392662	0.334364404
12:28:48	-0.264767673	-0.22599949	0.335473624	12:28:52	-0.263755891	-0.215614019	0.336582844
12:28:56	-0.26287708	-0.202928009	0.337692065	12:29:00	-0.26199827	-0.189448735	0.338801285
12:29:04	-0.26181899	-0.17638644	0.339910505	12:29:08	-0.26163971	-0.167025325	0.341019725

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
12:29:12	-0.261460429	-0.157664209	0.342128945	12:29:16	-0.261281149	-0.146192127	0.343238165
12:29:20	-0.261101869	-0.132609076	0.344347385	12:29:24	-0.260922589	-0.119026026	0.345456605
12:29:28	-0.260743308	-0.114686274	0.346565825	12:29:32	-0.260564028	-0.110346514	0.347675045
12:29:36	-0.260384748	-0.107069284	0.348784265	12:29:40	-0.260205468	-0.104854569	0.349893486
12:29:44	-0.260026187	-0.102639854	0.351002706	12:29:48	-0.259846907	-0.104128378	0.352111926
12:29:52	-0.259667627	-0.105616902	0.353221146	12:29:56	-0.259488347	-0.107105426	0.354330366
12:30:00	0.240690934	0.39140605	0.855439586	12:30:04	0.240901171	0.389935979	0.856548806
12:30:08	0.241111408	0.390998088	0.857658026	12:30:12	-0.258678355	-0.107939802	0.358767246
12:30:16	-0.258468118	-0.103140266	0.359876466	12:30:20	-0.258257881	-0.094603294	0.360985687
12:30:24	-0.258047644	-0.086066326	0.362094907	12:30:28	-0.257837407	-0.085495463	0.363204127
12:30:32	-0.25762717	-0.084924601	0.364313347	12:30:36	-0.257537558	-0.088119647	0.365259131
12:30:40	-0.258873394	-0.095858378	0.364273552	12:30:44	-0.260209231	-0.104732384	0.363287973
12:30:48	-0.261545068	-0.117012207	0.362302394	12:30:52	-0.262880904	-0.129292027	0.361316816
12:30:56	-0.264216741	-0.139875917	0.360331237	12:31:00	-0.265552578	-0.148763872	0.359345658
12:31:04	-0.266521852	-0.157433326	0.35836008	12:31:08	-0.267491126	-0.172702847	0.357374501
12:31:12	-0.2684604	-0.187972371	0.356388922	12:31:16	-0.269429675	-0.204900297	0.355403343
12:31:20	-0.270398949	-0.223486634	0.354417765	12:31:24	-0.271368223	-0.242072966	0.353432186
12:31:28	-0.272337497	-0.256771977	0.352446607	12:31:32	-0.273306771	-0.271470988	0.351461029
12:31:36	-0.274276046	-0.284887024	0.35047545	12:31:40	-0.27524532	-0.297020084	0.349489871
12:31:44	-0.276214594	-0.309153134	0.348504292	12:31:48	-0.277183868	-0.312277962	0.347518714
12:31:52	-0.27689038	-0.314650068	0.346533135	12:31:56	-0.271406924	-0.313928515	0.345547556
12:32:00	-0.265923468	-0.31320698	0.344561977	12:32:04	-0.259908163	-0.312168399	0.343576399
12:32:08	-0.253892859	-0.311129819	0.34259082	12:32:12	-0.247877554	-0.310091239	0.341605241
12:32:16	-0.241862249	-0.305443582	0.340619663	12:32:20	-0.251707871	-0.306641283	0.339634084
12:32:24	-0.252624334	-0.30251645	0.338648505	12:32:28	-0.253540798	-0.291197908	0.337662926
12:32:32	-0.254457261	-0.279879375	0.336677348	12:32:36	-0.255373724	-0.272800628	0.335691769
12:32:40	-0.256290187	-0.269961684	0.33470619	12:32:44	-0.25720665	-0.267122732	0.333720612
12:32:48	-0.258123113	-0.25742704	0.332735033	12:32:52	-0.259039576	-0.247731348	0.331749454
12:32:56	-0.259956039	-0.242799714	0.330763875	12:33:00	-0.260872502	-0.242632155	0.329778297
12:33:04	-0.263087846	-0.240845224	0.328792718	12:33:08	-0.26530319	-0.231877444	0.327807139
12:33:12	-0.267518534	-0.22290966	0.32682156	12:33:16	-0.270781616	-0.216136789	0.324416386
12:33:20	-0.275718452	-0.211931985	0.319743417	12:33:24	-0.280655288	-0.207727182	0.315070448
12:33:28	-0.285592123	-0.215477477	0.310397479	12:33:32	-0.290528959	-0.223227772	0.30572451
12:33:36	-0.295465795	-0.227662054	0.301051541	12:33:40	-0.30040263	-0.228780333	0.296378572
12:33:44	-0.305339466	-0.229898611	0.291705602	12:33:48	-0.310276302	-0.236296844	0.287032633
12:33:52	-0.314686492	-0.242381151	0.282359664	12:33:56	-0.31902275	-0.241983517	0.277686695
12:34:00	-0.323359008	-0.235148014	0.273013726	12:34:04	-0.326389325	-0.227534059	0.268340757
12:34:08	-0.329419641	-0.230958289	0.263667788	12:34:12	-0.328154537	-0.231822085	0.264814749
12:34:16	-0.323757013	-0.224751033	0.270205875	12:34:20	-0.319359489	-0.21161232	0.275597
12:34:24	-0.314961965	-0.198473606	0.280988125	12:34:28	-0.310564441	-0.177334851	0.28637925
12:34:32	-0.306166917	-0.156196097	0.291770375	12:34:36	-0.301769392	-0.137990329	0.2971615
12:34:40	-0.297371868	-0.122717554	0.302552626	12:34:44	-0.295384818	-0.108881625	0.304677762
12:34:48	-0.294399959	-0.106756653	0.305445016	12:34:52	-0.2934151	-0.104631681	0.30621227
12:34:56	-0.292430241	-0.104076399	0.306979523	12:35:00	-0.291445381	-0.105090809	0.307746777
12:35:04	-0.291622363	-0.106641824	0.308514031	12:35:08	-0.291799344	-0.107724982	0.309281285
12:35:12	-0.291976325	-0.108808145	0.310048538	12:35:16	-0.292153307	-0.109891303	0.310815792
12:35:20	-0.292330288	-0.10253681	0.311583046	12:35:24	-0.29250727	-0.095182321	0.3123503
12:35:28	-0.292684251	-0.093657195	0.313117553	12:35:32	-0.292861232	-0.09213206	0.313884807
12:35:36	-0.293038214	-0.093821172	0.314652061	12:35:40	-0.293215195	-0.09658171	0.315419315
12:35:44	-0.293392176	-0.100316445	0.316186568	12:35:48	-0.293569158	-0.10697383	0.316953822
12:35:52	-0.293746139	-0.113631206	0.317721076	12:35:56	-0.29392312	-0.123268224	0.31848833
12:36:00	-0.294100102	-0.133898457	0.319255583	12:36:04	-0.294391379	-0.141487954	0.320022837
12:36:08	-0.294682656	-0.139750857	0.320790091	12:36:12	-0.294973933	-0.13801376	0.321557345
12:36:16	-0.295265211	-0.140518464	0.322324598	12:36:20	-0.295556488	-0.1444371	0.323091852
12:36:24	-0.295847765	-0.147492413	0.323859106	12:36:28	-0.296139042	-0.147957762	0.324626359
12:36:32	-0.296430319	-0.148423109	0.325393613	12:36:36	-0.296721597	-0.145801075	0.326160867
12:36:40	-0.297012874	-0.142149911	0.326928121	12:36:44	-0.297304151	-0.136316323	0.327695374

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
12:36:48	-0.297595428	-0.123935447	0.328462628	12:36:52	-0.297886705	-0.111554571	0.329229882
12:36:56	-0.298177983	-0.101424403	0.329997136	12:37:00	-0.29846926	-0.092044474	0.330764389
12:37:04	-0.297776668	-0.084585883	0.331531643	12:37:08	-0.297084075	-0.084650724	0.332298897
12:37:12	-0.296391483	-0.084715564	0.333066151	12:37:16	-0.295698891	-0.075583805	0.333833404
12:37:20	-0.295006299	-0.063386515	0.334600658	12:37:24	-0.294313707	-0.05694212	0.335367912
12:37:28	-0.294181468	-0.0680904	0.335375933	12:37:32	-0.295265411	-0.079963627	0.333736133
12:37:36	-0.296349354	-0.092947068	0.332096333	12:37:40	-0.297433296	-0.106300583	0.330456533
12:37:44	-0.298517239	-0.125935488	0.328816732	12:37:48	-0.299601182	-0.164414556	0.327176932
12:37:52	-0.300685124	-0.202893627	0.325537132	12:37:56	-0.301769067	-0.230325009	0.323897332
12:38:00	-0.302853009	-0.257756385	0.322257531	12:38:04	-0.303537142	-0.284488215	0.320617731
12:38:08	-0.304221276	-0.309836343	0.318977931	12:38:12	-0.304905409	-0.335184472	0.31733813
12:38:16	-0.305589542	-0.339352617	0.31569833	12:38:20	-0.306273675	-0.336460784	0.31405853
12:38:24	-0.306957808	-0.333568952	0.31241873	12:38:28	-0.307641941	-0.33067711	0.310778929
12:38:32	-0.308326074	-0.327785278	0.309139129	12:38:36	-0.309010207	-0.329664876	0.307499329
12:38:40	-0.30969434	-0.333134956	0.305859529	12:38:44	-0.310378473	-0.337926233	0.304219728
12:38:48	-0.311062606	-0.346681064	0.302579928	12:38:52	-0.311746739	-0.355435894	0.300940128
12:38:56	-0.311437222	-0.356379259	0.300646639	12:39:00	-0.311093797	-0.354895988	0.300399093
12:39:04	-0.31126492	-0.356240686	0.300151547	12:39:08	-0.311425537	-0.365142852	0.299904001
12:39:12	-0.311537193	-0.374015833	0.299656455	12:39:16	-0.311648848	-0.378237411	0.299408909
12:39:20	-0.311760504	-0.380908504	0.299161363	12:39:24	-0.31187216	-0.379029434	0.298913817
12:39:28	-0.311983816	-0.372600238	0.298666271	12:39:32	-0.312095471	-0.366171024	0.298418725
12:39:36	-0.312207127	-0.35642491	0.298171179	12:39:40	-0.312318783	-0.345573156	0.297923632
12:39:44	-0.312430438	-0.335235006	0.297676086	12:39:48	-0.312542094	-0.325410433	0.29742854
12:39:52	-0.31265375	-0.315585861	0.297180994	12:39:56	-0.312765405	-0.298110964	0.296933448
12:40:00	-0.312877061	-0.278085952	0.296685902	12:40:04	-0.314259116	-0.270176637	0.296438356
12:40:08	-0.315641172	-0.273625736	0.29619081	12:40:12	-0.317023227	-0.277074843	0.295943264
12:40:16	-0.318405282	-0.28577151	0.295695718	12:40:20	-0.319787337	-0.296217378	0.295448172
12:40:24	-0.321169393	-0.297782788	0.295200626	12:40:28	-0.322551448	-0.290467746	0.29495308
12:40:32	-0.323933503	-0.283152705	0.294705534	12:40:36	-0.325315559	-0.267269695	0.294457987
12:40:40	-0.326697614	-0.248530698	0.294210441	12:40:44	-0.328079669	-0.229294045	0.293962895
12:40:48	-0.329461724	-0.208564433	0.293715349	12:40:52	-0.33084378	-0.187834822	0.293467803
12:40:56	-0.332225835	-0.172860779	0.293220257	12:41:00	-0.33360789	-0.159805258	0.292927211
12:41:04	-0.333818022	-0.146767261	0.292725165	12:41:08	-0.334028154	-0.135877527	0.292477619
12:41:12	-0.334238286	-0.124987793	0.292230073	12:41:16	-0.334448418	-0.116376773	0.291982527
12:41:20	-0.334658551	-0.108525314	0.291734981	12:41:24	-0.334868683	-0.102124814	0.291487435
12:41:28	-0.335078815	-0.100077145	0.291239888	12:41:32	-0.335288947	-0.098029477	0.290992342
12:41:36	-0.335499079	-0.083668693	0.290744796	12:41:40	-0.335709211	-0.065203535	0.29049725
12:41:44	-0.335919343	-0.052510839	0.290249704	12:41:48	-0.336129475	-0.05713554	0.290002158
12:41:52	-0.336339607	-0.06176024	0.289754612	12:41:56	-0.336549739	-0.068929414	0.289507066
12:42:00	-0.336759871	-0.076946755	0.28925952	12:42:04	-0.337771665	-0.087074317	0.289011974
12:42:08	-0.338783458	-0.102098976	0.288764428	12:42:12	-0.339795251	-0.117123645	0.288516882
12:42:16	-0.341269353	-0.127970162	0.287642946	12:42:20	-0.343481321	-0.137771922	0.285769264
12:42:24	-0.345693289	-0.147025899	0.283895583	12:42:28	-0.347905258	-0.154636517	0.282021901
12:42:32	-0.350117226	-0.162247135	0.28014822	12:42:36	-0.352329194	-0.171838703	0.278274538
12:42:40	-0.354541162	-0.182090592	0.276400857	12:42:44	-0.35675313	-0.193386779	0.274527175
12:42:48	-0.358965099	-0.207815867	0.272653494	12:42:52	-0.361177067	-0.222244954	0.270779812
12:42:56	-0.363389035	-0.231993882	0.268906131	12:43:00	-0.365601003	-0.240182758	0.267032449
12:43:04	-0.366775057	-0.247922818	0.265158768	12:43:08	-0.367949112	-0.256172479	0.263285086
12:43:12	-0.369123166	-0.264422144	0.261411405	12:43:16	-0.37029722	-0.273425632	0.259537723
12:43:20	-0.371471274	-0.282680398	0.257664041	12:43:24	-0.372645329	-0.291494319	0.25579036
12:43:28	-0.373354919	-0.298708838	0.254545987	12:43:32	-0.372390422	-0.304925469	0.255569862
12:43:36	-0.371425294	-0.312798587	0.256593736	12:43:40	-0.370461427	-0.321223858	0.257617611
12:43:44	-0.36949693	-0.328892007	0.258641485	12:43:48	-0.368532432	-0.334288769	0.25966536
12:43:52	-0.367567935	-0.339685523	0.260689234	12:43:56	-0.366603437	-0.330011494	0.261713109
12:44:00	-0.36563894	-0.320337456	0.262736983	12:44:04	-0.365163003	-0.309230151	0.263760858
12:44:08	-0.364687066	-0.29294932	0.264784732	12:44:12	-0.364211129	-0.276668493	0.265808607
12:44:16	-0.363742031	-0.264659082	0.266832481	12:44:20	-0.363298058	-0.254087099	0.267856355

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
12:44:24	-0.362854086	-0.245542346	0.26888023	12:44:28	-0.362410113	-0.243079283	0.269904104
12:44:32	-0.36196614	-0.240616221	0.270927979	12:44:36	-0.361522167	-0.23469056	0.271951853
12:44:40	-0.361078195	-0.227610699	0.272975728	12:44:44	-0.360634222	-0.221059161	0.273999602
12:44:48	-0.360190249	-0.216092597	0.275023477	12:44:52	-0.359746277	-0.211126033	0.276047351
12:44:56	-0.359302304	-0.20012142	0.277071226	12:45:00	-0.858858331	-0.687104125	-0.2219049
12:45:04	-0.85840508	-0.675945692	-0.220881025	12:45:08	-0.857951829	-0.670380435	-0.219857151
12:45:12	-0.357498578	-0.164815179	0.281166723	12:45:16	-0.357045327	-0.158289159	0.282190598
12:45:20	-0.356592075	-0.15144289	0.283214472	12:45:24	-0.356138824	-0.145622541	0.284238347
12:45:28	-0.355685573	-0.142879945	0.285262221	12:45:32	-0.355232322	-0.140137348	0.286286096
12:45:36	-0.354779071	-0.136322555	0.28730997	12:45:40	-0.35432582	-0.131435572	0.288333845
12:45:44	-0.353872568	-0.12654859	0.289357719	12:45:48	-0.353419317	-0.127203475	0.290381594
12:45:52	-0.352966066	-0.127858352	0.291405468	12:45:56	-0.352512815	-0.124313164	0.292429343
12:46:00	-0.3534288	-0.117384084	0.291598018	12:46:04	-0.359147375	-0.113317753	0.283737947
12:46:08	-0.364865949	-0.107782832	0.275877876	12:46:12	-0.370584524	-0.10224791	0.268017805
12:46:16	-0.376330398	-0.101879409	0.260157734	12:46:20	-0.382021673	-0.106677318	0.252297664
12:46:24	-0.387740248	-0.111475227	0.244437593	12:46:28	-0.393458822	-0.13151398	0.236577522
12:46:32	-0.399177397	-0.151552733	0.228717451	12:46:36	-0.404895971	-0.172503638	0.22085738
12:46:40	-0.407817652	-0.192699503	0.216786863	12:46:44	-0.405740995	-0.209915939	0.21948867
12:46:48	-0.403664337	-0.229751686	0.222190477	12:46:52	-0.40158768	-0.249587433	0.224892284
12:46:56	-0.399511022	-0.263256793	0.227594092	12:47:00	-0.397434365	-0.270759768	0.230295899
12:47:04	-0.395071895	-0.278092374	0.232997706	12:47:08	-0.392709426	-0.275564882	0.235699513
12:47:12	-0.390346957	-0.27303739	0.238401321	12:47:16	-0.387984487	-0.272226088	0.241103128
12:47:20	-0.385622018	-0.273130985	0.243804935	12:47:24	-0.383259549	-0.274035878	0.246506742
12:47:28	-0.380897079	-0.278697308	0.249208549	12:47:32	-0.37853461	-0.283358738	0.251910357
12:47:36	-0.376172141	-0.282308643	0.254612164	12:47:40	-0.373809671	-0.275547023	0.257313971
12:47:44	-0.371447202	-0.268785403	0.260015778	12:47:48	-0.369260972	-0.262128837	0.262478796
12:47:52	-0.368466992	-0.256302167	0.263055433	12:47:56	-0.367673013	-0.245845425	0.263632069
12:48:00	-0.366879033	-0.230758606	0.264208706	12:48:04	-0.367735053	-0.216655326	0.264785343
12:48:08	-0.368591072	-0.215438317	0.265361979	12:48:12	-0.369447091	-0.214221308	0.265938616
12:48:16	-0.370303111	-0.211322654	0.266515252	12:48:20	-0.37115913	-0.206742353	0.267091889
12:48:24	-0.372015149	-0.202162052	0.267668526	12:48:28	-0.372871169	-0.197581752	0.268245162
12:48:32	-0.373727188	-0.193001452	0.268821799	12:48:36	-0.374583207	-0.186486014	0.269398435
12:48:40	-0.375439227	-0.178035436	0.269975072	12:48:44	-0.376295246	-0.16958486	0.270551709
12:48:48	-0.377151265	-0.175965448	0.271128345	12:48:52	-0.378007285	-0.182346041	0.271704982
12:48:56	-0.378863304	-0.184112953	0.272281618	12:49:00	-0.379719324	-0.181266191	0.272858255
12:49:04	-0.379759683	-0.177933226	0.273434892	12:49:08	-0.379800042	-0.164409539	0.274011528
12:49:12	-0.379840402	-0.150885857	0.274588165	12:49:16	-0.379880761	-0.14642153	0.275164801
12:49:20	-0.37992112	-0.144976997	0.275741438	12:49:24	-0.37996148	-0.143532464	0.276318075
12:49:28	-0.380001839	-0.143260464	0.276894711	12:49:32	-0.380042198	-0.142988464	0.277471348
12:49:36	-0.379912963	-0.143203037	0.278047985	12:49:40	-0.379619414	-0.143907347	0.278624621
12:49:44	-0.379325865	-0.144611649	0.279201258	12:49:48	-0.379032316	-0.142565797	0.279777894
12:49:52	-0.378738767	-0.140519936	0.280354531	12:49:56	-0.378445218	-0.131504708	0.280931168
12:50:00	-0.378151669	-0.115520093	0.281507804	12:50:04	-0.376474247	-0.098710582	0.282084441
12:50:08	-0.374796825	-0.086219439	0.282661077	12:50:12	-0.373119403	-0.073728296	0.283237714
12:50:16	-0.371441981	-0.06031091	0.283814351	12:50:20	-0.369764558	-0.045967282	0.284390987
12:50:24	-0.368087136	-0.031623653	0.284967624	12:50:28	-0.366409714	-0.026503601	0.28554426
12:50:32	-0.364732292	-0.021383548	0.286120897	12:50:36	-0.36305487	-0.013033197	0.286697534
12:50:40	-0.361377448	-0.001452531	0.28727417	12:50:44	-0.359700025	0.010128136	0.287850807
12:50:48	-0.358022603	0.029062483	0.288427443	12:50:52	-0.354834095	0.048897583	0.291051474
12:50:56	-0.351554361	0.071353563	0.293799106	12:51:00	-0.348274628	0.096376081	0.296546739
12:51:04	-0.346049007	0.12077024	0.299294372	12:51:08	-0.343823386	0.134555959	0.302042005
12:51:12	-0.341597765	0.148341678	0.304789638	12:51:16	-0.339372144	0.155943753	0.30753727
12:51:20	-0.337146524	0.157362183	0.310284903	12:51:24	-0.334920903	0.158780614	0.313032536
12:51:28	-0.332695282	0.163657228	0.315780169	12:51:32	-0.330469661	0.168533806	0.318527801
12:51:36	-0.328244041	0.170903217	0.321275434	12:51:40	-0.32601842	0.17076546	0.324023067
12:51:44	-0.323792799	0.170627702	0.3267707	12:51:48	-0.321567178	0.167111418	0.329518332
12:51:52	-0.321175795	0.162501738	0.329780729	12:51:56	-0.320912251	0.150491326	0.329869914

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
12:52:00	-0.320648707	0.131156349	0.329959099	12:52:04	-0.319068593	0.11260616	0.330048284
12:52:08	-0.317488479	0.078676091	0.330137469	12:52:12	-0.315908364	0.044746021	0.330226654
12:52:16	-0.31432825	0.018227564	0.330315838	12:52:20	-0.312748136	-0.005820339	0.330405023
12:52:24	-0.311168021	-0.02986826	0.330494208	12:52:28	-0.309587907	-0.057147944	0.330583393
12:52:32	-0.308007793	-0.084427628	0.330672578	12:52:36	-0.30651166	-0.104391292	0.330761763
12:52:40	-0.305460521	-0.117254129	0.330850948	12:52:44	-0.304409383	-0.130116966	0.330940133
12:52:48	-0.303358244	-0.145473821	0.331029317	12:52:52	-0.302307105	-0.160830676	0.331118502
12:52:56	-0.301255967	-0.174470014	0.331207687	12:53:00	-0.300204828	-0.187536846	0.331296872
12:53:04	-0.300128755	-0.2011849	0.331386057	12:53:08	-0.300052681	-0.21834864	0.331475242
12:53:12	-0.299976608	-0.235512383	0.331564427	12:53:16	-0.299900535	-0.243570921	0.331653611
12:53:20	-0.299824461	-0.242524254	0.331742796	12:53:24	-0.299748388	-0.241477587	0.331831981
12:53:28	-0.299672314	-0.238766661	0.331921166	12:53:32	-0.299596241	-0.23106296	0.332010351
12:53:36	-0.299520168	-0.226480922	0.332099536	12:53:40	-0.299444094	-0.225020542	0.332188721
12:53:44	-0.299368021	-0.223560162	0.332277905	12:53:48	-0.299291947	-0.214688943	0.33236709
12:53:52	-0.299215874	-0.205817724	0.332456275	12:53:56	-0.299139801	-0.197678933	0.33254546
12:54:00	-0.299063727	-0.190272569	0.332634645	12:54:04	-0.299652785	-0.183262679	0.33272383
12:54:08	-0.300241843	-0.184297441	0.332813015	12:54:12	-0.300830901	-0.185332203	0.3329022
12:54:16	-0.301419958	-0.190367755	0.332991384	12:54:20	-0.302009016	-0.199404099	0.333080569
12:54:24	-0.302598074	-0.208440441	0.333169754	12:54:28	-0.303187132	-0.226092833	0.333258939
12:54:32	-0.303688438	-0.24369292	0.333348124	12:54:36	-0.303983372	-0.263859291	0.333437309
12:54:40	-0.304278306	-0.284922106	0.333526494	12:54:44	-0.30457324	-0.305984911	0.333615678
12:54:48	-0.304868174	-0.320815077	0.333704863	12:54:52	-0.305163108	-0.335645252	0.333794048
12:54:56	-0.305458042	-0.346689734	0.333883233	12:55:00	-0.305752976	-0.353948522	0.333972418
12:55:04	-0.306383249	-0.3614072	0.332708499	12:55:08	-0.308226525	-0.373274982	0.329801063
12:55:12	-0.310069802	-0.385142764	0.326893628	12:55:16	-0.311913078	-0.402810615	0.323986192
12:55:20	-0.313756354	-0.426278517	0.321078756	12:55:24	-0.315599631	-0.449746436	0.31817132
12:55:28	-0.317442907	-0.474371904	0.315263884	12:55:32	-0.319286184	-0.498997354	0.312356448
12:55:36	-0.32112946	-0.516912312	0.309449012	12:55:40	-0.322972736	-0.53259048	0.306541577
12:55:44	-0.324816013	-0.545561166	0.303634141	12:55:48	-0.326659289	-0.550409581	0.300726705
12:55:52	-0.326879182	-0.554290359	0.300018816	12:55:56	-0.324636315	-0.559959037	0.302647758
12:56:00	-0.322393447	-0.566712997	0.305276701	12:56:04	-0.319519044	-0.571404744	0.307905643
12:56:08	-0.31664464	-0.571039058	0.310534585	12:56:12	-0.313770236	-0.570673372	0.313163528
12:56:16	-0.310895833	-0.572572117	0.31579247	12:56:20	-0.308021429	-0.575225684	0.318421413
12:56:24	-0.305147025	-0.580438718	0.321050355	12:56:28	-0.302272622	-0.593330261	0.323679297
12:56:32	-0.299398218	-0.606221804	0.32630824	12:56:36	-0.296523814	-0.60850114	0.328937182
12:56:40	-0.29364941	-0.607243062	0.331566125	12:56:44	-0.290775007	-0.604436861	0.334195067
12:56:48	-0.287900603	-0.596986114	0.336824009	12:56:52	-0.285026199	-0.589535403	0.339452952
12:56:56	-0.282151796	-0.57585731	0.342081894	12:57:00	-0.279277392	-0.560103413	0.344710837
12:57:04	-0.277891902	-0.541433113	0.347339779	12:57:08	-0.276506411	-0.511351124	0.349968721
12:57:12	-0.275120921	-0.481269134	0.352597664	12:57:16	-0.27373543	-0.44999659	0.355226606
12:57:20	-0.27234994	-0.418327165	0.357855549	12:57:24	-0.270964449	-0.393413176	0.360484491
12:57:28	-0.269578959	-0.375254607	0.363113433	12:57:32	-0.268193468	-0.357096037	0.365742376
12:57:36	-0.266807978	-0.327196011	0.368371318	12:57:40	-0.265422487	-0.293382182	0.37100026
12:57:44	-0.264036997	-0.262646789	0.373629203	12:57:48	-0.262651506	-0.241146724	0.376258145
12:57:52	-0.261266016	-0.219646662	0.378887088	12:57:56	-0.259880525	-0.203730708	0.38151603
12:58:00	-0.258495035	-0.187814752	0.384144972	12:58:04	-0.25873607	-0.172196017	0.384834756
12:58:08	-0.260129067	-0.155246963	0.383963728	12:58:12	-0.261522064	-0.138297908	0.3830927
12:58:16	-0.262915061	-0.121730541	0.382221672	12:58:20	-0.264308058	-0.105290401	0.381350644
12:58:24	-0.265701056	-0.090985254	0.380479616	12:58:28	-0.267094053	-0.083085082	0.379608588
12:58:32	-0.26848705	-0.07518491	0.378737561	12:58:36	-0.269880047	-0.061780078	0.377866533
12:58:40	-0.271273044	-0.046540357	0.376995505	12:58:44	-0.272666041	-0.027963989	0.376124477
12:58:48	-0.274059039	0.000622344	0.375253449	12:58:52	-0.275452036	0.029208677	0.374382421
12:58:56	-0.276845033	0.046283395	0.373511393	12:59:00	-0.27823803	0.059520936	0.372640365
12:59:04	-0.27917009	0.070373664	0.371769338	12:59:08	-0.28010215	0.073247766	0.37089831
12:59:12	-0.28103421	0.076121869	0.370027282	12:59:16	-0.28196627	0.077037768	0.369156254
12:59:20	-0.28289833	0.077300904	0.368285226	12:59:24	-0.28383039	0.080631079	0.367414198
12:59:28	-0.28476245	0.093162323	0.36654317	12:59:32	-0.28569451	0.105693566	0.365672142

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
12:59:36	-0.28662657	0.114908477	0.364801115	12:59:40	-0.2875731	0.1230093	0.363930087
12:59:44	-0.288548851	0.130831903	0.363059059	12:59:48	-0.289524601	0.137872041	0.362188031
12:59:52	-0.290500351	0.14491218	0.361317003	12:59:56	-0.291476101	0.167022044	0.360445975
13:00:00	0.207548149	0.694155127	0.859574947	13:00:04	0.208509674	0.717789347	0.858703919
13:00:08	0.209471198	0.727462502	0.857832892	13:00:12	-0.289567278	0.237135656	0.356961864
13:00:16	-0.288605753	0.244402474	0.356090836	13:00:20	-0.287644229	0.250867181	0.355219808
13:00:24	-0.286682705	0.254477171	0.35434878	13:00:28	-0.28572118	0.24952294	0.353477752
13:00:32	-0.284759656	0.244568709	0.352606724	13:00:36	-0.283798132	0.231440655	0.351735696
13:00:40	-0.282836607	0.215587957	0.350864669	13:00:44	-0.281875083	0.200574286	0.349993641
13:00:48	-0.280913559	0.188077659	0.349122613	13:00:52	-0.279952034	0.175581033	0.348251585
13:00:56	-0.27899051	0.163483296	0.347380557	13:01:00	-0.278028986	0.151518581	0.346509529
13:01:04	-0.275435706	0.14396908	0.348346132	13:01:08	-0.272802795	0.146770926	0.350236432
13:01:12	-0.270169883	0.149572808	0.352126733	13:01:16	-0.267536971	0.152887734	0.354017034
13:01:20	-0.26490406	0.156373664	0.355907335	13:01:24	-0.262271148	0.158284752	0.357797635
13:01:28	-0.259638237	0.155471247	0.359687936	13:01:32	-0.257005325	0.152657742	0.361578237
13:01:36	-0.254372413	0.142211331	0.363468538	13:01:40	-0.251739502	0.129220605	0.365358838
13:01:44	-0.24910659	0.115437041	0.367249139	13:01:48	-0.246473679	0.099274961	0.36913944
13:01:52	-0.243840767	0.083112881	0.371029741	13:01:56	-0.241207855	0.072113312	0.372920041
13:02:00	-0.238574944	0.062834592	0.374810342	13:02:04	-0.238309183	0.050669048	0.376700643
13:02:08	-0.238043422	0.034076113	0.378590944	13:02:12	-0.237937369	0.017387979	0.380264854
13:02:16	-0.238825483	-0.00634476	0.380591753	13:02:20	-0.239713597	-0.032228174	0.380918652
13:02:24	-0.24060171	-0.055904918	0.381245551	13:02:28	-0.241489824	-0.072961682	0.38157245
13:02:32	-0.242377937	-0.090018446	0.381899349	13:02:36	-0.243266051	-0.107075205	0.382226248
13:02:40	-0.244154165	-0.124131969	0.382553147	13:02:44	-0.245042278	-0.13986751	0.382880046
13:02:48	-0.245930392	-0.151639385	0.383206945	13:02:52	-0.246818505	-0.163411261	0.383533844
13:02:56	-0.247706619	-0.168158375	0.383860743	13:03:00	-0.248594733	-0.1705639	0.384187642
13:03:04	-0.248408085	-0.174032617	0.38451454	13:03:08	-0.248221437	-0.182612855	0.384841439
13:03:12	-0.24803479	-0.191193093	0.385168338	13:03:16	-0.247848142	-0.182327452	0.385495237
13:03:20	-0.247661494	-0.167646516	0.385822136	13:03:24	-0.247474846	-0.152965579	0.386149035
13:03:28	-0.247288199	-0.143237119	0.386475934	13:03:32	-0.247101551	-0.138461135	0.386802833
13:03:36	-0.246914903	-0.139428279	0.387129732	13:03:40	-0.246728256	-0.142309799	0.387456631
13:03:44	-0.246541608	-0.14504352	0.38778353	13:03:48	-0.24635496	-0.147333838	0.388110429
13:03:52	-0.246168313	-0.149624156	0.388437328	13:03:56	-0.245981665	-0.139652016	0.388764227
13:04:00	-0.245795017	-0.125592388	0.389091126	13:04:04	-0.245456662	-0.109267038	0.389418025
13:04:08	-0.245118306	-0.086415805	0.389744924	13:04:12	-0.244779951	-0.063564569	0.390071823
13:04:16	-0.244441595	-0.050799168	0.390398722	13:04:20	-0.24410324	-0.041395701	0.390725621
13:04:24	-0.243764884	-0.034130847	0.39105252	13:04:28	-0.243426528	-0.03281822	0.391379418
13:04:32	-0.243088173	-0.032432796	0.391706317	13:04:36	-0.242749817	-0.046752677	0.392033216
13:04:40	-0.242411462	-0.066128863	0.392360115	13:04:44	-0.242073106	-0.086324433	0.392687014
13:04:48	-0.241653971	-0.108930015	0.393013913	13:04:52	-0.241104279	-0.131457776	0.393340812
13:04:56	-0.240554586	-0.153581249	0.393667711	13:05:00	-0.240004894	-0.175569959	0.39399461
13:05:04	-0.239895452	-0.194010502	0.39345683	13:05:08	-0.240568607	-0.201485748	0.391858698
13:05:12	-0.241241762	-0.208960994	0.390260567	13:05:16	-0.241914916	-0.21021064	0.388662436
13:05:20	-0.242588071	-0.209385089	0.387064304	13:05:24	-0.243261226	-0.207726782	0.385466173
13:05:28	-0.24393438	-0.20357022	0.383868041	13:05:32	-0.244607535	-0.199413654	0.38226991
13:05:36	-0.24528069	-0.190061526	0.380671779	13:05:40	-0.245953844	-0.175513828	0.379073647
13:05:44	-0.246626999	-0.160966131	0.377475516	13:05:48	-0.247300154	-0.153101653	0.375877384
13:05:52	-0.247973308	-0.145237174	0.374279253	13:05:56	-0.248646463	-0.146851859	0.372681122
13:06:00	-0.249319617	-0.157945706	0.37108299	13:06:04	-0.250777715	-0.169507446	0.369484859
13:06:08	-0.252235812	-0.210189834	0.367886727	13:06:12	-0.253693909	-0.250872222	0.366288596
13:06:16	-0.255018475	-0.290207217	0.364871388	13:06:20	-0.255572029	-0.327814811	0.364498837
13:06:24	-0.256125582	-0.365422423	0.364126286	13:06:28	-0.256679136	-0.380723963	0.363753734
13:06:32	-0.257232689	-0.396025504	0.363381183	13:06:36	-0.257786243	-0.413967253	0.363008631
13:06:40	-0.258339796	-0.434549173	0.36263608	13:06:44	-0.25889335	-0.455131094	0.362263529
13:06:48	-0.259446903	-0.461704677	0.361890977	13:06:52	-0.260000457	-0.468278259	0.361518426
13:06:56	-0.26055401	-0.477276439	0.361145875	13:07:00	-0.261107564	-0.488699217	0.360773323
13:07:04	-0.26138256	-0.499955987	0.360400772	13:07:08	-0.261657557	-0.498203523	0.36002822

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
13:07:12	-0.261932553	-0.496451023	0.359655669	13:07:16	-0.262207549	-0.496291911	0.359283118
13:07:20	-0.262482546	-0.49772615	0.358910566	13:07:24	-0.262757542	-0.49916039	0.358538015
13:07:28	-0.263032538	-0.499216159	0.358165463	13:07:32	-0.263307535	-0.499271893	0.357792912
13:07:36	-0.263582531	-0.495656481	0.357420361	13:07:40	-0.263857527	-0.48836985	0.357047809
13:07:44	-0.264132524	-0.481083219	0.356675258	13:07:48	-0.26440752	-0.475693752	0.356302706
13:07:52	-0.264682517	-0.470304321	0.355930155	13:07:56	-0.264957513	-0.464003738	0.355557604
13:08:00	-0.265232509	-0.456792039	0.355185052	13:08:04	-0.263832359	-0.448581793	0.354812501
13:08:08	-0.262432209	-0.433803795	0.354439949	13:08:12	-0.261032059	-0.419025796	0.354067398
13:08:16	-0.259631909	-0.403547123	0.353694847	13:08:20	-0.258231759	-0.387834896	0.353322295
13:08:24	-0.256831608	-0.372122652	0.352949744	13:08:28	-0.255431458	-0.348696637	0.352577192
13:08:32	-0.254031308	-0.325270622	0.352204641	13:08:36	-0.252631158	-0.301469487	0.35183209
13:08:40	-0.251231008	-0.277293224	0.351459538	13:08:44	-0.249830858	-0.253116969	0.351086987
13:08:48	-0.248430707	-0.216521962	0.350714435	13:08:52	-0.247030557	-0.179926953	0.350341884
13:08:56	-0.245630407	-0.142490188	0.349969333	13:09:00	-0.244230257	-0.104772836	0.349596781
13:09:04	-0.244450595	-0.068021434	0.34922423	13:09:08	-0.244670932	-0.040866892	0.348851678
13:09:12	-0.245708217	-0.01419932	0.347372233	13:09:16	-0.246886585	0.01207893	0.345701632
13:09:20	-0.248064953	0.038051964	0.34403103	13:09:24	-0.249243321	0.064024999	0.342360428
13:09:28	-0.250421689	0.086640487	0.340689827	13:09:32	-0.252545478	0.108692424	0.339019225
13:09:36	-0.254867618	0.120877676	0.337348624	13:09:40	-0.237189758	0.123314441	0.335678022
13:09:44	-0.259511898	0.125751206	0.33400742	13:09:48	-0.261834038	0.113584497	0.332336819
13:09:52	-0.264156178	0.101417788	0.330666217	13:09:56	-0.266478318	0.096753327	0.328995616
13:10:00	-0.268800458	0.099591112	0.327325014	13:10:04	-0.269633897	0.103316271	0.325654412
13:10:08	-0.270286556	0.105015401	0.323983811	13:10:12	-0.2702498	0.107125498	0.322313209
13:10:16	-0.270213044	0.105453206	0.320642608	13:10:20	-0.270176288	0.09999856	0.318972006
13:10:24	-0.270139532	0.094543914	0.317301404	13:10:28	-0.270102776	0.092437683	0.315630803
13:10:32	-0.27006602	0.090331435	0.313960201	13:10:36	-0.270029264	0.092710081	0.3122896
13:10:40	-0.269992508	0.099573586	0.310618998	13:10:44	-0.269875658	0.106484834	0.309056917
13:10:48	-0.267685779	0.103688566	0.310303614	13:10:52	-0.265495901	0.100892298	0.311550311
13:10:56	-0.263306022	0.098917327	0.312797008	13:11:00	-0.261116143	0.097763654	0.314043704
13:11:04	-0.260621404	0.095599534	0.315290401	13:11:08	-0.260126666	0.083889197	0.316537098
13:11:12	-0.259631927	0.072178859	0.317783795	13:11:16	-0.259137188	0.062848565	0.319030492
13:11:20	-0.25864245	0.055898315	0.320277189	13:11:24	-0.258147711	0.049907465	0.321523886
13:11:28	-0.257652972	0.046794782	0.322770583	13:11:32	-0.257158233	0.043682116	0.32401728
13:11:36	-0.256663495	0.035562966	0.325263977	13:11:40	-0.256168756	0.022437332	0.326510674
13:11:44	-0.255674017	0.009311716	0.32775737	13:11:48	-0.255179279	-0.001527387	0.329004067
13:11:52	-0.25468454	-0.01236649	0.330250764	13:11:56	-0.254189801	-0.025947718	0.331497461
13:12:00	-0.253695062	-0.042271078	0.332744158	13:12:04	-0.25417739	-0.059176852	0.333990855
13:12:08	-0.254659718	-0.056543603	0.335237552	13:12:12	-0.255142045	-0.053910354	0.336484249
13:12:16	-0.255624373	-0.051860703	0.337730946	13:12:20	-0.256106701	-0.050394648	0.338977643
13:12:24	-0.256589028	-0.048928584	0.34022434	13:12:28	-0.257071356	-0.052771182	0.341471037
13:12:32	-0.257553684	-0.056613781	0.342717733	13:12:36	-0.258036011	-0.057696597	0.34396443
13:12:40	-0.258518339	-0.056019639	0.345211127	13:12:44	-0.259000667	-0.054342682	0.346457824
13:12:48	-0.259482995	-0.060236126	0.347704521	13:12:52	-0.259965322	-0.066129579	0.348951218
13:12:56	-0.260615102	-0.078068063	0.349971031	13:13:00	-0.261945563	-0.096357506	0.35006858
13:13:04	-0.26183639	-0.113788809	0.350166128	13:13:08	-0.261727216	-0.116190246	0.350263676
13:13:12	-0.261618043	-0.118591679	0.350361224	13:13:16	-0.26150887	-0.123399373	0.350458772
13:13:20	-0.261399696	-0.130613328	0.35055632	13:13:24	-0.261290523	-0.137827283	0.350653869
13:13:28	-0.26118135	-0.145041238	0.350751417	13:13:32	-0.261072176	-0.160079415	0.350848965
13:13:36	-0.260963003	-0.173706401	0.350946513	13:13:40	-0.26085383	-0.183099819	0.351044061
13:13:44	-0.260744656	-0.192493236	0.351141609	13:13:48	-0.260635483	-0.204640464	0.351239158
13:13:52	-0.26052631	-0.216787692	0.351336706	13:13:56	-0.260417136	-0.228656672	0.351434254
13:14:00	-0.260307963	-0.240247407	0.351531802	13:14:04	-0.258971173	-0.251106371	0.35162935
13:14:08	-0.257634383	-0.258465795	0.351726898	13:14:12	-0.256297593	-0.265825218	0.351824447
13:14:16	-0.254960804	-0.277786419	0.351921995	13:14:20	-0.253624014	-0.294349398	0.352019543
13:14:24	-0.252287224	-0.310912376	0.352117091	13:14:28	-0.250950434	-0.322363055	0.352214639
13:14:32	-0.249613644	-0.333813734	0.352312187	13:14:36	-0.248276854	-0.341189297	0.352409736
13:14:40	-0.246940064	-0.344489762	0.352507284	13:14:44	-0.245603275	-0.347790209	0.352604832

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
13:14:48	-0.244266485	-0.348629782	0.35270238	13:14:52	-0.242929695	-0.349469374	0.352799928
13:14:56	-0.241592905	-0.349259959	0.352897476	13:15:00	-0.740256115	-0.848001575	-0.147004975
13:15:04	-0.741819568	-0.84847198	-0.146907427	13:15:08	-0.743349952	-0.859289355	-0.146809879
13:15:12	-0.244880336	-0.370106711	0.353287669	13:15:16	-0.24641072	-0.380924085	0.353385217
13:15:20	-0.247941104	-0.391741442	0.353482765	13:15:24	-0.249471487	-0.402558816	0.353580314
13:15:28	-0.251001871	-0.398899876	0.353677862	13:15:32	-0.252532255	-0.395240954	0.35377541
13:15:36	-0.254062639	-0.388935163	0.353872958	13:15:40	-0.255593022	-0.379982502	0.353970506
13:15:44	-0.257123406	-0.371029841	0.354068054	13:15:48	-0.25865379	-0.35140555	0.354165603
13:15:52	-0.260184174	-0.331781241	0.354263151	13:15:56	-0.261714557	-0.323403783	0.354360699
13:16:00	-0.263244941	-0.326273141	0.354458247	13:16:04	-0.2641675	-0.328780201	0.354555795
13:16:08	-0.265090058	-0.320390393	0.354653343	13:16:12	-0.266012617	-0.312000585	0.354750892
13:16:16	-0.266935176	-0.299853071	0.35484844	13:16:20	-0.267857734	-0.283947825	0.354945988
13:16:24	-0.268898401	-0.268112982	0.35488351	13:16:28	-0.270322149	-0.250124694	0.354301988
13:16:32	-0.271745897	-0.232136407	0.353720467	13:16:36	-0.273169646	-0.22496549	0.353138946
13:16:40	-0.274593394	-0.22140036	0.352557425	13:16:44	-0.276017142	-0.217835234	0.351975904
13:16:48	-0.27744089	-0.208804131	0.351394383	13:16:52	-0.278864638	-0.199773028	0.350812861
13:16:56	-0.280288386	-0.191690429	0.35023134	13:17:00	-0.281712135	-0.184556332	0.349649819
13:17:04	-0.281043287	-0.176174873	0.349068298	13:17:08	-0.280374439	-0.161661462	0.348486777
13:17:12	-0.279705591	-0.147148052	0.347905256	13:17:16	-0.279036743	-0.126411902	0.347323734
13:17:20	-0.278367895	-0.09945301	0.346742213	13:17:24	-0.277699048	-0.072494123	0.346160692
13:17:28	-0.2770302	-0.05913754	0.345579171	13:17:32	-0.276361352	-0.045780965	0.34499765
13:17:36	-0.275692504	-0.036147836	0.344416128	13:17:40	-0.275023656	-0.030238163	0.343834607
13:17:44	-0.274354808	-0.023548441	0.343253086	13:17:48	-0.27368596	-0.01451854	0.342671565
13:17:52	-0.273017113	-0.005488638	0.342090044	13:17:56	-0.272348265	0.008048879	0.341508523
13:18:00	-0.271679417	0.023088917	0.340927001	13:18:04	-0.272972304	0.036959594	0.34034548
13:18:08	-0.274265192	0.047726938	0.339763959	13:18:12	-0.27555808	0.058494282	0.339182438
13:18:16	-0.276850967	0.063478292	0.338600917	13:18:20	-0.278143855	0.062678968	0.338019396
13:18:24	-0.279436742	0.061879661	0.337437874	13:18:28	-0.28072963	0.054264801	0.336856353
13:18:32	-0.282022517	0.046649942	0.336274832	13:18:36	-0.283315405	0.039480497	0.335693311
13:18:40	-0.284608292	0.032756502	0.33511179	13:18:44	-0.28590118	0.026032507	0.334530269
13:18:48	-0.287194067	0.021238931	0.333948747	13:18:52	-0.288486955	0.016445355	0.333367226
13:18:56	-0.289779842	0.011651779	0.332785705	13:19:00	-0.29107273	0.006858203	0.332204184
13:19:04	-0.292495376	0.003101785	0.331622663	13:19:08	-0.293918022	0.002688878	0.331041141
13:19:12	-0.295340668	0.002275972	0.33045962	13:19:16	-0.296763314	0.005446721	0.329878099
13:19:20	-0.29818596	0.012201144	0.329296578	13:19:24	-0.299608606	0.018955567	0.328715057
13:19:28	-0.300519941	0.02906444	0.328826318	13:19:32	-0.301151509	0.039340061	0.329316641
13:19:36	-0.301783077	0.039133797	0.329806963	13:19:40	-0.302414644	0.028445612	0.330297286
13:19:44	-0.303046212	0.017757427	0.330787609	13:19:48	-0.30367778	0.013391683	0.331277932
13:19:52	-0.304309348	0.009025938	0.331768254	13:19:56	-0.304940915	0.011042571	0.332258577
13:20:00	-0.305572483	0.015186687	0.3327489	13:20:04	-0.305433478	0.019790112	0.333239222
13:20:08	-0.305294472	0.025112634	0.333729545	13:20:12	-0.305148642	0.030439243	0.334219868
13:20:16	-0.304995981	0.029955926	0.334710191	13:20:20	-0.304843321	0.023658614	0.335200513
13:20:24	-0.30469066	0.017361301	0.335690836	13:20:28	-0.304537999	0.011651254	0.336181159
13:20:32	-0.304385338	0.005941207	0.336671481	13:20:36	-0.304232678	-0.004733346	0.337161804
13:20:40	-0.304080017	-0.020372423	0.337652127	13:20:44	-0.303927356	-0.036011491	0.33814245
13:20:48	-0.303774695	-0.04408713	0.338632772	13:20:52	-0.303622035	-0.05216277	0.339123095
13:20:56	-0.303469374	-0.061747325	0.339613418	13:21:00	-0.303316713	-0.072840796	0.340103741
13:21:04	-0.302649012	-0.083627269	0.340594063	13:21:08	-0.301981311	-0.08378615	0.341084386
13:21:12	-0.30131361	-0.083945023	0.341574709	13:21:16	-0.300645908	-0.08747656	0.342065031
13:21:20	-0.299978207	-0.094380752	0.342555354	13:21:24	-0.299310506	-0.101284945	0.343045677
13:21:28	-0.298642805	-0.10335029	0.343536	13:21:32	-0.297975103	-0.105415626	0.344026322
13:21:36	-0.297307402	-0.103827389	0.344516645	13:21:40	-0.296639701	-0.098585565	0.345006968
13:21:44	-0.295972	-0.093343746	0.34549729	13:21:48	-0.295304298	-0.097363226	0.345987613
13:21:52	-0.294636597	-0.101382706	0.346477936	13:21:56	-0.293968896	-0.10802741	0.346968259
13:22:00	-0.293301195	-0.117297332	0.347458581	13:22:04	-0.291741817	-0.126035739	0.347948904
13:22:08	-0.290182439	-0.140692091	0.348439227	13:22:12	-0.288623061	-0.155348443	0.34892955
13:22:16	-0.287063683	-0.168427288	0.349419872	13:22:20	-0.285504306	-0.179928624	0.349910195

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
13:22:24	-0.283944928	-0.191429962	0.350400518	13:22:28	-0.28238555	-0.191311146	0.35089084
13:22:32	-0.280826172	-0.191192331	0.351381163	13:22:36	-0.279266795	-0.19306368	0.351871486
13:22:40	-0.277707417	-0.196925192	0.352361809	13:22:44	-0.276148039	-0.200786705	0.352852131
13:22:48	-0.274588661	-0.200644618	0.353342454	13:22:52	-0.273029283	-0.200502531	0.353832777
13:22:56	-0.271469906	-0.197078557	0.354323099	13:23:00	-0.269721992	-0.190260307	0.355068872
13:23:04	-0.269010169	-0.184059654	0.356155745	13:23:08	-0.268298346	-0.177859002	0.357242618
13:23:12	-0.267586523	-0.17165835	0.358329491	13:23:16	-0.2668747	-0.166550713	0.359416364
13:23:20	-0.266162877	-0.162536092	0.360503237	13:23:24	-0.265451053	-0.15852147	0.36159011
13:23:28	-0.26473923	-0.154506849	0.362676983	13:23:32	-0.264027407	-0.140294902	0.363763856
13:23:36	-0.263315584	-0.123724061	0.364850729	13:23:40	-0.262603761	-0.100076541	0.365937602
13:23:44	-0.261891938	-0.076429021	0.367024475	13:23:48	-0.261180114	-0.062458658	0.368111348
13:23:52	-0.260468291	-0.048488295	0.369198221	13:23:56	-0.259756468	-0.032851069	0.370285094
13:24:00	-0.259044645	-0.015546973	0.371371967	13:24:04	-0.258735586	0.001517041	0.37245884
13:24:08	-0.258426526	0.017111435	0.373545713	13:24:12	-0.258117467	0.032705812	0.374632586
13:24:16	-0.257808408	0.041182991	0.375719459	13:24:20	-0.257499349	0.042542938	0.376806332
13:24:24	-0.257190289	0.043902885	0.377893205	13:24:28	-0.25688123	0.052030384	0.378980078
13:24:32	-0.256572171	0.060157865	0.380066951	13:24:36	-0.256263112	0.066779326	0.381153824
13:24:40	-0.255954052	0.07189473	0.382240697	13:24:44	-0.255644993	0.077010153	0.38332757
13:24:48	-0.255335934	0.084821547	0.384414443	13:24:52	-0.255026875	0.092632958	0.385501316
13:24:56	-0.254717815	0.10319614	0.386588189	13:25:00	-0.254408756	0.116511128	0.387675062
13:25:04	-0.252755083	0.130627601	0.388761935	13:25:08	-0.25110141	0.142848615	0.389848808
13:25:12	-0.249447737	0.15506963	0.390935681	13:25:16	-0.247794064	0.166546659	0.392022554
13:25:20	-0.246133052	0.177284148	0.393109427	13:25:24	-0.244465725	0.188025366	0.3941963
13:25:28	-0.242798398	0.202571002	0.395283173	13:25:32	-0.241131071	0.217116637	0.396370046
13:25:36	-0.239463744	0.229005739	0.397456919	13:25:40	-0.237796417	0.238238308	0.398543792
13:25:44	-0.236129089	0.247470876	0.399630665	13:25:48	-0.234461762	0.252934521	0.400717538
13:25:52	-0.232794435	0.258398165	0.401804411	13:25:56	-0.231127108	0.267480267	0.402891284
13:26:00	-0.229540189	0.280132895	0.40386921	13:26:04	-0.228962862	0.292183721	0.404811453
13:26:08	-0.228385534	0.300007045	0.405753696	13:26:12	-0.227808207	0.307830369	0.406695939
13:26:16	-0.22723088	0.311911452	0.407638182	13:26:20	-0.226653552	0.31225033	0.408580425
13:26:24	-0.226076225	0.312589207	0.409522668	13:26:28	-0.225498898	0.306183574	0.410464911
13:26:32	-0.22492157	0.29977794	0.411407154	13:26:36	-0.224344243	0.289413939	0.412349397
13:26:40	-0.223766916	0.275091608	0.41329164	13:26:44	-0.223189588	0.260769277	0.414233882
13:26:48	-0.222612261	0.254460034	0.415176125	13:26:52	-0.222034934	0.248150827	0.416118368
13:26:56	-0.221457606	0.235565493	0.417060611	13:27:00	-0.220880279	0.216704067	0.418002854
13:27:04	-0.220322981	0.197830701	0.418945097	13:27:08	-0.219765684	0.176229246	0.41988734
13:27:12	-0.219208386	0.154627791	0.420829583	13:27:16	-0.218651088	0.135057499	0.421771826
13:27:20	-0.21809379	0.117518352	0.422714069	13:27:24	-0.217536492	0.099979204	0.423656312
13:27:28	-0.216979195	0.096570989	0.424598555	13:27:32	-0.216421897	0.093162775	0.425540798
13:27:36	-0.215864599	0.092827232	0.426483041	13:27:40	-0.215307301	0.09556436	0.427425283
13:27:44	-0.214750004	0.098301507	0.428367526	13:27:48	-0.214192706	0.089162186	0.429309769
13:27:52	-0.213635408	0.080022865	0.430252012	13:27:56	-0.21307811	0.06834916	0.431194255
13:28:00	-0.212520812	0.054141108	0.432136498	13:28:04	-0.212209746	0.03978628	0.433078741
13:28:08	-0.21189868	0.023150448	0.434020984	13:28:12	-0.211587614	0.006514615	0.434963227
13:28:16	-0.211276548	-0.009651253	0.43590547	13:28:20	-0.210965482	-0.025660454	0.436847713
13:28:24	-0.210654415	-0.040493613	0.437789956	13:28:28	-0.210343349	-0.051798601	0.438732199
13:28:32	-0.210032283	-0.063103589	0.439674441	13:28:36	-0.209721217	-0.072915573	0.440616684
13:28:40	-0.207316257	-0.079986416	0.444395976	13:28:44	-0.203943222	-0.086480205	0.449486927
13:28:48	-0.200570187	-0.083035074	0.454577878	13:28:52	-0.197197152	-0.079589943	0.459668828
13:28:56	-0.193824118	-0.076478797	0.464759779	13:29:00	-0.190451083	-0.07370164	0.469850729
13:29:04	-0.189377102	-0.072294915	0.470189365	13:29:08	-0.189352512	-0.067870494	0.469106166
13:29:12	-0.189327921	-0.063446073	0.468022966	13:29:16	-0.189303331	-0.05875781	0.466939767
13:29:20	-0.189278741	-0.053805706	0.465856568	13:29:24	-0.18925415	-0.048853603	0.464773368
13:29:28	-0.18922956	-0.059531368	0.463690169	13:29:32	-0.18920497	-0.070209133	0.462606969
13:29:36	-0.18918038	-0.083374972	0.46152377	13:29:40	-0.189155789	-0.099028886	0.460440571
13:29:44	-0.189131199	-0.1146828	0.459357371	13:29:48	-0.189106609	-0.12257778	0.458274172
13:29:52	-0.189082018	-0.130472762	0.457190972	13:29:56	-0.189057428	-0.134449458	0.456107773

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
13:30:00	0.310967162	0.365492127	0.955024573	13:30:04	0.308537206	0.363970597	0.953941374
13:30:08	0.30610725	0.365388292	0.952858175	13:30:12	-0.196322706	-0.133194013	0.451774975
13:30:16	-0.198752662	-0.141415142	0.450691776	13:30:20	-0.201182618	-0.159275097	0.449608576
13:30:24	-0.203612575	-0.17713505	0.448525377	13:30:28	-0.206044817	-0.199855785	0.447442178
13:30:32	-0.208478676	-0.222577483	0.446358978	13:30:36	-0.210912534	-0.239783117	0.445275779
13:30:40	-0.213346393	-0.251472704	0.444192579	13:30:44	-0.215780252	-0.263162283	0.44310938
13:30:48	-0.218214111	-0.264250979	0.44202618	13:30:52	-0.22064797	-0.265339676	0.440942981
13:30:56	-0.223081828	-0.263532841	0.439859782	13:31:00	-0.225515687	-0.258830458	0.438776582
13:31:04	-0.226067337	-0.253006119	0.437693383	13:31:08	-0.226618987	-0.237040826	0.436610183
13:31:12	-0.227170637	-0.221075542	0.435526984	13:31:16	-0.227722286	-0.207518242	0.434443785
13:31:20	-0.228273936	-0.196368938	0.433360585	13:31:24	-0.228825586	-0.185219629	0.432277386
13:31:28	-0.229377236	-0.196226298	0.431194186	13:31:32	-0.229928886	-0.207232971	0.430110987
13:31:36	-0.230480536	-0.216915862	0.429027788	13:31:40	-0.231032185	-0.225274986	0.427944588
13:31:44	-0.231583835	-0.233634101	0.426861389	13:31:48	-0.232135485	-0.241993216	0.425778189
13:31:52	-0.232687135	-0.25035234	0.42469499	13:31:56	-0.233238785	-0.261084188	0.42361179
13:32:00	-0.233697163	-0.274133164	0.422654966	13:32:04	-0.235077226	-0.287731541	0.421866627
13:32:08	-0.236457289	-0.299763116	0.421078289	13:32:12	-0.237837351	-0.311794691	0.420289951
13:32:16	-0.239217414	-0.321323983	0.419501612	13:32:20	-0.240597476	-0.328350993	0.418173274
13:32:24	-0.241977539	-0.335378002	0.417924936	13:32:28	-0.243357602	-0.344356127	0.417136597
13:32:32	-0.244737664	-0.353334269	0.416348259	13:32:36	-0.246117727	-0.364289108	0.415559921
13:32:40	-0.247497789	-0.37722066	0.414771582	13:32:44	-0.248877852	-0.390152212	0.413983244
13:32:48	-0.250257914	-0.40047747	0.413194905	13:32:52	-0.251637977	-0.41080271	0.412406567
13:32:56	-0.25301804	-0.419405928	0.411618229	13:33:00	-0.254398102	-0.426287107	0.41082989
13:33:04	-0.255377646	-0.432929543	0.410041552	13:33:08	-0.25635719	-0.433203031	0.409253214
13:33:12	-0.257336734	-0.433476519	0.408464875	13:33:16	-0.258316277	-0.430067349	0.407676537
13:33:20	-0.259295821	-0.425430603	0.406888199	13:33:24	-0.260275365	-0.420793874	0.40609986
13:33:28	-0.261254909	-0.408039173	0.405311522	13:33:32	-0.262234452	-0.395284455	0.404523184
13:33:36	-0.263213996	-0.386817159	0.403734845	13:33:40	-0.26419354	-0.391212094	0.402946507
13:33:44	-0.265173084	-0.395607029	0.402158169	13:33:48	-0.266152628	-0.411210105	0.40136983
13:33:52	-0.267132171	-0.426813181	0.400581492	13:33:56	-0.268111715	-0.434539069	0.399793154
13:34:00	-0.269045222	-0.434360325	0.399067191	13:34:04	-0.26948859	-0.433889418	0.398350144
13:34:08	-0.269931957	-0.427651164	0.397633097	13:34:12	-0.270375325	-0.42141291	0.396916049
13:34:16	-0.270818692	-0.413726353	0.396199002	13:34:20	-0.271262059	-0.404591476	0.395481955
13:34:24	-0.271705427	-0.395456598	0.394764907	13:34:28	-0.272148794	-0.403822262	0.39404786
13:34:32	-0.272592162	-0.412187908	0.393330813	13:34:36	-0.273035529	-0.41996906	0.392613765
13:34:40	-0.273478897	-0.4271657	0.391896718	13:34:44	-0.273922264	-0.43436234	0.391179671
13:34:48	-0.274365632	-0.433033841	0.390462623	13:34:52	-0.274808999	-0.431705324	0.389745576
13:34:56	-0.275252367	-0.426295012	0.389028529	13:35:00	-0.275695734	-0.416802904	0.388311482
13:35:04	-0.276592396	-0.407580998	0.387594434	13:35:08	-0.277489057	-0.406929211	0.386877387
13:35:12	-0.278385719	-0.406277423	0.38616034	13:35:16	-0.27928238	-0.413099228	0.385443292
13:35:20	-0.280179042	-0.427394608	0.384726245	13:35:24	-0.281075703	-0.441689988	0.384009198
13:35:28	-0.281972365	-0.45675712	0.38329215	13:35:32	-0.282869026	-0.471824234	0.382575103
13:35:36	-0.283744028	-0.483647321	0.381858056	13:35:40	-0.284605579	-0.494385318	0.381141008
13:35:44	-0.285467131	-0.505123314	0.380423961	13:35:48	-0.286328683	-0.511679429	0.379706914
13:35:52	-0.287190235	-0.518235543	0.378989866	13:35:56	-0.288051787	-0.521710761	0.378272819
13:36:00	-0.288913338	-0.522105047	0.377555772	13:36:04	-0.288876234	-0.521963657	0.376838724
13:36:08	-0.288839131	-0.530584317	0.376121677	13:36:12	-0.288802027	-0.539204976	0.37540463
13:36:16	-0.288085209	-0.542149824	0.375608537	13:36:20	-0.286275663	-0.539172667	0.377292998
13:36:24	-0.284466117	-0.536195511	0.37897746	13:36:28	-0.28265657	-0.53948361	0.380661922
13:36:32	-0.280847024	-0.542771709	0.382346383	13:36:36	-0.279037478	-0.54398045	0.384030845
13:36:40	-0.277227932	-0.543109832	0.385715307	13:36:44	-0.275418386	-0.545110559	0.387399768
13:36:48	-0.273608839	-0.555725354	0.38908423	13:36:52	-0.271799293	-0.566340149	0.390768692
13:36:56	-0.269989747	-0.576954944	0.392453153	13:37:00	-0.268180201	-0.58756974	0.394137615
13:37:04	-0.26685598	-0.59847383	0.395822077	13:37:08	-0.26553176	-0.610976566	0.397506538
13:37:12	-0.26420754	-0.623479302	0.399191	13:37:16	-0.26288332	-0.629816941	0.400875461
13:37:20	-0.261559099	-0.629989552	0.402559923	13:37:24	-0.260234879	-0.630162164	0.404244385
13:37:28	-0.258910659	-0.638659244	0.405928846	13:37:32	-0.257586439	-0.647156323	0.407613308

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
13:37:36	-0.256262218	-0.652649392	0.40929777	13:37:40	-0.254937998	-0.65513845	0.410982231
13:37:44	-0.253613778	-0.657627507	0.412666693	13:37:48	-0.252618031	-0.642331038	0.413906101
13:37:52	-0.2533585	-0.628069464	0.412793084	13:37:56	-0.254098969	-0.616129843	0.411680067
13:38:00	-0.254839438	-0.606512105	0.41056705	13:38:04	-0.255832557	-0.597045003	0.409454033
13:38:08	-0.256825677	-0.587577865	0.408341015	13:38:12	-0.257818797	-0.578110728	0.407227998
13:38:16	-0.258811916	-0.569142708	0.406114981	13:38:20	-0.259805036	-0.560673769	0.405001964
13:38:24	-0.260798156	-0.552204795	0.403888947	13:38:28	-0.261791275	-0.543735856	0.40277593
13:38:32	-0.262784395	-0.535266917	0.401662913	13:38:36	-0.263777514	-0.531989961	0.400549895
13:38:40	-0.264770634	-0.530443678	0.399436878	13:38:44	-0.265763754	-0.528897395	0.398323861
13:38:48	-0.266756873	-0.522055774	0.397210844	13:38:52	-0.267749993	-0.515214118	0.396097827
13:38:56	-0.268743113	-0.514574084	0.39498481	13:39:00	-0.269736232	-0.5201356	0.393871793
13:39:04	-0.270650164	-0.52564995	0.392758776	13:39:08	-0.271564096	-0.535897917	0.391645758
13:39:12	-0.272478028	-0.546145885	0.390532741	13:39:16	-0.27339196	-0.54862414	0.389419724
13:39:20	-0.274305892	-0.543332683	0.388306707	13:39:24	-0.275219824	-0.536572263	0.38719369
13:39:28	-0.274755183	-0.524583136	0.387948522	13:39:32	-0.273819847	-0.512313435	0.389341106
13:39:36	-0.27288451	-0.498903311	0.390733691	13:39:40	-0.271949174	-0.484352835	0.392126275
13:39:44	-0.271013838	-0.46980236	0.39351886	13:39:48	-0.270078502	-0.460251297	0.394911444
13:39:52	-0.269143165	-0.4507002	0.396304029	13:39:56	-0.268207829	-0.438669629	0.397696613
13:40:00	-0.267272493	-0.424159533	0.399089198	13:40:04	-0.266014542	-0.409457149	0.400481782
13:40:08	-0.264756592	-0.387654657	0.401874367	13:40:12	-0.263498642	-0.365852165	0.403266951
13:40:16	-0.262240691	-0.34249242	0.404659536	13:40:20	-0.260982741	-0.317575421	0.40605212
13:40:24	-0.25972479	-0.292658404	0.407444705	13:40:28	-0.25846684	-0.273671316	0.408837289
13:40:32	-0.25720889	-0.254684219	0.410229874	13:40:36	-0.255950939	-0.236480927	0.411622458
13:40:40	-0.254692989	-0.219061427	0.413015043	13:40:44	-0.253451728	-0.20165188	0.414407627
13:40:48	-0.252219134	-0.17335451	0.415800212	13:40:52	-0.25098654	-0.145057141	0.417192796
13:41:04	-0.249753946	-0.120418191	0.418585381	13:41:00	-0.248521352	-0.099437661	0.419977965
13:41:08	-0.247211143	-0.078410869	0.42137055	13:41:08	-0.245900933	-0.065235827	0.422763134
13:41:12	-0.244590724	-0.05206078	0.424155719	13:41:16	-0.243280514	-0.035785545	0.425548303
13:41:20	-0.241970304	-0.016410102	0.426940888	13:41:24	-0.240660095	0.002965332	0.428333472
13:41:28	-0.239349885	0.020950492	0.429726057	13:41:32	-0.238039676	0.038935642	0.431118641
13:41:36	-0.236729466	0.062600293	0.432511226	13:41:40	-0.235815199	0.09170841	0.433367342
13:41:44	-0.235822185	0.113588724	0.432975238	13:41:48	-0.235829172	0.115433066	0.432583134
13:41:52	-0.235836158	0.117277407	0.432191029	13:41:56	-0.235843145	0.12718211	0.431798925
13:42:00	-0.235850131	0.145147155	0.431406821	13:42:04	-0.235108431	0.163558481	0.431014716
13:42:08	-0.23436673	0.177345157	0.430622612	13:42:12	-0.233625029	0.191131798	0.430230508
13:42:16	-0.232883329	0.20638225	0.429838403	13:42:20	-0.232141628	0.223096479	0.429446299
13:42:24	-0.231399928	0.239810707	0.429054195	13:42:28	-0.230658227	0.249529835	0.42866209
13:42:32	-0.229916527	0.259248963	0.428269986	13:42:36	-0.229174826	0.268968091	0.427877882
13:42:40	-0.228433125	0.278687219	0.427485777	13:42:44	-0.227691425	0.288406347	0.427093673
13:42:48	-0.226949724	0.29639299	0.426701569	13:42:52	-0.226208024	0.304379598	0.426309464
13:42:56	-0.225466323	0.303854639	0.42591736	13:43:00	-0.224724622	0.294818043	0.425525256
13:43:04	-0.224889713	0.285240959	0.425133151	13:43:08	-0.225054804	0.265665509	0.424741047
13:43:12	-0.225219895	0.246090058	0.424348943	13:43:16	-0.225384985	0.229224827	0.423956838
13:43:20	-0.225550076	0.215069885	0.423564734	13:43:24	-0.225715167	0.200914907	0.42317263
13:43:28	-0.225880257	0.184420816	0.422780525	13:43:32	-0.226045348	0.167926725	0.422388421
13:43:36	-0.226210439	0.155830996	0.421996317	13:43:40	-0.22637553	0.156930373	0.421604212
13:43:44	-0.22654062	0.15802975	0.421212108	13:43:48	-0.226622088	0.157002211	0.420933306
13:43:52	-0.225311962	0.156804198	0.422539995	13:43:56	-0.224001835	0.157956319	0.424146685
13:44:00	-0.222691709	0.160458612	0.425753375	13:44:04	-0.221097352	0.162387073	0.427360065
13:44:08	-0.219502994	0.162085814	0.428966755	13:44:12	-0.217908637	0.161784556	0.430573444
13:44:16	-0.21631428	0.164180513	0.432180134	13:44:20	-0.214719922	0.169273684	0.433786824
13:44:24	-0.213125565	0.174366855	0.435393514	13:44:28	-0.211531208	0.173668343	0.437000204
13:44:32	-0.20993685	0.17296983	0.438606894	13:44:36	-0.208342493	0.166851965	0.440213583
13:44:40	-0.206748136	0.155314728	0.441820273	13:44:44	-0.205153778	0.143777473	0.443426963
13:44:48	-0.203559421	0.124845892	0.445033653	13:44:52	-0.201965064	0.10591431	0.446640343
13:44:56	-0.200370707	0.089349627	0.448247032	13:45:00	-0.698776349	-0.424848158	-0.050146278
13:45:04	-0.698015522	-0.439542816	-0.048539588	13:45:08	-0.697254695	-0.452810542	-0.046932898

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
13:45:12	-0.196493868	0.033921715	0.454673792	13:45:16	-0.195733041	0.024001099	0.456280482
13:45:20	-0.194972214	0.017427583	0.457887171	13:45:24	-0.194211387	0.010854068	0.459493861
13:45:28	-0.193644457	-0.002200047	0.460837838	13:45:32	-0.193337025	-0.015408846	0.461830215
13:45:36	-0.193029594	-0.029925296	0.462822592	13:45:40	-0.192722162	-0.045749415	0.46381497
13:45:44	-0.192414731	-0.061573533	0.464807347	13:45:48	-0.192107299	-0.083809173	0.465799724
13:45:52	-0.191779406	-0.106032615	0.466792102	13:45:56	-0.191442718	-0.128783859	0.467784479
13:46:00	-0.191106031	-0.152068145	0.468776856	13:46:04	-0.191118569	-0.1755606	0.469769234
13:46:08	-0.191131107	-0.190656226	0.470761611	13:46:12	-0.191143645	-0.205751848	0.471753988
13:46:16	-0.191156183	-0.214282781	0.472746366	13:46:20	-0.191168721	-0.216249027	0.473738743
13:46:24	-0.191181259	-0.218215272	0.474731112	13:46:28	-0.191193797	-0.228563819	0.475723497
13:46:32	-0.191206335	-0.238912357	0.476715875	13:46:36	-0.191218873	-0.251825389	0.477708252
13:46:40	-0.191231411	-0.26559325	0.478700629	13:46:44	-0.191243949	-0.28160196	0.479693007
13:46:48	-0.191256487	-0.304333224	0.480685384	13:46:52	-0.191269025	-0.327064488	0.481677761
13:46:56	-0.191281563	-0.337437097	0.482670139	13:47:00	-0.191294101	-0.335451033	0.483662516
13:47:04	-0.190696315	-0.333101183	0.484654893	13:47:08	-0.19009853	-0.332760273	0.485647271
13:47:12	-0.189500745	-0.332419362	0.486639648	13:47:16	-0.18890296	-0.330131457	0.487632025
13:47:20	-0.188305175	-0.325896542	0.488624403	13:47:24	-0.187707389	-0.321661644	0.48961678
13:47:28	-0.187109604	-0.324603632	0.490609157	13:47:32	-0.186511819	-0.327545621	0.491601535
13:47:36	-0.185914034	-0.339947207	0.492593912	13:47:40	-0.185316248	-0.36180839	0.493586289
13:47:44	-0.184718463	-0.383669573	0.494578666	13:47:48	-0.184120678	-0.412762589	0.495571044
13:47:52	-0.183522893	-0.441855659	0.496563421	13:47:56	-0.182925108	-0.464987107	0.497555798
13:48:00	-0.182327322	-0.482157006	0.498548176	13:48:04	-0.18175026	-0.499339257	0.497511784
13:48:08	-0.181177345	-0.51652398	0.496469774	13:48:12	-0.18060443	-0.533708703	0.495427763
13:48:16	-0.180031515	-0.548716682	0.494385752	13:48:20	-0.1794586	-0.561547916	0.493343742
13:48:24	-0.178885684	-0.57437915	0.492301731	13:48:28	-0.178312769	-0.577173363	0.49125972
13:48:32	-0.177739854	-0.579967576	0.49021771	13:48:36	-0.177166939	-0.582761753	0.489175699
13:48:40	-0.176594024	-0.585555966	0.488133688	13:48:44	-0.176021109	-0.588350179	0.487091678
13:48:48	-0.175448194	-0.583250824	0.486049667	13:48:52	-0.174875279	-0.578151469	0.485007656
13:48:56	-0.174302364	-0.570839947	0.483965646	13:49:00	-0.173729448	-0.561316221	0.482923635
13:49:04	-0.174232017	-0.552433647	0.481881625	13:49:08	-0.174734586	-0.543551001	0.480839614
13:49:12	-0.175237155	-0.534668426	0.479797603	13:49:16	-0.175739724	-0.524144748	0.478755593
13:49:20	-0.176242293	-0.511980003	0.477713582	13:49:24	-0.176744862	-0.499815257	0.476671571
13:49:28	-0.177247431	-0.476670362	0.475629561	13:49:32	-0.17775	-0.453525467	0.47458755
13:49:36	-0.178252569	-0.429159853	0.473545539	13:49:40	-0.178755138	-0.403573519	0.472503529
13:49:44	-0.179257707	-0.377987168	0.471461518	13:49:48	-0.179760276	-0.363019046	0.470419508
13:49:52	-0.180262845	-0.348050941	0.469377497	13:49:56	-0.180765414	-0.330560959	0.468335486
13:50:00	-0.181267983	-0.310549136	0.467293476	13:50:04	-0.183181816	-0.291378546	0.466081421
13:50:08	-0.185248135	-0.273625233	0.464662761	13:50:12	-0.187314454	-0.25587193	0.463244101
13:50:16	-0.189380773	-0.246619187	0.461825442	13:50:20	-0.191447092	-0.245867006	0.460406782
13:50:24	-0.193513411	-0.245114834	0.458988122	13:50:28	-0.19557973	-0.239171602	0.457569462
13:50:32	-0.197646049	-0.233228379	0.456150803	13:50:36	-0.199712368	-0.229120694	0.454732143
13:50:40	-0.201778687	-0.226848565	0.453313483	13:50:44	-0.203845005	-0.224576427	0.451894824
13:50:48	-0.205911324	-0.223584662	0.450476164	13:50:52	-0.207977643	-0.222592897	0.449057504
13:50:56	-0.210043962	-0.219041878	0.447638844	13:51:00	-0.212103084	-0.212927305	0.446220185
13:51:04	-0.213261919	-0.206276095	0.444801525	13:51:08	-0.214420754	-0.199008983	0.443382865
13:51:12	-0.215579589	-0.191741875	0.441964206	13:51:16	-0.216738424	-0.185067801	0.440545546
13:51:20	-0.21789726	-0.178986763	0.439126886	13:51:24	-0.219056095	-0.172905724	0.437708227
13:51:28	-0.22021493	-0.17084835	0.436289567	13:51:32	-0.221373765	-0.168790977	0.434870907
13:51:36	-0.2225326	-0.167074972	0.433452247	13:51:40	-0.223025728	-0.16530352	0.432935564
13:51:44	-0.223355262	-0.163434552	0.432640538	13:51:48	-0.223684795	-0.15257408	0.432345512
13:51:52	-0.224014328	-0.141713609	0.432050486	13:51:56	-0.224343862	-0.124488851	0.43175546
13:52:00	-0.224673395	-0.100899804	0.431460434	13:52:04	-0.224465622	-0.076990478	0.431165407
13:52:08	-0.224257849	-0.045697054	0.430870381	13:52:12	-0.224050076	-0.014403639	0.430575355
13:52:16	-0.223842304	0.017495898	0.430280329	13:52:20	-0.223634531	0.050001568	0.429985303
13:52:24	-0.223426758	0.082507219	0.429690277	13:52:28	-0.223218985	0.109036523	0.429395251
13:52:32	-0.223011212	0.135565809	0.429100225	13:52:36	-0.22280344	0.153979096	0.428805199
13:52:40	-0.222595667	0.164276347	0.428510173	13:52:44	-0.222387894	0.174573598	0.428215146

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
13:52:48	-0.222180121	0.190318022	0.42792012	13:52:52	-0.221972348	0.206062481	0.427625094
13:52:56	-0.221764576	0.217505005	0.427330068	13:53:00	-0.221556803	0.224645664	0.427035042
13:53:04	-0.221940995	0.231433426	0.426740016	13:53:08	-0.222325187	0.229567078	0.42644499
13:53:12	-0.222709379	0.227700765	0.426149964	13:53:16	-0.223093572	0.226739031	0.425854938
13:53:20	-0.223477764	0.226681912	0.425559912	13:53:24	-0.223861956	0.226624792	0.425264886
13:53:28	-0.224246148	0.225981224	0.424969859	13:53:32	-0.22463034	0.225337691	0.424674833
13:53:36	-0.225014533	0.225256376	0.424379807	13:53:40	-0.225398725	0.22686189	0.424084781
13:53:44	-0.225782917	0.228467404	0.423789755	13:53:48	-0.226167109	0.229255956	0.423494727
13:53:52	-0.226551302	0.230044542	0.423199703	13:53:56	-0.226935494	0.225062194	0.422904679
13:54:00	-0.227319686	0.214308912	0.422609651	13:54:04	-0.226850973	0.204064032	0.422314625
13:54:08	-0.226382261	0.196692558	0.422019598	13:54:12	-0.225913548	0.189321084	0.421724572
13:54:16	-0.225444835	0.184904839	0.421429546	13:54:20	-0.224976123	0.183443895	0.42113452
13:54:24	-0.22450741	0.18198295	0.420839494	13:54:28	-0.224038698	0.18178028	0.420544468
13:54:32	-0.223569985	0.181577573	0.420249442	13:54:36	-0.223101272	0.18384409	0.419954416
13:54:40	-0.22263256	0.188579829	0.41965939	13:54:44	-0.222163847	0.193315532	0.419364364
13:54:48	-0.221695134	0.193522729	0.419069338	13:54:52	-0.221226422	0.193729925	0.418774311
13:54:56	-0.220757709	0.191796724	0.418479285	13:55:00	-0.220288996	0.187723125	0.418184259
13:55:04	-0.221001594	0.182945365	0.417889233	13:55:08	-0.221790597	0.17569256	0.417490684
13:55:12	-0.223522759	0.167877553	0.415814234	13:55:16	-0.225254921	0.149905559	0.414137785
13:55:20	-0.226987083	0.121776633	0.412461335	13:55:24	-0.228719245	0.093647688	0.410784885
13:55:28	-0.230451408	0.066101319	0.409108435	13:55:32	-0.23218357	0.038554932	0.407431985
13:55:36	-0.233915732	0.013376705	0.405755535	13:55:40	-0.235647894	-0.00943339	0.404079085
13:55:44	-0.237380056	-0.032243476	0.402402635	13:55:48	-0.239112219	-0.043000993	0.400726185
13:55:52	-0.240844381	-0.05375851	0.399049735	13:55:56	-0.242576543	-0.066755455	0.397373286
13:56:00	-0.244308705	-0.081991826	0.395696836	13:56:04	-0.242758245	-0.095271478	0.395881844
13:56:08	-0.240796499	-0.104794499	0.396603527	13:56:12	-0.238830445	-0.11431495	0.397325211
13:56:16	-0.236864391	-0.121116825	0.398046894	13:56:20	-0.234898337	-0.125200118	0.398768578
13:56:24	-0.232932284	-0.129283412	0.399490261	13:56:28	-0.23096623	-0.128389919	0.400211944
13:56:32	-0.229000176	-0.127496427	0.400933628	13:56:36	-0.227034122	-0.116109782	0.401655311
13:56:40	-0.225068068	-0.094229985	0.402376995	13:56:44	-0.223102014	-0.072350186	0.403098678
13:56:48	-0.221135961	-0.063729796	0.403820361	13:56:52	-0.219169907	-0.055109406	0.404542045
13:56:56	-0.217203853	-0.045599316	0.405263728	13:57:00	-0.215237799	-0.035199516	0.405985412
13:57:04	-0.214076492	-0.025279422	0.406707095	13:57:08	-0.212915184	-0.015359327	0.407428778
13:57:12	-0.211753876	-0.005439224	0.408150462	13:57:16	-0.210592569	0.008368471	0.408872145
13:57:20	-0.209431261	0.026063767	0.409593829	13:57:24	-0.208269954	0.043759063	0.410315512
13:57:28	-0.207108646	0.054042428	0.411037195	13:57:32	-0.205947339	0.06432581	0.411758879
13:57:36	-0.204786031	0.065064342	0.412480562	13:57:40	-0.203624724	0.05625806	0.413202246
13:57:44	-0.202463416	0.047451777	0.413923929	13:57:48	-0.201302109	0.035566606	0.414645612
13:57:52	-0.200140801	0.023681443	0.415367296	13:57:56	-0.198979493	0.012592582	0.416088979
13:58:00	-0.197818186	0.002300034	0.416810663	13:58:04	-0.199512404	-0.009694649	0.417532346
13:58:08	-0.201206623	-0.020479432	0.418254029	13:58:12	-0.202900841	-0.031264215	0.418975713
13:58:16	-0.20459506	-0.041503799	0.419697396	13:58:20	-0.206289278	-0.051198184	0.42041908
13:58:24	-0.207983497	-0.060892569	0.421140763	13:58:28	-0.209677715	-0.073808317	0.421862446
13:58:32	-0.211371934	-0.086724065	0.42258413	13:58:36	-0.213066152	-0.092740681	0.423305813
13:58:40	-0.21476037	-0.091858169	0.424027497	13:58:44	-0.216454589	-0.090975657	0.42474918
13:58:48	-0.218148807	-0.104640023	0.425470863	13:58:52	-0.219843026	-0.118304389	0.426192547
13:58:56	-0.221537244	-0.130790968	0.42691423	13:59:00	-0.223231463	-0.142099759	0.427635914
13:59:04	-0.222289242	-0.15183701	0.428357597	13:59:08	-0.221347022	-0.146581948	0.42907928
13:59:12	-0.220404802	-0.141326888	0.429800964	13:59:16	-0.219462582	-0.138202895	0.430522647
13:59:20	-0.218335256	-0.137099632	0.431495133	13:59:24	-0.217197885	-0.13599038	0.43248123
13:59:28	-0.216060513	-0.130289482	0.433467327	13:59:32	-0.214923141	-0.124588585	0.434453424
13:59:36	-0.21378577	-0.11178401	0.435439521	13:59:40	-0.212648398	-0.091875758	0.436425618
13:59:44	-0.211511026	-0.071967507	0.437411715	13:59:48	-0.210373655	-0.052738494	0.438397812
13:59:52	-0.209236283	-0.03350948	0.43938391	13:59:56	-0.208098911	-0.015027202	0.440370007
14:00:00	0.293038461	0.545143699	0.941356104	14:00:04	0.293295101	0.540085279	0.942342201
14:00:08	0.293551742	0.53502684	0.943328298	14:00:12	-0.206191618	0.02996842	0.444314395
14:00:16	-0.205934978	0.024909991	0.445300492	14:00:20	-0.205678337	0.019477694	0.44628659

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
14:00:24	-0.205421697	0.013671531	0.447272687	14:00:28	-0.205165056	0.007865368	0.448258784
14:00:32	-0.204908416	0.002059204	0.449244881	14:00:36	-0.204651775	-0.003746959	0.450230978
14:00:40	-0.204395135	-0.009338507	0.451217075	14:00:44	-0.204138494	-0.014715422	0.452203172
14:00:48	-0.203881854	-0.020092345	0.45318927	14:00:52	-0.203625213	-0.023080165	0.454175367
14:00:56	-0.203368573	-0.026067985	0.455161464	14:01:00	-0.203111932	-0.037956907	0.456147561
14:01:04	-0.202068068	-0.05827767	0.457133658	14:01:08	-0.201024204	-0.078598433	0.458119755
14:01:12	-0.199980339	-0.104030174	0.459105852	14:01:16	-0.19875714	-0.129355015	0.46009195
14:01:20	-0.197493061	-0.147754741	0.461078047	14:01:24	-0.196228983	-0.159253714	0.462064144
14:01:28	-0.195758649	-0.171225831	0.461974783	14:01:32	-0.195737831	-0.17403673	0.461276368
14:01:36	-0.195717013	-0.176847625	0.460577952	14:01:40	-0.195696195	-0.176997549	0.459879537
14:01:44	-0.195675377	-0.174486504	0.459181121	14:01:48	-0.195654559	-0.171975453	0.458482706
14:01:52	-0.195633741	-0.168510243	0.45778429	14:01:56	-0.195612923	-0.165045029	0.457085875
14:02:00	-0.195592105	-0.162654614	0.456387459	14:02:04	-0.193857622	-0.16031751	0.455689044
14:02:08	-0.192123139	-0.157980407	0.454990628	14:02:12	-0.190388655	-0.156136056	0.454292213
14:02:16	-0.188654172	-0.1542917	0.453593797	14:02:20	-0.186919689	-0.150329548	0.452895382
14:02:24	-0.185185206	-0.14424959	0.452196966	14:02:28	-0.183450722	-0.138169632	0.451498551
14:02:32	-0.181716239	-0.135148068	0.450800135	14:02:36	-0.179981756	-0.132126501	0.450101719
14:02:40	-0.178247273	-0.130782404	0.449403304	14:02:44	-0.176512789	-0.131115773	0.448704888
14:02:48	-0.174778306	-0.131449141	0.448006473	14:02:52	-0.173043823	-0.134978875	0.447308057
14:02:56	-0.17130934	-0.138508608	0.446609642	14:03:00	-0.169574856	-0.143086972	0.445911226
14:03:04	-0.170258683	-0.150155483	0.44522573	14:03:08	-0.16872685	-0.155903274	0.447542265
14:03:12	-0.167195016	-0.162498068	0.449858799	14:03:16	-0.165663183	-0.169092862	0.452175334
14:03:20	-0.16413135	-0.175007433	0.454491869	14:03:24	-0.162599516	-0.180241788	0.456808404
14:03:28	-0.161067683	-0.185476143	0.459124939	14:03:32	-0.15953585	-0.187964715	0.461441474
14:03:36	-0.158004016	-0.190453287	0.463758009	14:03:40	-0.156472183	-0.192365945	0.466074543
14:03:44	-0.15494035	-0.193702681	0.468391078	14:03:48	-0.153408516	-0.195039416	0.470707613
14:03:52	-0.151876683	-0.245270528	0.473024148	14:03:56	-0.15034485	-0.295501631	0.475340683
14:04:00	-0.148813016	-0.332539156	0.477657218	14:04:04	-0.145603317	-0.355382953	0.479973753
14:04:08	-0.142393618	-0.37822675	0.482290287	14:04:12	-0.139183919	-0.376300796	0.484606822
14:04:16	-0.136782633	-0.374856726	0.486923357	14:04:20	-0.134486742	-0.372360211	0.489174327
14:04:24	-0.132522417	-0.368946105	0.490976053	14:04:28	-0.130558092	-0.365531981	0.492777779
14:04:32	-0.128593767	-0.363259772	0.494579505	14:04:36	-0.126629441	-0.360987546	0.496381232
14:04:40	-0.124665116	-0.360683524	0.498182958	14:04:44	-0.122700791	-0.362347671	0.499984684
14:04:48	-0.120736465	-0.364011836	0.50178641	14:04:52	-0.11877214	-0.369328761	0.503588137
14:04:56	-0.116807815	-0.374645669	0.505389863	14:05:00	-0.114843489	-0.381085696	0.507191589
14:05:04	-0.11454122	-0.389639534	0.508993315	14:05:08	-0.11423895	-0.398193407	0.510795042
14:05:12	-0.11393668	-0.408030567	0.512596768	14:05:16	-0.11363441	-0.417867726	0.514398494
14:05:20	-0.11333214	-0.427704886	0.51620022	14:05:24	-0.11302987	-0.43754201	0.518001947
14:05:28	-0.112727601	-0.446866374	0.519803673	14:05:32	-0.112425331	-0.454652279	0.521605399
14:05:36	-0.112123061	-0.462438184	0.523407125	14:05:40	-0.111926725	-0.470468967	0.52506532
14:05:44	-0.113309489	-0.479622761	0.524583969	14:05:48	-0.114692253	-0.488776554	0.524102617
14:05:52	-0.116075017	-0.497930383	0.523621265	14:05:56	-0.117457781	-0.507084176	0.523139914
14:06:00	-0.118840545	-0.515372473	0.522658562	14:06:04	-0.119638675	-0.522446783	0.522177211
14:06:08	-0.120436805	-0.529521057	0.521695859	14:06:12	-0.121234936	-0.531458703	0.521214508
14:06:16	-0.122033066	-0.533396349	0.520733156	14:06:20	-0.122831197	-0.533271727	0.520251805
14:06:24	-0.123149346	-0.530798761	0.519770453	14:06:28	-0.123393941	-0.528281916	0.519289101
14:06:32	-0.123638535	-0.52576507	0.51880775	14:06:36	-0.12388313	-0.52324826	0.518326398
14:06:40	-0.124127725	-0.521003641	0.517845047	14:06:44	-0.124372319	-0.519031284	0.517363695
14:06:48	-0.124616914	-0.517058926	0.516882344	14:06:52	-0.124861509	-0.534884583	0.516400992
14:06:56	-0.125106103	-0.552710241	0.515919641	14:07:00	-0.125350698	-0.556794652	0.515438289
14:07:04	-0.125898952	-0.547318859	0.514956937	14:07:08	-0.126447207	-0.537843031	0.514475586
14:07:12	-0.126995461	-0.538264914	0.513994234	14:07:16	-0.127543715	-0.538686832	0.513512883
14:07:20	-0.128091969	-0.540466649	0.513031531	14:07:24	-0.128640224	-0.543604434	0.51255018
14:07:28	-0.129188478	-0.54674222	0.512068828	14:07:32	-0.129736732	-0.54987997	0.511587477
14:07:36	-0.130284987	-0.553017756	0.511106125	14:07:40	-0.130833241	-0.5552343	0.510624774
14:07:44	-0.131381495	-0.556529673	0.510143422	14:07:48	-0.131929749	-0.55782501	0.50966207
14:07:52	-0.132478004	-0.557333858	0.509180719	14:07:56	-0.133026258	-0.556842671	0.508699367

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
14:08:00	-0.133574512	-0.554558634	0.508218016	14:08:04	-0.133365655	-0.550030374	0.507736664
14:08:08	-0.133156797	-0.545502114	0.507255313	14:08:12	-0.13294794	-0.537266661	0.506773961
14:08:16	-0.132739082	-0.52903107	0.50629261	14:08:20	-0.132530225	-0.518668597	0.505811258
14:08:24	-0.132321367	-0.506179157	0.505329906	14:08:28	-0.13211251	-0.493689717	0.504848555
14:08:32	-0.131903653	-0.479874355	0.504367203	14:08:36	-0.131694795	-0.466058993	0.503885852
14:08:40	-0.131485938	-0.451117491	0.5034045	14:08:44	-0.13127708	-0.435049849	0.502923149
14:08:48	-0.131068223	-0.418982207	0.502441797	14:08:52	-0.130859365	-0.400029968	0.501960446
14:08:56	-0.130650508	-0.381077729	0.501479094	14:09:00	-0.13044165	-0.361062682	0.500997743
14:09:04	-0.130113104	-0.339913498	0.500516391	14:09:08	-0.129784557	-0.318764296	0.500035039
14:09:12	-0.12945601	-0.29655829	0.499553688	14:09:16	-0.128494172	-0.273974789	0.499930392
14:09:20	-0.127265938	-0.251232476	0.50066804	14:09:24	-0.126037705	-0.228490181	0.501405687
14:09:28	-0.124809471	-0.205747886	0.502143335	14:09:32	-0.123581237	-0.183829837	0.502880982
14:09:36	-0.122353004	-0.161911788	0.50361863	14:09:40	-0.12112477	-0.140795936	0.504356278
14:09:44	-0.119896536	-0.12048228	0.505093925	14:09:48	-0.118668303	-0.100168624	0.505831573
14:09:52	-0.117440069	-0.047363451	0.50656922	14:09:56	-0.116211836	0.005441717	0.507306868
14:10:00	-0.114983602	0.083670887	0.508044516	14:10:04	-0.113807832	0.187292757	0.508782163
14:10:08	-0.112632062	0.290914644	0.509519811	14:10:12	-0.111456292	0.352118455	0.510257459
14:10:16	-0.110280522	0.41332223	0.510995106	14:10:20	-0.109104751	0.456881925	0.511732754
14:10:24	-0.107928981	0.482797469	0.512470401	14:10:28	-0.106753211	0.508713049	0.513208049
14:10:32	-0.105577441	0.512456468	0.513945697	14:10:36	-0.104401671	0.516199887	0.514683344
14:10:40	-0.103225901	0.514966418	0.515420992	14:10:44	-0.102050131	0.50875606	0.516158639
14:10:48	-0.100874361	0.502545739	0.516896287	14:10:52	-0.099698591	0.491389014	0.517633935
14:10:56	-0.098522821	0.480232289	0.518371582	14:11:00	-0.09734705	0.467787303	0.51910923
14:11:04	-0.095566355	0.454414714	0.519846878	14:11:08	-0.09378566	0.441042053	0.520584525
14:11:12	-0.092004965	0.427669464	0.521322173	14:11:16	-0.09022427	0.414296804	0.52205982
14:11:20	-0.088443575	0.401139168	0.522797468	14:11:24	-0.08666288	0.38819652	0.523535116
14:11:28	-0.084882184	0.375253873	0.524272763	14:11:32	-0.082419101	0.36271795	0.525010411
14:11:36	-0.079886765	0.350223344	0.525748059	14:11:40	-0.077354428	0.338310248	0.526485706
14:11:44	-0.074822092	0.326978697	0.527223354	14:11:48	-0.072289756	0.315647145	0.527961001
14:11:52	-0.06975742	0.307603023	0.528698649	14:11:56	-0.067225084	0.299558902	0.529436297
14:12:00	-0.064692748	0.292739052	0.530173944	14:12:04	-0.064520787	0.28573642	0.530911592
14:12:08	-0.064348826	0.278733824	0.531649239	14:12:12	-0.064176864	0.273247659	0.532386887
14:12:16	-0.064004903	0.267761494	0.533124535	14:12:20	-0.063832942	0.262275328	0.533862182
14:12:24	-0.063660981	0.256789145	0.53459983	14:12:28	-0.06348902	0.25130298	0.535337478
14:12:32	-0.063317059	0.247805022	0.536075125	14:12:36	-0.063145098	0.244307064	0.536812773
14:12:40	-0.062973136	0.241667923	0.53755042	14:12:44	-0.063145223	0.239682518	0.537821912
14:12:48	-0.063683942	0.237478568	0.537596649	14:12:52	-0.06422266	0.271085115	0.537371386
14:12:56	-0.064761379	0.304691661	0.537146123	14:13:00	-0.065300097	0.327655232	0.53692086
14:13:04	-0.064567102	0.340733912	0.536695597	14:13:08	-0.063834106	0.353812593	0.536470334
14:13:12	-0.063101111	0.343955799	0.536245071	14:13:16	-0.062368115	0.334098969	0.536019808
14:13:20	-0.06163512	0.322061629	0.535794545	14:13:24	-0.060902124	0.307843707	0.535569282
14:13:28	-0.060169129	0.293625821	0.535344019	14:13:32	-0.059436133	0.275910029	0.535118756
14:13:36	-0.058703137	0.258194255	0.534893493	14:13:40	-0.057970142	0.238738216	0.53466823
14:13:44	-0.057237146	0.21754191	0.534442967	14:13:48	-0.056504151	0.196345622	0.534217704
14:13:52	-0.055771155	0.175149335	0.533992441	14:13:56	-0.05503816	0.153953029	0.533767178
14:14:00	-0.054305164	0.133413929	0.533541915	14:14:04	-0.052286492	0.114298379	0.533316652
14:14:08	-0.050267819	0.095182829	0.533091389	14:14:12	-0.048249147	0.077688264	0.532866126
14:14:16	-0.046230474	0.060193708	0.532640863	14:14:20	-0.044211802	0.043118687	0.5324156
14:14:24	-0.042193129	0.026463216	0.532190337	14:14:28	-0.040174457	0.009807742	0.531965074
14:14:32	-0.038155784	-0.005091317	0.531739811	14:14:36	-0.036137112	-0.019990376	0.531514548
14:14:40	-0.034118439	-0.033112296	0.531289285	14:14:44	-0.032099767	-0.044457075	0.531064022
14:14:48	-0.030081094	-0.055801853	0.530838758	14:14:52	-0.028062422	-0.064000838	0.530613495
14:14:56	-0.026043749	-0.072199822	0.530388232	14:15:00	-0.524025077	-0.578766653	0.030162969
14:15:04	-0.52377335	-0.583922431	0.0299937706	14:15:08	-0.520729593	-0.589078209	0.029712443
14:15:12	-0.019081852	-0.092109959	0.52948718	14:15:16	-0.01743411	-0.095141709	0.529261917
14:15:20	-0.015786368	-0.098173459	0.529036654	14:15:24	-0.014138626	-0.101205209	0.528811391
14:15:28	-0.012490885	-0.104236959	0.528586128	14:15:32	-0.010843143	-0.107268709	0.528360865

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
14:15:36	-0.009195401	-0.110300459	0.528135602	14:15:40	-0.007547659	-0.112797891	0.527910339
14:15:44	-0.005899917	-0.114761006	0.527685076	14:15:48	-0.004252176	-0.116724111	0.527459813
14:15:52	-0.002604434	-0.108370677	0.52723455	14:15:56	-0.000956692	-0.100017242	0.527009287
14:16:00	0.00069105	-0.099743274	0.526784024	14:16:04	0.002688279	-0.107340431	0.526558761
14:16:08	0.006482821	-0.113866237	0.528768705	14:16:12	0.010072828	-0.11792396	0.532844213
14:16:16	0.010868719	-0.123647211	0.536919721	14:16:20	0.01166461	-0.125670714	0.540995229
14:16:24	0.012460501	-0.123994486	0.545070737	14:16:28	0.013129044	-0.122394161	0.549146245
14:16:32	0.012211834	-0.11851553	0.553221754	14:16:36	0.011294624	-0.1146369	0.557297262
14:16:40	0.008318173	-0.111985742	0.56137277	14:16:44	0.00521905	-0.109407717	0.565448278
14:16:48	0.007815186	-0.103434835	0.569523786	14:16:52	0.033898947	-0.086667909	0.573599294
14:16:56	0.059982708	-0.069900983	0.577674802	14:17:00	0.086066469	-0.055162874	0.58175031
14:17:04	0.097336955	-0.051283556	0.585825818	14:17:08	0.116972155	-0.042418161	0.589901326
14:17:12	0.136607356	-0.035020273	0.593976834	14:17:16	0.156242557	-0.027622385	0.598052342
14:17:20	0.166200608	-0.025618016	0.602127851	14:17:24	0.148570728	-0.039683505	0.606203359
14:17:28	0.134325988	-0.051731165	0.610278867	14:17:32	0.145851	-0.048417875	0.614354375
14:17:36	0.157376011	-0.045104585	0.618429883	14:17:40	0.156770084	-0.050200249	0.606068997
14:17:44	0.14746394	-0.061659865	0.581920057	14:17:48	0.145924108	-0.068490113	0.56829381
14:17:52	0.159659716	-0.067432926	0.575364489	14:17:56	0.140162361	-0.086185376	0.582435167
14:18:00	0.143467087	-0.091345876	0.589505846	14:18:04	0.146192564	-0.09685164	0.596576525
14:18:08	0.148918041	-0.102357421	0.603647204	14:18:12	0.151643518	-0.107358809	0.610717882
14:18:16	0.154368995	-0.112360215	0.617788561	14:18:20	0.155591491	-0.118257508	0.62485924
14:18:24	0.153167465	-0.126328453	0.631929919	14:18:28	0.150743439	-0.13439938	0.639000598
14:18:32	0.148319413	-0.141677665	0.646071276	14:18:36	0.145895387	-0.148955967	0.653141955
14:18:40	0.126266916	-0.16564239	0.636902071	14:18:44	0.102391584	-0.184013157	0.61490805
14:18:48	0.083691045	-0.19929931	0.592914029	14:18:52	0.065762177	-0.200565933	0.570920008
14:18:56	0.047833309	-0.201832556	0.548925987	14:19:00	0.029904441	-0.2140759	0.526931966
14:19:04	0.012840313	-0.236780542	0.504937945	14:19:08	-0.004223816	-0.259485166	0.482943924
14:19:12	-0.021287944	-0.274012946	0.460949903	14:19:16	-0.038352072	-0.288540709	0.438955882
14:19:20	-0.012872842	-0.273721411	0.474604501	14:19:24	-0.010875007	-0.268911347	0.478437823
14:19:28	-0.008877172	-0.264101283	0.482271145	14:19:32	-0.006879337	-0.254650778	0.486104467
14:19:36	-0.004881502	-0.245200254	0.489937789	14:19:40	-0.002883667	-0.234138632	0.493771111
14:19:44	-0.000885832	-0.221465893	0.497604433	14:19:48	0.001112003	-0.208793155	0.501437755
14:19:52	0.003109839	-0.194657457	0.505271077	14:19:56	0.005107674	-0.180521777	0.509104399
14:20:00	0.007105509	-0.165744135	0.512937721	14:20:04	0.009011544	-0.150379268	0.517029922
14:20:08	0.012384488	-0.134140007	0.52310966	14:20:12	0.015757432	-0.115456368	0.529189399
14:20:16	0.019130376	-0.096772729	0.535269137	14:20:20	0.022503321	-0.077437348	0.541348876
14:20:24	0.025876265	-0.057450215	0.547428614	14:20:28	0.029249209	-0.037463086	0.553508353
14:20:32	0.032622153	-0.019289521	0.559588091	14:20:36	0.034749106	-0.001858674	0.563979616
14:20:40	0.0329036	0.012626086	0.562988797	14:20:44	0.031058094	0.026532678	0.561997979
14:20:48	0.029212588	0.040439269	0.56100716	14:20:52	0.027367082	0.052148997	0.560016341
14:20:56	0.025521576	0.063858722	0.559025522	14:21:00	0.02367607	0.073962376	0.558034703
14:21:04	0.020325045	0.081562543	0.557043884	14:21:08	0.016974021	0.089162704	0.556053066
14:21:12	0.013622996	0.094155221	0.555062247	14:21:16	0.010271972	0.099147738	0.554071428
14:21:20	0.006920947	0.103358795	0.553080609	14:21:24	0.003569922	0.106788391	0.55208979
14:21:28	0.001557388	0.11101584	0.551098972	14:21:32	0.000603233	0.114527475	0.550108153
14:21:36	-0.000350923	0.118039119	0.549117334	14:21:40	-0.001305078	0.120892376	0.548126515
14:21:44	-0.002259234	0.123087265	0.547135696	14:21:48	-0.003213389	0.125282145	0.546144878
14:21:52	-0.004167545	0.162472422	0.545154059	14:21:56	-0.0051217	0.1996627	0.54416324
14:22:00	-0.006075855	0.240813938	0.543172421	14:22:04	-0.006297893	0.286362575	0.542181602
14:22:08	-0.006519931	0.331911212	0.541190784	14:22:12	-0.006741968	0.34985654	0.540199965
14:22:16	-0.006964006	0.367801868	0.539209146	14:22:20	-0.007186044	0.379051146	0.538218327
14:22:24	-0.007408082	0.383604304	0.537227508	14:22:28	-0.007630119	0.388157498	0.53623669
14:22:32	-0.007852157	0.387067236	0.535245871	14:22:36	-0.008074195	0.385976975	0.534255052
14:22:40	-0.008296232	0.383705716	0.533264233	14:22:44	-0.00851827	0.380253531	0.532273414
14:22:48	-0.008740308	0.376801345	0.531282595	14:22:52	-0.008962346	0.373349125	0.530291777
14:22:56	-0.009184383	0.369896939	0.529300958	14:23:00	-0.009406421	0.366444718	0.528310139
14:23:04	-0.009345999	0.363160903	0.52731932	14:23:08	-0.009285576	0.359877053	0.526328501

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
14:23:12	-0.009225154	0.356593237	0.525337683	14:23:16	-0.009164731	0.353309422	0.524346864
14:23:20	-0.009104309	0.350385022	0.523356045	14:23:24	-0.012103605	0.345996259	0.518219568
14:23:28	-0.00118924	0.349901177	0.512373502	14:23:32	0.006425827	0.353713006	0.506527436
14:23:36	0.014479593	0.357786338	0.500681369	14:23:40	0.024462413	0.364193424	0.494835303
14:23:44	0.034445233	0.37178435	0.488989237	14:23:48	0.044428052	0.379375275	0.483143171
14:23:52	0.054410872	0.387831235	0.477297105	14:23:56	0.035550687	0.379094328	0.471451038
14:24:00	0.014003555	0.368755807	0.465604972	14:24:04	-0.009144632	0.357462888	0.459758906
14:24:08	-0.032292819	0.346169969	0.45391284	14:24:12	-0.036265861	0.344906025	0.448066774
14:24:16	-0.029194813	0.350225292	0.442220707	14:24:20	-0.022123764	0.354570023	0.436374641
14:24:24	-0.015052716	0.357940219	0.430528575	14:24:28	-0.007981668	0.361310414	0.424682509
14:24:32	-0.000910619	0.362867543	0.418836443	14:24:36	0.006160429	0.364424638	0.412990376
14:24:40	-0.01400293	0.349038344	0.40714431	14:24:44	-0.046494161	0.325594216	0.401298244
14:24:48	-0.044484136	0.322715752	0.413706318	14:24:52	-0.03967292	0.31858897	0.429909768
14:24:56	-0.029325952	0.317761927	0.455445965	14:25:00	-0.016723979	0.322098861	0.485723723
14:25:04	-0.024602122	0.318047716	0.48580672	14:25:08	-0.032480266	0.313996535	0.485889717
14:25:12	-0.040358409	0.30860984	0.485972714	14:25:16	-0.048236553	0.303223144	0.486055711
14:25:20	-0.056114697	0.296656233	0.486138707	14:25:24	-0.06399284	0.288909035	0.486221704
14:25:28	-0.070704124	0.281857384	0.486304701	14:25:32	-0.066943856	0.278490114	0.486387698
14:25:36	-0.063183588	0.275122845	0.486470695	14:25:40	-0.05942332	0.271167172	0.486553691
14:25:44	-0.055663052	0.266623026	0.486636688	14:25:48	-0.051902784	0.26207888	0.486719685
14:25:52	-0.048142516	0.257030981	0.486802682	14:25:56	-0.044382248	0.251983081	0.486885679
14:26:00	-0.040621981	0.245993546	0.486968675	14:26:04	-0.039774323	0.237326212	0.487051672
14:26:08	-0.038926666	0.228658897	0.487134669	14:26:12	-0.038079009	0.217548597	0.487217666
14:26:16	-0.037231351	0.206438297	0.487300663	14:26:20	-0.036383694	0.19532798	0.487383659
14:26:24	-0.035536037	0.18421768	0.487466656	14:26:28	-0.036573212	0.171983862	0.487549653
14:26:32	-0.040043367	0.158299781	0.48763265	14:26:36	-0.043513522	0.1446157	0.487715647
14:26:40	-0.046983677	0.13033421	0.487798643	14:26:44	-0.050453833	0.115455329	0.48788164
14:26:48	-0.053923988	0.100576447	0.487964637	14:26:52	-0.057394143	0.08417419	0.488047634
14:26:56	-0.060864298	0.067771923	0.488130631	14:27:00	-0.064334454	0.051879166	0.488213627
14:27:04	-0.064196791	0.038646482	0.488296624	14:27:08	-0.064059129	0.025413794	0.488379621
14:27:12	-0.063921466	0.013848008	0.488462618	14:27:16	-0.063783803	0.002282222	0.488545615
14:27:20	-0.063646141	-0.008533228	0.488628611	14:27:24	-0.063508478	-0.018598343	0.488711608
14:27:28	-0.063370816	-0.028663459	0.488794605	14:27:32	-0.063233153	-0.038728573	0.488877602
14:27:36	-0.063095491	-0.048793688	0.488960599	14:27:40	-0.062957828	-0.059387943	0.489043595
14:27:44	-0.062820166	-0.070511334	0.489126592	14:27:48	-0.062682503	-0.081634728	0.489209589
14:27:52	-0.062544841	-0.115878072	0.489292586	14:27:56	-0.062407178	-0.150121415	0.489355583
14:28:00	-0.062284261	-0.188875755	0.4894386	14:28:04	-0.063607896	-0.232994585	0.488527518
14:28:08	-0.064931531	-0.277113398	0.487616437	14:28:12	-0.066255165	-0.294075488	0.486705355
14:28:16	-0.0675788	-0.311037577	0.485794273	14:28:20	-0.068902435	-0.32302722	0.484883191
14:28:24	-0.070226069	-0.330044399	0.483972109	14:28:28	-0.071549704	-0.337061577	0.483061028
14:28:32	-0.072873339	-0.340824138	0.482149946	14:28:36	-0.074196974	-0.344586681	0.481238864
14:28:40	-0.075520608	-0.348349241	0.480327782	14:28:44	-0.076844243	-0.352111802	0.4794167
14:28:48	-0.078167878	-0.355874363	0.478505619	14:28:52	-0.079491512	-0.3594478	0.477594537
14:28:56	-0.080815147	-0.363021238	0.476683455	14:29:00	-0.082138782	-0.365316754	0.475772373
14:29:04	-0.083374899	-0.366282216	0.474861291	14:29:08	-0.084611016	-0.367247642	0.47395021
14:29:12	-0.085847134	-0.357526677	0.473039128	14:29:16	-0.087083251	-0.347805746	0.472128046
14:29:20	-0.088319368	-0.338612747	0.471216964	14:29:24	-0.089555485	-0.329947716	0.470305882
14:29:28	-0.090791602	-0.321282684	0.469394801	14:29:32	-0.09202772	-0.318472827	0.468483719
14:29:36	-0.093263837	-0.315662952	0.467572637	14:29:40	-0.094499954	-0.315400234	0.466661555
14:29:44	-0.095736071	-0.317684636	0.465750474	14:29:48	-0.096972188	-0.319969056	0.464839392
14:29:52	-0.098208306	-0.325028412	0.46392831	14:29:56	-0.099444423	-0.330087767	0.463017228
14:30:00	0.399578309	0.164457444	0.962106146	14:30:04	0.399639908	0.15907218	0.961195065
14:30:08	0.399701508	0.153686934	0.960283983	14:30:12	-0.100236893	-0.349247973	0.459372901
14:30:16	-0.100175293	-0.352182881	0.458461819	14:30:20	-0.100113693	-0.354506381	0.457550737
14:30:24	-0.100052094	-0.356218437	0.456639656	14:30:28	-0.099990494	-0.357930476	0.455728574
14:30:32	-0.099928895	-0.35964255	0.454817492	14:30:36	-0.099867295	-0.361354624	0.45390641
14:30:40	-0.099805695	-0.363259161	0.452995328	14:30:44	-0.098210255	-0.364441898	0.454162471

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
14:30:48	-0.096027089	-0.3652743	0.456125932	14:30:52	-0.093843922	-0.374368	0.458089393
14:30:56	-0.091660756	-0.383461735	0.460052854	14:31:00	-0.08947759	-0.393914114	0.462016315
14:31:04	-0.088469879	-0.406425809	0.463979777	14:31:08	-0.087462168	-0.41893754	0.465943238
14:31:12	-0.086454457	-0.418847878	0.467906699	14:31:16	-0.085446747	-0.418758217	0.46987016
14:31:20	-0.084439036	-0.37983886	0.471833621	14:31:24	-0.083431325	-0.302089736	0.473797082
14:31:28	-0.082423615	-0.224340613	0.475760544	14:31:32	-0.081415904	-0.121062004	0.477724005
14:31:36	-0.080408193	-0.0177834	0.479687466	14:31:40	-0.079400482	0.065519809	0.481650927
14:31:44	-0.078392772	0.128847601	0.483614388	14:31:48	-0.077385061	0.19217541	0.48557785
14:31:52	-0.07637735	0.228887325	0.487541311	14:31:56	-0.07536964	0.265599258	0.489504772
14:32:00	-0.074361929	0.285216591	0.491468233	14:32:04	-0.072535514	0.29962377	0.493431694
14:32:08	-0.070709098	0.31403095	0.495395156	14:32:12	-0.068882683	0.319660377	0.497358617
14:32:16	-0.067056267	0.325289804	0.499322078	14:32:20	-0.065229852	0.330226052	0.501285539
14:32:24	-0.063403437	0.334469086	0.503249	14:32:28	-0.061892494	0.338524071	0.504785023
14:32:32	-0.060432328	0.337234337	0.506252247	14:32:36	-0.058972162	0.335944567	0.507719471
14:32:40	-0.057511996	0.33292384	0.509186696	14:32:44	-0.05605183	0.328172156	0.51065392
14:32:48	-0.054591664	0.323420436	0.512121144	14:32:52	-0.053131498	0.317246972	0.513588369
14:32:56	-0.051671332	0.311073507	0.515055593	14:33:00	-0.050211166	0.304900079	0.516522817
14:33:04	-0.049516401	0.298270371	0.517990042	14:33:08	-0.048821636	0.291640663	0.519457266
14:33:12	-0.048126871	0.285792459	0.52092449	14:33:16	-0.047432106	0.279944292	0.522391715
14:33:20	-0.046737341	0.274510504	0.523858939	14:33:24	-0.046042576	0.269491166	0.525326163
14:33:28	-0.045347811	0.264471828	0.526793388	14:33:32	-0.044653046	0.25858385	0.528260612
14:33:36	-0.043958281	0.252695872	0.529727836	14:33:40	-0.043263516	0.246179307	0.531195061
14:33:44	-0.042568751	0.239034156	0.532662285	14:33:48	-0.041873986	0.231889006	0.534129509
14:33:52	-0.041179221	0.258129025	0.535596734	14:33:56	-0.040484456	0.284369026	0.537063958
14:34:00	-0.039789691	0.285017836	0.538531182	14:34:04	-0.039868575	0.259614224	0.539998407
14:34:08	-0.039947459	0.234210612	0.541465631	14:34:12	-0.040372852	0.208600453	0.542463367
14:34:16	-0.041042921	0.182844463	0.543129586	14:34:20	-0.04171299	0.160203602	0.543795805
14:34:24	-0.042383059	0.140677906	0.544462025	14:34:28	-0.043053127	0.1211152193	0.545128244
14:34:32	-0.043723196	0.105612807	0.545794464	14:34:36	-0.044393265	0.090073422	0.546460683
14:34:40	-0.045063334	0.076858406	0.547126903	14:34:44	-0.045733403	0.065967759	0.547793122
14:34:48	-0.046403472	0.055077112	0.548459341	14:34:52	-0.047073541	0.04879812	0.549125561
14:34:56	-0.04774361	0.042519132	0.54979178	14:35:00	-0.048413679	0.038083965	0.550458
14:35:04	-0.047386318	0.036504434	0.551124219	14:35:08	-0.046358956	0.034924904	0.551790438
14:35:12	-0.045331595	0.035300996	0.552456658	14:35:16	-0.044304234	0.035677089	0.553122877
14:35:20	-0.043276873	0.036929141	0.553789097	14:35:24	-0.042249511	0.039057162	0.554455316
14:35:28	-0.041308263	0.041133847	0.555121536	14:35:32	-0.040394927	0.045028732	0.555787755
14:35:36	-0.03948159	0.048923611	0.556453974	14:35:40	-0.038568254	0.053374833	0.557120194
14:35:44	-0.037654917	0.058382391	0.557786413	14:35:48	-0.036741581	0.06338995	0.558452633
14:35:52	-0.035828244	0.069087454	0.559118852	14:35:56	-0.034914908	0.074784958	0.559785071
14:36:00	-0.034001571	0.079393192	0.560451291	14:36:04	-0.032810586	0.083077651	0.56111751
14:36:08	-0.0316196	0.08676211	0.56178373	14:36:12	-0.030428614	0.085034143	0.562449949
14:36:16	-0.029237628	0.083306177	0.563116168	14:36:20	-0.028046643	0.0792858	0.563782388
14:36:24	-0.026855657	0.072973031	0.564448607	14:36:28	-0.025664671	0.066660261	0.565114827
14:36:32	-0.024473686	0.059269911	0.565781046	14:36:36	-0.0232827	0.051879557	0.566447266
14:36:40	-0.022091714	0.045346461	0.567113485	14:36:44	-0.020900728	0.039670613	0.567779704
14:36:48	-0.019709743	0.033994766	0.568445924	14:36:52	-0.018518757	0.048980165	0.569112143
14:36:56	-0.017327771	0.063965563	0.569778363	14:37:00	-0.016136786	0.092739658	0.570444582
14:37:04	-0.015716283	0.134843179	0.571110801	14:37:08	-0.01529578	0.1769467	0.571777021
14:37:12	-0.014875277	0.195070724	0.57244324	14:37:16	-0.014454774	0.213194749	0.57310946
14:37:20	-0.014034271	0.22280035	0.573775679	14:37:24	-0.013613768	0.223887562	0.574441899
14:37:28	-0.013193265	0.224974775	0.575108118	14:37:32	-0.012592473	0.218296495	0.576018615
14:37:36	-0.011921343	0.211660142	0.577024412	14:37:40	-0.011250214	0.20324428	0.578030209
14:37:44	-0.010579085	0.193048875	0.579036006	14:37:48	-0.009907955	0.182853488	0.580041803
14:37:52	-0.009236826	0.169502415	0.5810476	14:37:56	-0.008565697	0.156151324	0.582053397
14:38:00	-0.007894568	0.143255595	0.583059193	14:38:04	-0.006977627	0.130961736	0.58406499
14:38:08	-0.006060686	0.118667877	0.585070787	14:38:12	-0.005143745	0.107328088	0.586076584
14:38:16	-0.004226804	0.095988309	0.587082381	14:38:20	-0.003309864	0.08543643	0.588088178

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
14:38:24	-0.002392923	0.075672469	0.589093975	14:38:28	-0.001475982	0.065908507	0.590099772
14:38:32	-0.000559041	0.059244135	0.591105569	14:38:36	0.000357899	0.052579764	0.592111366
14:38:40	0.00127484	0.04755729	0.593117163	14:38:44	0.002191781	0.044176724	0.59412296
14:38:48	0.003108722	0.040796158	0.595128757	14:38:52	0.004025663	0.040580875	0.596134554
14:38:56	0.004942603	0.040365596	0.59714035	14:39:00	0.005859544	0.041156666	0.598146147
14:39:04	0.00635721	0.04270417	0.599151944	14:39:08	0.006854877	0.044251674	0.600157741
14:39:12	0.007352543	0.045799178	0.601163538	14:39:16	0.007850209	0.047346681	0.602169335
14:39:20	0.008347876	0.049609854	0.603175132	14:39:24	0.008845542	0.0525887	0.604180929
14:39:28	0.009343208	0.055567546	0.605186726	14:39:32	0.009840875	0.058546387	0.606192523
14:39:36	0.010338541	0.061525233	0.60719832	14:39:40	0.010836207	0.064932035	0.608204117
14:39:44	0.011333873	0.068766789	0.609209914	14:39:48	0.01183154	0.072601547	0.610215711
14:39:52	0.012329206	0.090478498	0.611221508	14:39:56	0.012826872	0.108355454	0.612227304
14:40:00	0.013324539	0.119926056	0.613233101	14:40:04	0.015616499	0.126259864	0.614238898
14:40:08	0.017908459	0.132593663	0.615244695	14:40:12	0.020200419	0.138428159	0.616250492
14:40:16	0.022492379	0.144262654	0.617256289	14:40:20	0.02478434	0.149276882	0.618262086
14:40:24	0.0270763	0.15347086	0.619267883	14:40:28	0.02936826	0.15766483	0.62027368
14:40:32	0.03166022	0.15906649	0.621279477	14:40:36	0.033343214	0.160105155	0.621460176
14:40:40	0.033099857	0.157386335	0.619030834	14:40:44	0.032856501	0.152058289	0.616601491
14:40:48	0.032613144	0.146730242	0.614172149	14:40:52	0.032369787	0.133928515	0.611742806
14:40:56	0.03212643	0.121126787	0.609313464	14:41:00	0.031717858	0.105533954	0.606884122
14:41:04	0.028523022	0.08558765	0.604454779	14:41:08	0.025328186	0.065641342	0.602025437
14:41:12	0.02213335	0.044765198	0.599596094	14:41:16	0.018938514	0.023889052	0.597166752
14:41:20	0.015743678	0.004256941	0.59473741	14:41:24	0.012548842	-0.014131137	0.592308067
14:41:28	0.009354006	-0.032519214	0.589878725	14:41:32	0.00615917	-0.048176262	0.587449382
14:41:36	0.002964333	-0.06383331	0.58502004	14:41:40	-0.000230503	-0.077296048	0.582590697
14:41:44	-0.003425339	-0.088564481	0.580161355	14:41:48	-0.006323438	-0.099656034	0.578134066
14:41:52	-0.0060377	-0.103804878	0.580420606	14:41:56	-0.005751962	-0.107953731	0.582707146
14:42:00	-0.005466224	-0.109585316	0.584993686	14:42:04	-0.005366747	-0.108810679	0.587280226
14:42:08	-0.00526727	-0.108036042	0.589566766	14:42:12	-0.005167792	-0.104210051	0.591853306
14:42:16	-0.005068315	-0.10038406	0.594139846	14:42:20	-0.004968838	-0.095389382	0.596426386
14:42:24	-0.00486936	-0.089226018	0.598712926	14:42:28	-0.004769883	-0.083062663	0.600999466
14:42:32	-0.003779549	-0.074003129	0.603286006	14:42:36	-0.002737607	-0.064912833	0.605572545
14:42:40	-0.001695665	-0.053973528	0.607859085	14:42:44	-0.000653723	-0.041185212	0.610145625
14:42:48	0.000388219	-0.028396902	0.612432165	14:42:52	0.001430161	0.018372659	0.614718705
14:42:56	0.002472103	0.065142218	0.617005245	14:43:00	0.003514045	0.105387032	0.619291785
14:43:04	0.005766763	0.139828823	0.621578325	14:43:08	0.008019481	0.174270613	0.623864865
14:43:12	0.010272199	0.186300704	0.626151405	14:43:16	0.012524917	0.198330777	0.628437945
14:43:20	0.014777635	0.205184429	0.630724485	14:43:24	0.017030353	0.206861625	0.633011025
14:43:28	0.019283071	0.208538838	0.635297564	14:43:32	0.02153579	0.204633351	0.637584104
14:43:36	0.023788508	0.200727847	0.639870644	14:43:40	0.026041226	0.195954821	0.642157184
14:43:44	0.028293944	0.190314238	0.644443724	14:43:48	0.030546662	0.184673672	0.646730264
14:43:52	0.03279938	0.181622224	0.649016804	14:43:56	0.035052098	0.178570775	0.651303344
14:44:00	0.037304816	0.175519344	0.653589884	14:44:04	0.040792559	0.173204075	0.655876424
14:44:08	0.030841093	0.162877901	0.639953976	14:44:12	0.020280766	0.152813046	0.623206572
14:44:16	0.009720439	0.1427482	0.606459169	14:44:20	-0.000839888	-0.133712295	0.589711765
14:44:24	-0.011400216	0.12570533	0.572964362	14:44:28	-0.021960543	0.117698374	0.556216959
14:44:32	-0.03252087	0.112699755	0.539469555	14:44:36	-0.031963014	0.114328512	0.537786347
14:44:40	-0.022869176	0.122814259	0.54766867	14:44:44	-0.013775338	0.133068846	0.557550993
14:44:48	-0.0046815	0.143323424	0.567433316	14:44:52	0.004412338	0.155769713	0.577315639
14:44:56	0.013506176	0.168216029	0.587197962	14:45:00	-0.477399986	-0.324113163	0.097080286
14:45:04	-0.470169525	-0.322328574	0.106962609	14:45:08	-0.47147084	-0.325629644	0.105285098
14:45:12	0.010988274	0.178092657	0.581604346	14:45:16	0.009953611	0.191654061	0.582692923
14:45:20	0.011132039	0.207210175	0.593912349	14:45:24	0.012310467	0.223441828	0.605131774
14:45:28	0.013488895	0.239673463	0.616351199	14:45:32	0.014667323	0.251577261	0.627570624
14:45:36	0.015845751	0.263481077	0.638790049	14:45:40	0.017024179	0.272759821	0.650009474
14:45:44	0.085946815	0.319794764	0.661228899	14:45:48	0.081916296	0.323343463	0.672448324
14:45:52	0.077885778	0.326892162	0.683667749	14:45:56	0.073855259	0.330440861	0.694887174

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
14:46:00	0.072278482	0.346990851	0.706106599	14:46:04	0.142561752	0.417914172	0.717326025
14:46:08	0.200666535	0.481578051	0.72854545	14:46:12	0.217587414	0.513068873	0.739764875
14:46:16	0.166283303	0.5038918	0.658545225	14:46:20	0.116448708	0.487739146	0.606966293
14:46:24	0.012583345	0.431528052	0.555387361	14:46:28	0.025143874	0.444716592	0.503808429
14:46:32	0.058325188	0.45768298	0.452413951	14:46:36	0.013506885	0.424155006	0.462213365
14:46:40	-0.031311417	0.387477314	0.472012779	14:46:44	-0.033687153	0.372949261	0.481812194
14:46:48	-0.029608374	0.362268644	0.491611608	14:46:52	-0.026006782	0.349259187	0.500764476
14:46:56	-0.02810286	0.332853436	0.502197483	14:47:00	-0.030198939	0.31580343	0.503630489
14:47:04	-0.03190548	0.298341296	0.505063496	14:47:08	-0.033612021	0.280879197	0.506496502
14:47:12	-0.035318562	0.263992124	0.507929509	14:47:16	-0.037025103	0.24710505	0.509362515
14:47:20	-0.038731645	0.232177211	0.510795522	14:47:24	-0.040438186	0.219208605	0.512228528
14:47:28	-0.042144727	0.206240016	0.513661535	14:47:32	-0.041929477	0.195062831	0.515094542
14:47:36	-0.04149284	0.184017594	0.516527548	14:47:40	-0.041056202	0.170623259	0.517960555
14:47:44	-0.040619565	0.154879809	0.519393561	14:47:48	-0.040182927	0.139136359	0.520826568
14:47:52	-0.03974629	0.118727809	0.522259574	14:47:56	-0.039309652	0.098319251	0.523692581
14:48:00	-0.038873015	0.076468118	0.525125588	14:48:04	-0.038774278	0.052972995	0.526558594
14:48:08	-0.038675541	0.029477871	0.527991601	14:48:12	-0.038576804	0.004202503	0.529424607
14:48:16	-0.038478067	-0.021072866	0.530857614	14:48:20	-0.03837933	-0.046348235	0.53229062
14:48:24	-0.038280593	-0.071623604	0.533723627	14:48:28	-0.038181856	-0.096898972	0.535156634
14:48:32	-0.038083119	-0.120269503	0.53658964	14:48:36	-0.037984382	-0.143640043	0.538022647
14:48:40	-0.037885645	-0.165134239	0.539455653	14:48:44	-0.036519964	-0.183996904	0.542605262
14:48:48	-0.035128547	-0.202844219	0.54578974	14:48:52	-0.03373713	-0.256009209	0.548974217
14:48:56	-0.032345714	-0.309174217	0.552158695	14:49:00	-0.030954297	-0.370976227	0.555343173
14:49:04	-0.02989218	-0.441611513	0.558527651	14:49:08	-0.025945131	-0.510527136	0.561712129
14:49:12	-0.019525823	-0.546517957	0.564896607	14:49:16	-0.013106514	-0.582508777	0.568081085
14:49:20	-0.006687205	-0.598886869	0.571265563	14:49:24	-0.000439575	-0.595754638	0.574217431
14:49:28	0.003214021	-0.59416867	0.573654603	14:49:32	0.006867618	-0.591990818	0.573091775
14:49:36	0.010521214	-0.589812966	0.572528948	14:49:40	0.01417481	-0.587635113	0.57196612
14:49:44	0.017828407	-0.585457261	0.571403292	14:49:48	0.021482003	-0.583279409	0.570840464
14:49:52	0.025135599	-0.581101557	0.570277636	14:49:56	0.028789196	-0.578923705	0.569714809
14:50:00	0.032442792	-0.576745853	0.569151981	14:50:04	0.037394957	-0.573793944	0.568589153
14:50:08	0.042347123	-0.570842035	0.568026325	14:50:12	0.047299289	-0.567890126	0.567463497
14:50:16	0.052251454	-0.564938216	0.56690067	14:50:20	0.05720362	-0.55766682	0.566337842
14:50:24	0.062155785	-0.546075972	0.565775014	14:50:28	0.067107951	-0.534485088	0.565212186
14:50:32	0.072060116	-0.518731152	0.564649358	14:50:36	0.077012282	-0.502977217	0.564086531
14:50:40	0.081964447	-0.486552949	0.563523703	14:50:44	0.086916613	-0.469458347	0.562960875
14:50:48	0.091868778	-0.452363709	0.562398047	14:50:52	0.096820944	-0.435269108	0.561835219
14:50:56	0.101773109	-0.418174506	0.561272392	14:51:00	0.106725275	-0.402503034	0.560709564
14:51:04	0.110479154	-0.388968937	0.560146736	14:51:08	0.114233034	-0.37543484	0.559583908
14:51:12	0.117986914	-0.363455972	0.55902108	14:51:16	0.121740793	-0.351477103	0.558458252
14:51:20	0.125494673	-0.339863477	0.557895425	14:51:24	0.129248552	-0.328615128	0.557332597
14:51:28	0.133002432	-0.31736678	0.556769769	14:51:32	0.136756312	-0.306611935	0.556206941
14:51:36	0.140510191	-0.29585709	0.555644113	14:51:40	0.088751228	-0.317467862	0.555081286
14:51:44	0.052530529	-0.329091786	0.554518458	14:51:48	0.01630983	-0.340715745	0.55395563
14:51:52	0.038110836	-0.291190591	0.553392802	14:51:56	0.065486916	-0.238342185	0.552829974
14:52:00	0.092862996	-0.165693793	0.552267147	14:52:04	0.121112924	-0.072724493	0.551704319
14:52:08	0.077212232	-0.022763062	0.551141491	14:52:12	-0.007401687	-0.022641776	0.550578663
14:52:16	0.004726383	0.035145909	0.562155322	14:52:20	0.061679438	0.107591778	0.607231218
14:52:24	0.124048503	0.171204762	0.652307115	14:52:28	0.144247544	0.20968084	0.667146142
14:52:32	0.115754809	0.204733192	0.616011942	14:52:36	0.087262073	0.199785543	0.564877742
14:52:40	0.058769337	0.190969587	0.513743542	14:52:44	0.030276602	0.178285331	0.462609341
14:52:48	0.038409853	0.187433257	0.461100245	14:52:52	0.106439037	0.227489475	0.540745058
14:52:56	0.174468221	0.267545674	0.620389871	14:53:00	0.122574081	0.234720264	0.612551395
14:53:04	0.103634321	0.220141272	0.597335591	14:53:08	0.00787464	0.159771116	0.478035311
14:53:12	0.00222052	0.152007287	0.480820421	14:53:16	-0.003433601	0.144243476	0.483605531
14:53:20	-0.009087721	0.137146952	0.486390641	14:53:24	-0.014741842	0.130717741	0.489175752
14:53:28	-0.020395962	0.12428853	0.491960862	14:53:32	-0.026050083	0.120200324	0.494745972

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
14:53:36	-0.031704203	0.11611211	0.497531082	14:53:40	-0.037358324	0.113227153	0.500316192
14:53:44	-0.043012445	0.111545452	0.503101303	14:53:48	-0.048666565	0.109863751	0.505886413
14:53:52	-0.047200127	0.113829188	0.508671523	14:53:56	-0.045594367	0.117877672	0.511456633
14:54:00	-0.043988607	0.121318941	0.514241744	14:54:04	-0.042939551	0.123821162	0.517026854
14:54:08	-0.041890495	0.126323364	0.519811964	14:54:12	-0.040841438	0.126398873	0.522597074
14:54:16	-0.039792382	0.126474364	0.525382184	14:54:20	-0.038743325	0.126549873	0.528167295
14:54:24	-0.037694269	0.126625364	0.530952405	14:54:28	-0.036645212	0.126700872	0.533737515
14:54:32	-0.035596156	0.130428822	0.536522625	14:54:36	-0.0345471	0.134156771	0.539307735
14:54:40	-0.033498043	0.139512393	0.542092846	14:54:44	-0.032448987	0.146495689	0.544877956
14:54:48	-0.03139993	0.153479002	0.547663066	14:54:52	-0.030350874	0.184475983	0.550448176
14:54:56	-0.029301817	0.215472963	0.553233286	14:55:00	-0.028252761	0.251188391	0.556018397
14:55:04	-0.025843338	0.292433152	0.558803507	14:55:08	-0.023433999	0.333677878	0.561588617
14:55:12	-0.021024618	0.347485624	0.564373727	14:55:16	-0.018615236	0.361293335	0.567158838
14:55:20	-0.016205855	0.376464559	0.569943948	14:55:24	-0.013796474	0.392999258	0.572729058
14:55:28	-0.011387093	0.409533958	0.575514168	14:55:32	-0.008977712	0.418306797	0.578299278
14:55:36	-0.006568331	0.427079636	0.581084389	14:55:40	-0.004158949	0.433465539	0.583869499
14:55:44	-0.001749568	0.437464505	0.586654609	14:55:48	0.000659813	0.441463507	0.589439719
14:55:52	0.003069194	0.443249666	0.592224829	14:55:56	0.005478575	0.445035861	0.59500994
14:56:00	0.007887956	0.446822021	0.59779505	14:56:04	0.011008725	0.449032263	0.60058016
14:56:08	0.014129495	0.45124247	0.60336527	14:56:12	0.017250264	0.455384303	0.60615038
14:56:16	0.020371033	0.459526137	0.608935491	14:56:20	0.023491802	0.463968195	0.611720601
14:56:24	0.026612571	0.468710404	0.614505711	14:56:28	0.029733334	0.473452614	0.617290821
14:56:32	0.032854109	0.47629695	0.620075932	14:56:36	0.035974879	0.47914125	0.622861042
14:56:40	0.039095648	0.479308907	0.625646152	14:56:44	0.04185633	0.476585278	0.628431262
14:56:48	0.044019379	0.473505374	0.631216372	14:56:52	0.043353049	0.462659875	0.630167913
14:56:56	0.042232068	0.451543366	0.628503439	14:57:00	0.041111086	0.438745107	0.626838965
14:57:04	0.038579443	0.423424156	0.625174491	14:57:08	0.036047801	0.408103205	0.623510017
14:57:12	0.033516158	0.393766098	0.621845543	14:57:16	0.030984516	0.379429027	0.62018107
14:57:20	0.028452873	0.364356426	0.618516596	14:57:24	0.025921231	0.348548367	0.616852122
14:57:28	0.023389588	0.332740272	0.615187648	14:57:32	0.020857946	0.314154346	0.613523174
14:57:36	0.018326303	0.295568438	0.6118587	14:57:40	0.015794661	0.276140856	0.610194226
14:57:44	0.013263018	0.255871636	0.608529752	14:57:48	0.010731376	0.235602397	0.606865278
14:57:52	0.008199733	0.167619105	0.605200804	14:57:56	0.005668091	0.099635795	0.60353633
14:58:00	0.003136448	0.050679525	0.601871856	14:58:04	0.003890663	0.02270893	0.60318592
14:58:08	0.006391181	-0.004220722	0.606866078	14:58:12	0.0088917	-0.005370417	0.610546236
14:58:16	0.011392218	-0.006520111	0.614226394	14:58:20	0.013892737	-0.009463888	0.617906552
14:58:24	0.016393255	-0.014201747	0.62158671	14:58:28	0.018893774	-0.018939607	0.625266868
14:58:32	0.022727103	-0.028064943	0.628947026	14:58:36	0.028268628	-0.036172052	0.632627184
14:58:40	0.033810153	-0.045035457	0.636307342	14:58:44	0.039351677	-0.054655173	0.639987501
14:58:48	0.044893202	-0.06427488	0.643667659	14:58:52	0.050434727	-0.073894596	0.647347817
14:58:56	0.055976252	-0.083514303	0.651027975	14:59:00	0.061517777	-0.092187337	0.654708133
14:59:04	0.068651859	-0.098964401	0.658388291	14:59:08	0.075785941	-0.105741456	0.662068449
14:59:12	0.082920023	-0.101821016	0.665748607	14:59:16	0.090054105	-0.097900576	0.669428765
14:59:20	0.097188188	-0.091515994	0.673108923	14:59:24	0.10432227	-0.082667279	0.676789081
14:59:28	0.111456352	-0.073818563	0.680469239	14:59:32	0.118590434	-0.064969848	0.684149397
14:59:36	0.125724516	-0.056121133	0.687829555	14:59:40	0.132858598	-0.047272418	0.691509713
14:59:44	0.135799053	-0.04092346	0.689507861	14:59:48	0.137702967	-0.035487429	0.686984641
14:59:52	0.136926774	-0.032534176	0.68446142	14:59:56	0.136150581	-0.029580922	0.6819382
15:00:00	0.635374388	0.476753265	1.179414979	15:00:04	0.630827738	0.484220884	1.176891759
15:00:08	0.626281087	0.491688485	1.174368538	15:00:12	0.121734437	-0.000843901	0.671845317
15:00:16	0.117187786	0.006623709	0.669322097	15:00:20	0.112641136	0.01323232	0.666798876
15:00:24	0.108094485	0.018981927	0.664275656	15:00:28	0.103547834	0.024731537	0.661752435
15:00:32	0.099001184	0.025978828	0.659229215	15:00:36	0.094454533	0.027226118	0.656705994
15:00:40	0.089907883	0.027003939	0.654182773	15:00:44	0.085361232	0.025312288	0.651659553
15:00:48	0.088821965	0.028393716	0.649136332	15:00:52	0.117960104	0.032625338	0.646613112
15:00:56	0.143467648	0.034692819	0.644089891	15:01:00	0.131804475	0.017810087	0.637637237
15:01:04	0.111899932	-0.000778513	0.617066444	15:01:08	0.091995389	-0.019367113	0.596495651

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
15:01:12	0.072090847	-0.030323434	0.575924858	15:01:16	0.052186304	-0.041279754	0.555354066
15:01:20	0.032281761	-0.051549113	0.534783273	15:01:24	0.012377219	-0.061131516	0.51421248
15:01:28	0.011559319	-0.059336662	0.519502469	15:01:32	0.019520058	-0.056454075	0.539157009
15:01:36	0.025943389	-0.05448791	0.558811548	15:01:40	0.00729963	-0.067463852	0.544502308
15:01:44	0.01494666	-0.064768258	0.565814856	15:01:48	0.02259369	-0.062072669	0.587127404
15:01:52	0.045939215	-0.046084293	0.608439952	15:01:56	0.053209702	-0.039677999	0.600218937
15:02:00	0.056198259	-0.035272405	0.58619627	15:02:04	0.061222002	-0.029101971	0.572173603
15:02:08	0.066245744	-0.022931538	0.558150936	15:02:12	0.071269487	-0.017788642	0.544128269
15:02:16	0.07629323	-0.01264575	0.530105602	15:02:20	0.081316973	-0.004020874	0.516082935
15:02:24	0.086340716	0.008085985	0.502060268	15:02:28	0.091364459	0.020192844	0.4880376
15:02:32	0.096388201	0.0242316	0.474014933	15:02:36	0.101411944	0.028270355	0.459992266
15:02:40	0.106435687	0.032309111	0.445969599	15:02:44	0.11145943	0.036347867	0.431946932
15:02:48	0.123170556	0.044372868	0.417924265	15:02:52	0.056480338	0.009696237	0.403901598
15:02:56	0.06794359	0.021605679	0.389878931	15:03:00	0.089981601	0.039332393	0.390184164
15:03:04	0.115121869	0.058422142	0.398137532	15:03:08	0.07298481	0.037408918	0.406090899
15:03:12	0.005028137	0.000472972	0.414044267	15:03:16	0.047414685	0.02931091	0.421997634
15:03:20	-0.033229129	-0.015884511	0.326053193	15:03:24	0.018687635	0.017240507	0.371859156
15:03:28	0.062485381	0.045525904	0.417665119	15:03:32	0.075519759	0.057457724	0.463471082
15:03:36	0.205840309	0.139302012	0.668189859	15:03:40	0.18215023	0.130709993	0.655219479
15:03:44	0.149335833	0.118046149	0.620344494	15:03:48	0.116521436	0.105382306	0.58546951
15:03:52	0.083707039	0.10415412	0.550594525	15:03:56	0.050892643	0.102925936	0.51571954
15:04:00	0.139874295	0.168065774	0.645867869	15:04:04	0.086059173	0.141853967	0.642473847
15:04:08	0.087708405	0.148703593	0.639079825	15:04:12	0.089357637	0.135623115	0.635685802
15:04:16	0.09100687	0.122542633	0.63229178	15:04:20	0.092656102	0.110611056	0.628897758
15:04:24	0.094305334	0.09982838	0.625503735	15:04:28	0.095954566	0.089045706	0.622109713
15:04:32	0.094010843	0.076121325	0.618715691	15:04:36	0.090138805	0.062047505	0.615321668
15:04:40	0.086266766	0.04591882	0.611927646	15:04:44	0.082394727	0.027735271	0.608533623
15:04:48	0.078522689	0.00955172	0.605139601	15:04:52	0.07465065	0.00269398	0.601745579
15:04:56	0.07079	-0.004156972	0.598366987	15:05:00	0.067058832	-0.014801239	0.595163833
15:05:04	0.064963104	-0.028341134	0.591960679	15:05:08	0.062867376	-0.04188103	0.588757524
15:05:12	0.060771648	-0.058373317	0.58555437	15:05:16	0.058675921	-0.074865613	0.582351216
15:05:20	0.056580193	-0.08982955	0.579148062	15:05:24	0.054484465	-0.103265127	0.575944908
15:05:28	0.052388737	-0.116700704	0.572741754	15:05:32	0.050293009	-0.127783186	0.5695386
15:05:36	0.024302487	-0.153108975	0.533960027	15:05:40	0.024114498	-0.162046679	0.533341698
15:05:44	0.023926509	-0.169976786	0.532723368	15:05:48	0.02373852	-0.177906894	0.532105038
15:05:52	0.023550531	-0.184523497	0.531486708	15:05:56	0.023362542	-0.191140118	0.530868379
15:06:00	0.023174553	-0.19676625	0.530250049	15:06:04	0.020453544	-0.202911823	0.529631719
15:06:08	0.017732535	-0.209057396	0.52901339	15:06:12	0.015011525	-0.217970337	0.52839506
15:06:16	0.012290516	-0.226883295	0.52777673	15:06:20	0.009569506	-0.236672515	0.5271584
15:06:24	0.006848497	-0.247338033	0.526540071	15:06:28	0.004127488	-0.258003532	0.525921741
15:06:32	0.001406478	-0.26866905	0.525303411	15:06:36	-0.001314531	-0.279334567	0.524685081
15:06:40	-0.004323958	-0.290371094	0.524066752	15:06:44	-0.007541142	-0.30173057	0.523448422
15:06:48	-0.010758326	-0.313090045	0.522830092	15:06:52	-0.01397551	-0.279094707	0.522211762
15:06:56	-0.017192695	-0.245099387	0.521593433	15:07:00	-0.020409879	-0.224656759	0.520975103
15:07:04	-0.022244138	-0.216942518	0.520356773	15:07:08	-0.024078398	-0.209228258	0.519738443
15:07:12	-0.025912658	-0.210707215	0.519120114	15:07:16	-0.027746917	-0.212186172	0.518501784
15:07:20	-0.029581177	-0.214943583	0.517883454	15:07:24	-0.031415436	-0.218979449	0.517265125
15:07:28	-0.033249696	-0.223015332	0.516646795	15:07:32	-0.035083956	-0.225643842	0.516028465
15:07:36	-0.036918215	-0.228272353	0.515410135	15:07:40	-0.038752475	-0.230002343	0.514791806
15:07:44	-0.040586734	-0.230833776	0.514173476	15:07:48	-0.042420994	-0.231665227	0.513555146
15:07:52	-0.044255254	-0.23249666	0.512936816	15:07:56	-0.045433045	-0.2329368	0.512318487
15:08:00	-0.045335993	-0.232617008	0.511700157	15:08:04	-0.045948441	-0.232720156	0.511081827
15:08:08	-0.046560889	-0.232823286	0.510463497	15:08:12	-0.047173336	-0.232475531	0.509845168
15:08:16	-0.04225895	-0.228833314	0.51671523	15:08:20	-0.036134244	-0.223597417	0.525225172
15:08:24	-0.030009538	-0.217489307	0.533735114	15:08:28	-0.023884832	-0.211381198	0.542245056
15:08:32	-0.017760126	-0.203095296	0.550754999	15:08:36	-0.01163542	-0.194809377	0.559264941
15:08:40	-0.005510714	-0.186043455	0.567774883	15:08:44	0.000613992	-0.176797548	0.576284825

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
15:08:48	0.006738698	-0.167551607	0.584794767	15:08:52	0.012863404	-0.1583057	0.593304709
15:08:56	0.01898811	-0.149059758	0.601814652	15:09:00	0.025112816	-0.140149054	0.610324594
15:09:04	0.03219773	-0.131001205	0.618834536	15:09:08	0.039282644	-0.121853338	0.627344478
15:09:12	0.046646801	-0.114397632	0.63585442	15:09:16	0.056221757	-0.105624104	0.644364362
15:09:20	0.065796713	-0.100783255	0.652874305	15:09:24	0.075371668	-0.099875093	0.661384247
15:09:28	0.084946624	-0.098966931	0.669894189	15:09:32	0.064788422	-0.113719522	0.638118225
15:09:36	0.036376586	-0.133391976	0.595159288	15:09:40	0.007964751	-0.150984911	0.552200351
15:09:44	0.009611375	-0.148580946	0.549968077	15:09:48	0.015745236	-0.14350221	0.553815627
15:09:52	0.019044726	-0.098309011	0.557663177	15:09:56	0.019339919	-0.054906627	0.561510728
15:10:00	0.019635112	-0.024059622	0.565358278	15:10:04	0.019392556	-0.006088537	0.569205828
15:10:08	0.019150001	0.011882546	0.573053378	15:10:12	0.018907445	0.022708087	0.576900928
15:10:16	0.022086416	0.028427604	0.580748479	15:10:20	0.026679556	0.032263535	0.584596029
15:10:24	0.031272696	0.033372915	0.588443579	15:10:28	0.035865837	0.034482296	0.592291129
15:10:32	0.039250249	0.031106541	0.594500956	15:10:36	0.040094268	0.026216496	0.593268766
15:10:40	0.040938287	0.021326452	0.592036575	15:10:44	0.041782306	0.016436407	0.590804384
15:10:48	0.042626325	0.011546363	0.589572193	15:10:52	0.043470344	0.007894297	0.588340003
15:10:56	0.042503819	0.003162994	0.587107812	15:11:00	0.039343402	-0.002185249	0.585875621
15:11:04	0.036658846	-0.006559034	0.584643431	15:11:08	0.033974291	-0.010932819	0.58341124
15:11:12	0.031289736	-0.012488136	0.582179049	15:11:16	0.028605181	-0.014043453	0.580946858
15:11:20	0.025920626	-0.013809072	0.579714668	15:11:24	0.02323607	-0.011784992	0.578482477
15:11:28	0.020551515	-0.009760913	0.577250286	15:11:32	0.01786696	-0.004861022	0.576018096
15:11:36	0.015182405	3.88676E-05	0.574785905	15:11:40	0.01249785	0.004938758	0.573553714
15:11:44	0.009813295	0.009838648	0.572321523	15:11:48	0.007128739	0.014738538	0.571089333
15:11:52	0.004444184	0.01655254	0.569857142	15:11:56	0.001759629	0.018366542	0.568624951
15:12:00	-0.000924926	0.018201699	0.567392761	15:12:04	-0.004170042	0.015723871	0.56616057
15:12:08	-0.007415159	0.013246043	0.564928379	15:12:12	-0.010404224	0.007780311	0.563696188
15:12:16	-0.01248992	0.002853063	0.562463998	15:12:20	-0.014575616	-0.002727524	0.561231807
15:12:24	-0.016661311	-0.008961448	0.559999616	15:12:28	-0.018747007	-0.015195373	0.558767426
15:12:32	-0.019035396	-0.019421434	0.559970433	15:12:36	-0.018780044	-0.023323379	0.561910162
15:12:40	-0.018524693	-0.026568585	0.563849892	15:12:44	-0.018269341	-0.029157053	0.565789621
15:12:48	-0.018013989	-0.03174552	0.567729351	15:12:52	-0.017758638	0.022659682	0.56966908
15:12:56	-0.017503286	0.077064881	0.57160881	15:13:00	-0.017247935	0.113584218	0.573548539
15:13:04	-0.01689459	0.132276109	0.575488269	15:13:08	-0.016541246	0.150967992	0.577427998
15:13:12	-0.016187901	0.147520224	0.579367728	15:13:16	-0.015834556	0.144072437	0.581307457
15:13:20	-0.015481212	0.138383003	0.583247187	15:13:24	-0.015127867	0.130451912	0.585186916
15:13:28	-0.014774523	0.122520821	0.587126646	15:13:32	-0.014449083	0.111325398	0.589028567
15:13:36	-0.014124072	0.100129719	0.590929906	15:13:40	-0.013799062	0.089502547	0.592831245
15:13:44	-0.013474051	0.079443889	0.594732584	15:13:48	-0.013149041	0.069385222	0.596633924
15:13:52	-0.01282403	0.062562835	0.598535263	15:13:56	-0.01210637	0.055974501	0.600436602
15:14:00	-0.011088663	0.051642442	0.602337941	15:14:04	-0.010356841	0.049217398	0.604239281
15:14:08	-0.009625018	0.046792355	0.60614062	15:14:12	-0.008893195	0.048127779	0.608041959
15:14:16	-0.008161373	0.049463207	0.609943298	15:14:20	-0.00742955	0.052541735	0.611844638
15:14:24	-0.006697727	0.057363367	0.613745977	15:14:28	-0.005965905	0.062184998	0.615647316
15:14:32	-0.005234082	0.071287052	0.617548655	15:14:36	-0.004502259	0.080389102	0.619449995
15:14:40	-0.003770436	0.091493931	0.621351334	15:14:44	-0.003453939	0.104353949	0.622689943
15:14:48	-0.003536189	0.116976287	0.623488282	15:14:52	-0.003618439	0.129598626	0.624286622
15:14:56	-0.003700689	0.142220956	0.625084961	15:15:00	-0.50378294	-0.345975347	0.125883301
15:15:04	-0.502854736	-0.334387994	0.12668164	15:15:08	-0.501926533	-0.322800624	0.12747998
15:15:12	-0.00099833	0.189610301	0.628278319	15:15:16	-7.01263E-05	0.202021225	0.629076659
15:15:20	0.000858077	0.214432167	0.629874998	15:15:24	0.00178628	0.226843092	0.630673338
15:15:28	0.002714484	0.239254016	0.631471678	15:15:32	0.003642687	0.244190922	0.632270017
15:15:36	0.00457089	0.24912781	0.633068357	15:15:40	0.005499094	0.253464179	0.633866696
15:15:44	0.006427297	0.257200013	0.634665036	15:15:48	0.0073555	0.260935847	0.635463375
15:15:52	0.008283704	0.293786146	0.636261715	15:15:56	0.009211907	0.326636462	0.637060054
15:16:00	0.01014011	0.351474239	0.637858394	15:16:04	0.01075632	0.368113522	0.638656733
15:16:08	0.011372529	0.384752805	0.639455073	15:16:12	0.011988738	0.385826656	0.640253412
15:16:16	0.012604948	0.386900506	0.641051752	15:16:20	0.013221157	0.386418382	0.641850091

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
15:16:24	0.013837366	0.384380248	0.642648431	15:16:28	0.014453576	0.382342113	0.64344677
15:16:32	0.015069785	0.380304014	0.64424511	15:16:36	0.015685994	0.37826588	0.645043449
15:16:40	0.016302204	0.376571563	0.645841789	15:16:44	0.016918413	0.375221065	0.646640128
15:16:48	0.017534622	0.373870567	0.647438468	15:16:52	0.018150832	0.372520068	0.648236807
15:16:56	0.018767041	0.37116957	0.649035147	15:17:00	0.01938325	0.369525386	0.649833486
15:17:04	0.019655547	0.367382585	0.650631826	15:17:08	0.019927843	0.365239749	0.651430165
15:17:12	0.02020014	0.364338594	0.652228505	15:17:16	0.020472436	0.36343744	0.653026844
15:17:20	0.020744732	0.36343692	0.653825184	15:17:24	0.021017029	0.364337	0.654623524
15:17:28	0.021289325	0.36523708	0.655421863	15:17:32	0.021561622	0.368503098	0.656220203
15:17:36	0.021833918	0.371769152	0.657018542	15:17:40	0.022106214	0.377175391	0.657816882
15:17:44	0.022378511	0.384721885	0.658615221	15:17:48	0.022650807	0.392268344	0.659413561
15:17:52	0.022923104	0.400470889	0.6602119	15:17:56	0.023235129	0.408697151	0.661064069
15:18:00	0.02359199	0.415345383	0.661976986	15:18:04	0.024783759	0.420886605	0.662889904
15:18:08	0.025975529	0.426427791	0.663802822	15:18:12	0.027167298	0.427379893	0.66471574
15:18:16	0.028359068	0.428331994	0.665628658	15:18:20	0.029550837	0.427286704	0.666541576
15:18:24	0.030742606	0.424244022	0.667454493	15:18:28	0.031934376	0.421201339	0.668367411
15:18:32	0.033126145	0.414659828	0.669280329	15:18:36	0.034317915	0.408118316	0.670193247
15:18:40	0.035509684	0.40157684	0.671106165	15:18:44	0.036701453	0.395035329	0.672019083
15:18:48	0.037893223	0.388493817	0.672932	15:18:52	0.039084992	0.326228485	0.673844918
15:18:56	0.040276762	0.263963117	0.674757836	15:19:00	0.041468531	0.211172108	0.675670754
15:19:04	0.041345207	0.167071509	0.676583672	15:19:08	0.041221883	0.122970918	0.67749659
15:19:12	0.041098559	0.103134557	0.678409507	15:19:16	0.040975235	0.083298205	0.679322425
15:19:20	0.040851911	0.069660069	0.680235343	15:19:24	0.040728587	0.062220162	0.681148261
15:19:28	0.040761711	0.05487351	0.682061179	15:19:32	0.041469013	0.053985632	0.682974097
15:19:36	0.042176314	0.053097752	0.683887014	15:19:40	0.042883616	0.054033794	0.684799932
15:19:44	0.043590917	0.056793753	0.68571285	15:19:48	0.044298219	0.059553712	0.686625768
15:19:52	0.04500552	0.061703572	0.687538686	15:19:56	0.045712822	0.063853433	0.688451603
15:20:00	0.046420123	0.065385077	0.689364521	15:20:04	0.048915761	0.067364503	0.690277439
15:20:08	0.051411398	0.069343929	0.691190357	15:20:12	0.053907035	0.068491442	0.692103275
15:20:16	0.056402672	0.067638956	0.693016193	15:20:20	0.058898309	0.064780043	0.69392911
15:20:24	0.061555993	0.060011301	0.695061588	15:20:28	0.064363636	0.055331948	0.696397247
15:20:32	0.06717128	0.047694827	0.697732907	15:20:36	0.069978923	0.040057706	0.699068567
15:20:40	0.072786566	0.031443586	0.700404226	15:20:44	0.075594209	0.021852465	0.701739886
15:20:48	0.078401853	0.012261344	0.703075546	15:20:52	0.081209496	-0.000402761	0.704411205
15:20:56	0.084017139	-0.013066873	0.705746865	15:21:00	0.086824782	-0.026599289	0.707082525
15:21:04	0.088530263	-0.041657007	0.708418184	15:21:08	0.090235743	-0.056714717	0.709753844
15:21:12	0.091941223	-0.071772435	0.711089503	15:21:16	0.093646703	-0.086830153	0.712425163
15:21:20	0.095352184	-0.101452255	0.713760823	15:21:24	0.097057664	-0.115638766	0.715096482
15:21:28	0.098763144	-0.129825259	0.716432142	15:21:32	0.100468624	-0.141771534	0.717767802
15:21:36	0.102174105	-0.153717809	0.719103461	15:21:40	0.103879585	-0.164837582	0.720439121
15:21:44	0.105585065	-0.175130887	0.721774781	15:21:48	0.107290545	-0.185424174	0.72311044
15:21:52	0.108996026	-0.228614155	0.7244461	15:21:56	0.110701506	-0.271804136	0.72578176
15:22:00	0.112406986	-0.324683608	0.727117419	15:22:04	0.115826186	-0.38623103	0.728453079
15:22:08	0.119245385	-0.447778453	0.729788738	15:22:12	0.122664585	-0.476630616	0.731124398
15:22:16	0.126083785	-0.505482779	0.732460058	15:22:20	0.129502984	-0.518889777	0.733795717
15:22:24	0.132922184	-0.516851645	0.735131377	15:22:28	0.136341384	-0.514813513	0.736467037
15:22:32	0.139760583	-0.512775381	0.737802696	15:22:36	0.143179783	-0.510737249	0.739138356
15:22:40	0.146598983	-0.508699117	0.740474016	15:22:44	0.150018182	-0.506660985	0.741809675
15:22:48	0.153437382	-0.504622853	0.743145335	15:22:52	0.156856582	-0.502584721	0.744480994
15:22:56	0.160275782	-0.500546589	0.745816654	15:23:00	0.163694981	-0.492271768	0.747152314
15:23:04	0.165832312	-0.478524323	0.748487973	15:23:08	0.167969643	-0.464776879	0.749823633
15:23:12	0.170106974	-0.451029434	0.751159293	15:23:16	0.247857835	-0.392209936	0.854944872
15:23:20	0.220867765	-0.396715322	0.820834348	15:23:24	0.203229154	-0.396536815	0.803924777
15:23:28	0.189531787	-0.394008993	0.792355257	15:23:32	0.179307302	-0.388594041	0.785491199
15:23:36	0.169082818	-0.383179089	0.778627141	15:23:40	0.158858333	-0.37701866	0.771763083
15:23:44	0.139595877	-0.375500182	0.764899024	15:23:48	0.15449723	-0.353617188	0.758034966
15:23:52	0.169398583	-0.329947739	0.751170908	15:23:56	0.184299937	-0.30627829	0.744306849

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
15:24:00	0.19920129	-0.28141381	0.737442791	15:24:04	0.178108271	-0.276810021	0.730578733
15:24:08	0.14717945	-0.278069166	0.723714674	15:24:12	0.218882296	-0.21496201	0.716850616
15:24:16	0.160611351	-0.229330216	0.709986558	15:24:20	0.102016972	-0.242807676	0.702684273
15:24:24	0.143343536	-0.195640306	0.694712416	15:24:28	0.240653055	-0.115102364	0.686740559
15:24:32	0.217781379	-0.10620257	0.678768702	15:24:36	0.258518082	-0.059386807	0.670796845
15:24:40	0.153956654	-0.098957385	0.551992351	15:24:44	0.138153092	-0.085397118	0.553447234
15:24:48	0.122349529	-0.071836878	0.554902118	15:24:52	0.106545967	-0.082402462	0.556357002
15:24:56	0.076872883	-0.101235444	0.557811885	15:25:00	0.145119292	-0.063021536	0.559266769
15:25:04	0.150878508	-0.063376648	0.560721653	15:25:08	0.182692286	-0.048201058	0.562176537
15:25:12	0.214506063	-0.034947076	0.56363142	15:25:16	0.225844759	-0.033897955	0.565086304
15:25:20	0.224054999	-0.036299252	0.566541188	15:25:24	0.22226524	-0.034325298	0.567996071
15:25:28	0.11455061	-0.095491499	0.569450955	15:25:32	0.136406054	-0.074644372	0.570905839
15:25:36	0.158261497	-0.053797263	0.572360722	15:25:40	0.180116941	-0.032286323	0.573815606
15:25:44	0.201972385	-0.010111568	0.57527049	15:25:48	0.212338919	0.005214825	0.576725373
15:25:52	0.214716137	0.015778911	0.578180257	15:25:56	0.217093355	0.026342997	0.579635141
15:26:00	0.221912893	0.037443002	0.584399161	15:26:04	0.227704935	0.048202783	0.590220071
15:26:08	0.233496976	0.058962565	0.596040981	15:26:12	0.239289018	0.066291369	0.601861891
15:26:16	0.24508106	0.073620182	0.607682802	15:26:20	0.250873102	0.079771063	0.613503712
15:26:24	0.259012528	0.086143254	0.622505128	15:26:28	0.277178618	0.098492188	0.645091824
15:26:32	0.295344708	0.110841123	0.66767852	15:26:36	0.313510798	0.123190053	0.690265216
15:26:40	0.331676888	0.137549037	0.712851911	15:26:44	0.349842978	0.153918066	0.735438607
15:26:48	0.368009068	0.170287099	0.758025303	15:26:52	0.386175159	0.19123514	0.780611999
15:26:56	0.404341249	0.212183179	0.803198695	15:27:00	0.399340385	0.220976249	0.794396133
15:27:04	0.395456934	0.23208988	0.784952576	15:27:08	0.391573482	0.243203513	0.775509018
15:27:12	0.387690031	0.255649694	0.76606546	15:27:16	0.384006979	0.268215333	0.756893427
15:27:20	0.383774932	0.282112846	0.752397212	15:27:24	0.383542884	0.295285143	0.747900997
15:27:28	0.383310837	0.308457444	0.743404782	15:27:32	0.38307879	0.319592693	0.738908567
15:27:36	0.382846742	0.330727951	0.734412353	15:27:40	0.382614695	0.34119292	0.729916138
15:27:44	0.382382648	0.350987601	0.725419923	15:27:48	0.3839325	0.361844444	0.720923708
15:27:52	0.386751609	0.413537429	0.716427493	15:27:56	0.389570717	0.465230414	0.711931278
15:28:00	0.392389826	0.522311699	0.707435064	15:28:04	0.393097021	0.583522354	0.702781476
15:28:08	0.391869136	0.643579572	0.696264084	15:28:12	0.38433005	0.664541925	0.689746691
15:28:16	0.376790964	0.685504278	0.683229299	15:28:20	0.369251878	0.703489445	0.676711906
15:28:24	0.361712791	0.718497496	0.670194514	15:28:28	0.354173705	0.733505512	0.663677121
15:28:32	0.350755382	0.734543257	0.662743014	15:28:36	0.337297251	0.729596428	0.661856411
15:28:40	0.324379183	0.719361962	0.660969808	15:28:44	0.315290462	0.70580055	0.660083205
15:28:48	0.436155735	0.7697027	0.659196602	15:28:52	0.448718711	0.76175519	0.658309999
15:28:56	0.461281687	0.75380768	0.657423396	15:29:00	0.473844662	0.744664285	0.656536793
15:29:04	0.462626733	0.720149578	0.65565019	15:29:08	0.450181876	0.694903518	0.654763587
15:29:12	0.489884223	0.70414599	0.653876984	15:29:16	0.450384755	0.666177488	0.652990381
15:29:20	0.43880224	0.646523354	0.652103778	15:29:24	0.451955672	0.643287513	0.651217175
15:29:28	0.376510858	0.58723963	0.650330572	15:29:32	0.375833199	0.57575929	0.649443969
15:29:36	0.376046908	0.56481028	0.648557366	15:29:40	0.175946222	0.433402842	0.647670763
15:29:44	0.161043609	0.411335019	0.64678416	15:29:48	0.119253259	0.373239832	0.645897558
15:29:52	0.093270378	0.343158012	0.645010955	15:29:56	0.088297773	0.325600092	0.644124352
15:30:00	0.583325168	0.808912127	1.143237749	15:30:04	0.579248111	0.793627958	1.142351146
15:30:08	0.575171054	0.778343788	1.141464543	15:30:12	0.071093996	0.265908579	0.64057794
15:30:16	0.067016939	0.25347337	0.639691337	15:30:20	0.062939882	0.241585456	0.638804734
15:30:24	0.058862825	0.230244855	0.637918131	15:30:28	0.054785768	0.218904254	0.637031528
15:30:32	0.050708711	0.208170762	0.636144925	15:30:36	0.046631653	0.197437287	0.635258322
15:30:40	0.042554596	0.187053386	0.634371719	15:30:44	0.038477539	0.177019059	0.633485116
15:30:48	0.01780025	0.157089609	0.610106608	15:30:52	-0.019942274	0.108317338	0.563606153
15:30:56	-0.022685258	0.080407752	0.564527106	15:31:00	-0.019681127	0.058908387	0.573234912
15:31:04	-0.016921154	0.040247932	0.581942718	15:31:08	-0.014161182	0.021587479	0.590650524
15:31:12	-0.011401209	0.006548128	0.59935833	15:31:16	-0.009349473	-0.008913392	0.607106536
15:31:20	-0.007359777	-0.022486883	0.614770682	15:31:24	-0.005370082	-0.034135363	0.622434828
15:31:28	0.000779386	-0.043304267	0.630098974	15:31:32	0.009500913	-0.042509068	0.63776312

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
15:31:36	0.018222439	-0.041713873	0.645427266	15:31:40	0.026943966	-0.037847859	0.653091413
15:31:44	0.035665492	-0.030911025	0.660755559	15:31:48	0.044387019	-0.023974195	0.668419705
15:31:52	0.053108546	-0.024402695	0.676083851	15:31:56	0.061830072	-0.024831191	0.683747997
15:32:00	0.070551599	-0.025259691	0.691412143	15:32:04	0.079430977	-0.025594094	0.698015068
15:32:08	0.08276694	-0.029232845	0.697107133	15:32:12	0.086102903	-0.033610213	0.696199199
15:32:16	0.089438865	-0.037987581	0.695291264	15:32:20	0.092774828	-0.03916366	0.69438333
15:32:24	0.096110791	-0.037138452	0.693475395	15:32:28	0.099446753	-0.035113252	0.692567461
15:32:32	0.102782716	-0.034494013	0.691659526	15:32:36	0.106118678	-0.033874774	0.690751592
15:32:40	0.101046169	-0.039727074	0.689843658	15:32:44	0.122711845	-0.031100518	0.688935723
15:32:48	0.311708156	0.077269227	0.688027789	15:32:52	0.286448873	0.057924543	0.687119854
15:32:56	0.26118959	0.038579859	0.68621192	15:33:00	0.235930307	0.020486778	0.685303985
15:33:04	0.144146067	-0.036009196	0.684396051	15:33:08	0.116784251	-0.054103952	0.683488116
15:33:12	0.350795079	0.086305367	0.682580182	15:33:16	0.352181031	0.088050604	0.681672247
15:33:20	0.353566983	0.089795842	0.680764313	15:33:24	0.354952935	0.091541079	0.679856379
15:33:28	0.343937962	0.085894316	0.678948444	15:33:32	0.372481474	0.10505239	0.696444742
15:33:36	0.41851155	0.134633934	0.737633851	15:33:40	0.464541626	0.164215477	0.77882296
15:33:44	0.510571702	0.193797021	0.820012068	15:33:48	0.556601779	0.223378564	0.861201177
15:33:52	0.597330722	0.232937219	0.895207701	15:33:56	0.63311816	0.239550319	0.922518903
15:34:00	0.475472242	0.117243465	0.902702435	15:34:04	0.441838077	0.055240794	0.876009535
15:34:08	0.408203913	-0.006761878	0.849316634	15:34:12	0.311182528	-0.091879592	0.736739428
15:34:16	0.498038476	-0.007782429	0.740015353	15:34:20	0.292635042	-0.149430128	0.743291277
15:34:24	0.161760395	-0.238577428	0.746567202	15:34:28	0.125978133	-0.271041665	0.749843126
15:34:32	0.474000458	-0.062848814	0.75311905	15:34:36	0.535072985	-0.025702289	0.756394975
15:34:40	0.27710011	-0.174400297	0.759670899	15:34:44	0.414748825	-0.082940957	0.762946824
15:34:48	0.552397541	0.008518419	0.766222748	15:34:52	0.637180115	0.071876711	0.75882742
15:34:56	0.616147808	0.072160429	0.74758779	15:35:00	0.595115501	0.073357591	0.736348159
15:35:04	0.573881593	0.075348042	0.725108529	15:35:08	0.476275278	0.031814085	0.713868898
15:35:12	0.421860911	0.015278253	0.702629268	15:35:16	0.367446544	-0.001257579	0.691389637
15:35:20	0.313032178	-0.017793412	0.680150007	15:35:24	0.258617811	-0.034329244	0.668910376
15:35:28	0.48135979	0.114343526	0.657670746	15:35:32	0.37537796	0.066444877	0.646431115
15:35:36	0.404002392	0.098782933	0.635191485	15:35:40	0.432626824	0.129493433	0.623951854
15:35:44	0.386226064	0.113855011	0.612712224	15:35:48	0.260257965	0.050787733	0.601472593
15:35:52	0.134289867	-0.015699428	0.590232963	15:35:56	0.051039994	-0.056722917	0.578993332
15:36:00	0.081286447	-0.031189052	0.567753702	15:36:04	0.113032276	-0.005857479	0.556514071
15:36:08	0.148363991	0.021611586	0.479930606	15:36:12	0.260132782	0.094003317	0.615385435
15:36:16	0.326758201	0.139485789	0.689674824	15:36:20	0.31724512	0.139583276	0.660803005
15:36:24	0.307732038	0.139680768	0.631931185	15:36:28	0.182102101	0.070562798	0.445730877
15:36:32	0.219774506	0.099657155	0.480791389	15:36:36	0.16750277	0.075137202	0.515851901
15:36:40	0.08337214	0.031972757	0.550912413	15:36:44	0.011749514	-0.003389764	0.585972925
15:36:48	0.073547693	0.040777791	0.621033436	15:36:52	0.135345871	0.108897962	0.656093948
15:36:56	0.174919578	0.163770475	0.661042187	15:37:00	0.212867008	0.227017558	0.663786958
15:37:04	0.249270794	0.298688474	0.666531729	15:37:08	0.28567458	0.37035939	0.669276499
15:37:12	0.322078365	0.422876724	0.67202127	15:37:16	0.358482151	0.475394041	0.674766041
15:37:20	0.394885936	0.510456382	0.677510812	15:37:24	0.431289722	0.528063731	0.680255583
15:37:28	0.185961707	0.377735121	0.683000354	15:37:32	0.185350181	0.381883296	0.685745125
15:37:36	0.184738654	0.386031453	0.688489896	15:37:40	0.184127128	0.388734345	0.691234667
15:37:44	0.183515602	0.389991972	0.693979437	15:37:48	0.17458183	0.38628882	0.696724208
15:37:52	0.236635793	0.421067869	0.699468979	15:37:56	0.235250448	0.418031714	0.70221375
15:38:00	0.233865103	0.413313809	0.704958521	15:38:04	0.233264294	0.407381806	0.707703292
15:38:08	0.232663486	0.401449784	0.710448063	15:38:12	0.232062677	0.395517763	0.713192834
15:38:16	0.231461868	0.389585759	0.715937605	15:38:20	0.230861059	0.384029177	0.718682375
15:38:24	0.230260251	0.378848052	0.721427146	15:38:28	0.229659442	0.373666909	0.724171917
15:38:32	0.229058633	0.370636485	0.726916688	15:38:36	0.228457824	0.367606062	0.729661459
15:38:40	0.227857016	0.364188243	0.73240623	15:38:44	0.227256207	0.360382994	0.735151001
15:38:48	0.226655398	0.356577763	0.737895772	15:38:52	0.226054589	0.351751701	0.740640543
15:38:56	0.22545378	0.346925639	0.743385313	15:39:00	0.224852972	0.341692481	0.746130084
15:39:04	0.222224475	0.334843536	0.748874855	15:39:08	0.219595979	0.327994592	0.751619626

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
15:39:12	0.216967483	0.319377935	0.754364397	15:39:16	0.214332567	0.310757434	0.757109168
15:39:20	0.210937554	0.301683868	0.758880661	15:39:24	0.203632577	0.290279616	0.755254486
15:39:28	0.196327601	0.278875381	0.75167831	15:39:32	0.189022624	0.269173218	0.748102134
15:39:36	0.178160089	0.25735045	0.744525958	15:39:40	0.16616527	0.244852754	0.740949783
15:39:44	0.154170452	0.232355058	0.737373607	15:39:48	0.142175634	0.219857354	0.733797431
15:39:52	0.130180816	0.176686777	0.730221255	15:39:56	0.118185998	0.133516199	0.726645079
15:40:00	0.106360563	0.108100169	0.71624802	15:40:04	0.096891477	0.101742305	0.690729332
15:40:08	0.104795282	0.105740152	0.688749438	15:40:12	0.114783387	0.122471139	0.689593595
15:40:16	0.124771492	0.139202122	0.690437752	15:40:20	0.134759598	0.151807718	0.691281908
15:40:24	0.144747703	0.160287929	0.692126065	15:40:28	0.154735809	0.16876814	0.692970221
15:40:32	0.164723914	0.171346543	0.693814378	15:40:36	0.174712019	0.173924947	0.694658535
15:40:40	0.184700125	0.174688295	0.695502691	15:40:44	0.19468823	0.173636589	0.696346848
15:40:48	0.204676335	0.172584882	0.697191004	15:40:52	0.214664441	0.171533175	0.698035161
15:40:56	0.224652546	0.170481466	0.698879318	15:41:00	0.234640652	0.168590542	0.699723474
15:41:04	0.242609657	0.164656847	0.700567631	15:41:08	0.236824194	0.152524326	0.701411787
15:41:12	0.187981092	0.111513334	0.702255944	15:41:16	0.237853794	0.129345303	0.703100101
15:41:20	0.234423292	0.117671671	0.703944257	15:41:24	0.23099279	0.108265651	0.704788414
15:41:28	0.227562288	0.098859631	0.70563257	15:41:32	0.224131786	0.094135296	0.706476727
15:41:36	0.220701284	0.089410964	0.707320884	15:41:40	0.217270782	0.079091869	0.70816504
15:41:44	0.21384028	0.063178017	0.709009197	15:41:48	0.210409778	0.047264165	0.709853354
15:41:52	0.206979276	0.033437212	0.71069751	15:41:56	0.203548774	0.019610259	0.711541667
15:42:00	0.200118272	0.006903265	0.712385823	15:42:04	0.195912065	-0.005146149	0.71322998
15:42:08	0.191705858	-0.017195571	0.714074137	15:42:12	0.187499652	-0.026161112	0.714918293
15:42:16	0.183323538	-0.035108707	0.715803224	15:42:20	0.179649069	-0.042394708	0.71736784
15:42:24	0.175974601	-0.048318129	0.718932457	15:42:28	0.172300132	-0.054241551	0.720497074
15:42:32	0.168625664	-0.060164972	0.722061691	15:42:36	0.170405618	-0.062837097	0.723626307
15:42:40	0.172984388	-0.064488163	0.725190924	15:42:44	0.175563158	-0.065594369	0.726755541
15:42:48	0.178141928	-0.066700574	0.728320158	15:42:52	0.180720698	-0.149675392	0.729884775
15:42:56	0.183299468	-0.23265021	0.731449391	15:43:00	0.185878238	-0.312376326	0.733014008
15:43:04	0.189150499	-0.38844029	0.734578625	15:43:08	0.192183182	-0.464647098	0.736143242
15:43:12	0.194709862	-0.469892991	0.737707859	15:43:16	0.197236543	-0.475138849	0.739272475
15:43:20	0.199763223	-0.477008738	0.740837092	15:43:24	0.202289904	-0.475502622	0.742401709
15:43:28	0.204816584	-0.473996507	0.743966326	15:43:32	0.207343265	-0.472490392	0.745530943
15:43:36	0.209869945	-0.470984277	0.747095559	15:43:40	0.212396626	-0.469478162	0.748660176
15:43:44	0.214923306	-0.467972047	0.750224793	15:43:48	0.217449987	-0.466465932	0.75178941
15:43:52	0.219976667	-0.464959817	0.753354027	15:43:56	0.222503348	-0.463453702	0.754918643
15:44:00	0.225030028	-0.450541831	0.75648326	15:44:04	0.228005368	-0.425956729	0.758047877
15:44:08	0.230980708	-0.401371627	0.759612494	15:44:12	0.233956048	-0.373602807	0.761177111
15:44:16	0.236931387	-0.345833986	0.762741727	15:44:20	0.239906727	-0.318065201	0.764306344
15:44:24	0.242882067	-0.29029638	0.765870961	15:44:28	0.245129502	-0.262961453	0.766449329
15:44:32	0.247260499	-0.237090994	0.766869933	15:44:36	0.249391497	-0.211220535	0.767290537
15:44:40	0.251522494	-0.183966134	0.767711142	15:44:44	0.253653491	-0.155327792	0.768131746
15:44:48	0.255784489	-0.126689468	0.76855235	15:44:52	0.257915486	-0.093636314	0.768972955
15:44:56	0.260046483	-0.060583177	0.769393559	15:45:00	-0.237822519	-0.525618132	0.269814163
15:45:04	-0.235162193	-0.488425689	0.270234768	15:45:08	-0.233179273	-0.451637038	0.270655372
15:45:12	0.267724542	0.086330559	0.771075976	15:45:16	0.268628356	0.124298153	0.771496581
15:45:20	0.269532171	0.162265749	0.771917185	15:45:24	0.270435985	0.200233344	0.77233779
15:45:28	0.2713398	0.238200941	0.772758394	15:45:32	0.272243614	0.273879924	0.773178998
15:45:36	0.273147429	0.309558916	0.773599603	15:45:40	0.274051243	0.343005595	0.774020207
15:45:44	0.274955057	0.374219954	0.774440811	15:45:48	0.275858872	0.405434312	0.774861416
15:45:52	0.276762686	0.466634546	0.77528202	15:45:56	0.277666501	0.527834745	0.775702624
15:46:00	0.278570315	0.599390593	0.776123229	15:46:04	0.277053598	0.679859177	0.776543833
15:46:08	0.275536881	0.760327762	0.776964437	15:46:12	0.274020165	0.75942367	0.777385042
15:46:16	0.272503448	0.758519579	0.777805646	15:46:20	0.270986731	0.757615488	0.778226251
15:46:24	0.269470014	0.756711396	0.778646855	15:46:28	0.266925298	0.755194531	0.777674609
15:46:32	0.263796671	0.753329605	0.775911212	15:46:36	0.260668044	0.751464679	0.774147814
15:46:40	0.257539417	0.749599752	0.772384417	15:46:44	0.25441079	0.747734826	0.77062102

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
15:46:48	0.251282163	0.7458699	0.768857623	15:46:52	0.248153536	0.744004974	0.767094226
15:46:56	0.245024909	0.742140048	0.765330829	15:47:00	0.241896282	0.740275122	0.763567432
15:47:04	0.241243297	0.739885888	0.761804035	15:47:08	0.240590312	0.739496654	0.760040638
15:47:12	0.239937327	0.739107419	0.758277241	15:47:16	0.239668986	0.738947465	0.756513844
15:47:20	0.240222652	0.739277497	0.754750447	15:47:24	0.240776318	0.739607529	0.75298705
15:47:28	0.241329985	0.739937561	0.751223653	15:47:32	0.241883651	0.740267593	0.749460255
15:47:36	0.242437317	0.740597625	0.747696858	15:47:40	0.242990983	0.740927657	0.745933461
15:47:44	0.243544649	0.741257688	0.744170064	15:47:48	0.244098316	0.74158772	0.742406667
15:47:52	0.244651982	0.741917752	0.74064327	15:47:56	0.245205648	0.742247784	0.738879873
15:48:00	0.245759314	0.742577816	0.737116476	15:48:04	0.2450753	0.742170085	0.735353079
15:48:08	0.244391285	0.741762355	0.733589682	15:48:12	0.24370727	0.741354624	0.731826285
15:48:16	0.243023255	0.740946893	0.730062888	15:48:20	0.241933858	0.727604711	0.727750231
15:48:24	0.240689029	0.701477035	0.725226979	15:48:28	0.239444201	0.675349359	0.722703727
15:48:32	0.238199372	0.63617255	0.720180475	15:48:36	0.236954544	0.596995776	0.717657223
15:48:40	0.235709715	0.559319303	0.715133971	15:48:44	0.234464887	0.523143129	0.712610719
15:48:48	0.233220058	0.486966956	0.710087467	15:48:52	0.23197523	0.369896546	0.707564215
15:48:56	0.230730401	0.252826135	0.705040963	15:49:00	0.231541988	0.129248004	0.705205426
15:49:04	0.232773664	-0.001813233	0.705757866	15:49:08	0.234005339	-0.132874463	0.706310307
15:49:12	0.235237014	-0.233979386	0.706862747	15:49:16	0.236468689	-0.335084308	0.707415188
15:49:20	0.237700364	-0.399094756	0.707967628	15:49:24	0.23893204	-0.426010694	0.708520069
15:49:28	0.240163715	-0.452926631	0.709072509	15:49:32	0.24139539	-0.452192448	0.709624949
15:49:36	0.242627065	-0.451458266	0.71017739	15:49:40	0.24385874	-0.450724083	0.71072983
15:49:44	0.245090416	-0.449989901	0.711282271	15:49:48	0.246322091	-0.449255718	0.711834711
15:49:52	0.247553766	-0.448521536	0.712387152	15:49:56	0.248785441	-0.447787353	0.712939592
15:50:00	0.250017116	-0.439437727	0.713492033	15:50:04	0.25195987	-0.423048759	0.714044473
15:50:08	0.254956169	-0.406031824	0.714596914	15:50:12	0.257952467	-0.384151163	0.715149354
15:50:16	0.260948765	-0.362270502	0.715701794	15:50:20	0.263945063	-0.341697927	0.716254235
15:50:24	0.266941361	-0.322433474	0.716806675	15:50:28	0.26993766	-0.303169021	0.717359116
15:50:32	0.272933958	-0.284732083	0.717911556	15:50:36	0.275930256	-0.266295145	0.718463997
15:50:40	0.278926554	-0.247652136	0.719016437	15:50:44	0.281922853	-0.228802986	0.719568878
15:50:48	0.284919151	-0.209953836	0.720121318	15:50:52	0.287915449	-0.191104686	0.720673759
15:50:56	0.290911747	-0.172255535	0.721226199	15:51:00	0.293908046	-0.154055934	0.721778639
15:51:04	0.297258055	-0.136295039	0.72233108	15:51:08	0.300608064	-0.118534109	0.72288352
15:51:12	0.303958073	-0.099428284	0.723435961	15:51:16	0.307308082	-0.080322442	0.723988401
15:51:20	0.310658091	-0.061216617	0.724540842	15:51:24	0.3140081	-0.042110775	0.725093282
15:51:28	0.317358109	-0.02300495	0.725645723	15:51:32	0.320708119	-0.001139574	0.726198163
15:51:36	0.324058128	0.020725801	0.726750604	15:51:40	0.327408137	0.044092667	0.727303044
15:51:44	0.330758146	0.068961024	0.727855485	15:51:48	0.334108155	0.093829372	0.728407925
15:51:52	0.337458164	0.05358154	0.728960365	15:51:56	0.340808173	0.0133337	0.729512806
15:52:00	0.344158182	-0.016822137	0.730065246	15:52:04	0.348011356	-0.036586042	0.730617687
15:52:08	0.35186453	-0.056349948	0.731170127	15:52:12	0.355203727	-0.059166988	0.731026173
15:52:16	0.357371619	-0.062682207	0.7292952	15:52:20	0.359539511	-0.058064497	0.727564227
15:52:24	0.361707404	-0.045313839	0.725833254	15:52:28	0.363875296	-0.032563181	0.724102281
15:52:32	0.366043188	-0.011316999	0.722371308	15:52:36	0.36821108	0.009929183	0.720640335
15:52:40	0.370378973	0.032976689	0.718909362	15:52:44	0.372546865	0.057825535	0.717178388
15:52:48	0.374714757	0.082674382	0.715447415	15:52:52	0.376882649	0.106384137	0.713716442
15:52:56	0.379050542	0.130093893	0.711985469	15:53:00	0.381218434	0.155099238	0.710254496
15:53:04	0.383330371	0.180503097	0.708523523	15:53:08	0.385442308	0.204745322	0.70679255
15:53:12	0.387554244	0.22550265	0.705061577	15:53:16	0.389666181	0.246259979	0.703330604
15:53:20	0.391778118	0.260721411	0.701599631	15:53:24	0.393890055	0.273084211	0.699868658
15:53:28	0.396001992	0.283919793	0.698137685	15:53:32	0.398113929	0.290173716	0.696406712
15:53:36	0.400225866	0.296427644	0.694675739	15:53:40	0.402337803	0.299540128	0.692944766
15:53:44	0.40444974	0.301605471	0.691213793	15:53:48	0.407233451	0.303913717	0.690393018
15:53:52	0.4203223	0.311892109	0.70353483	15:53:56	0.43341149	0.319870502	0.716676641
15:54:00	0.446499998	0.3287552	0.729818453	15:54:04	0.456823016	0.336293327	0.742960265
15:54:08	0.467146034	0.343831455	0.756102076	15:54:12	0.477469051	0.351369586	0.769243888
15:54:16	0.487792069	0.358907714	0.7823857	15:54:20	0.478392345	0.352500977	0.78530968

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
15:54:24	0.445480074	0.331349291	0.772914937	15:54:28	0.412567804	0.309297002	0.760520193
15:54:32	0.344603704	0.26364904	0.74812545	15:54:36	0.339035961	0.255194584	0.735730707
15:54:40	0.333468218	0.24509929	0.723335963	15:54:44	0.327900475	0.234457053	0.71094122
15:54:48	0.320639814	0.225815403	0.698546477	15:54:52	0.244518764	0.185156279	0.686151733
15:54:56	0.168397714	0.144497155	0.67375699	15:55:00	0.372192241	0.270691367	0.661362247
15:55:04	0.300004769	0.232376988	0.648967503	15:55:08	0.227817297	0.19243092	0.63657276
15:55:12	0.088053776	0.107308772	0.530074295	15:55:16	0.092427442	0.108104566	0.536614912
15:55:20	0.096801108	0.106655826	0.543155529	15:55:24	0.101174773	0.104458911	0.549696146
15:55:28	0.105548439	0.100279732	0.556236763	15:55:32	0.109922105	0.090153754	0.56277738
15:55:36	0.114295771	0.080027778	0.569317997	15:55:40	0.121469497	0.072257043	0.579652458
15:55:44	0.129936871	0.065486155	0.591739702	15:55:48	0.138404245	0.059522526	0.603826946
15:55:52	0.146871618	0.055980674	0.61591419	15:55:56	0.155338992	0.052438824	0.628001434
15:56:00	0.163806366	0.052928577	0.640088677	15:56:04	0.174416387	0.056039398	0.652175921
15:56:08	0.185026408	0.06041337	0.664263165	15:56:12	0.195636429	0.068576792	0.676350409
15:56:16	0.20624645	0.07674021	0.688437653	15:56:20	0.216856471	0.085499722	0.700524897
15:56:24	0.227466492	0.094457937	0.71261214	15:56:28	0.238076513	0.103117718	0.724699384
15:56:32	0.242562491	0.107231769	0.72848907	15:56:36	0.242102466	0.108397582	0.725577341
15:56:40	0.241642441	0.110063268	0.722665611	15:56:44	0.241182417	0.111895575	0.719753882
15:56:48	0.240722392	0.113897828	0.716842153	15:56:52	0.240262367	0.116409914	0.713930424
15:56:56	0.239802342	0.118922001	0.711018695	15:57:00	0.239342317	0.120861966	0.708106965
15:57:04	0.236441505	0.12115631	0.705195236	15:57:08	0.233540694	0.121750874	0.702283507
15:57:12	0.232496632	0.124352883	0.701887516	15:57:16	0.232291581	0.127455014	0.702628314
15:57:20	0.23208653	0.130557144	0.703369113	15:57:24	0.23188148	0.133659274	0.704109911
15:57:28	0.231676429	0.136277689	0.704850709	15:57:32	0.231471378	0.137444958	0.705591507
15:57:36	0.231266327	0.138612228	0.706332305	15:57:40	0.231061276	0.13683212	0.707073103
15:57:44	0.230856226	0.134069551	0.707813901	15:57:48	0.230651175	0.127560928	0.708554699
15:57:52	0.230446124	0.109814138	0.709295497	15:57:56	0.230241073	0.09206735	0.710036295
15:58:00	0.230036022	0.030687947	0.710777093	15:58:04	0.227492618	-0.046629509	0.711517891
15:58:08	0.224949214	-0.117934439	0.712258689	15:58:12	0.22240581	-0.171201766	0.712999487
15:58:16	0.219862406	-0.224469092	0.713740285	15:58:20	0.217319001	-0.257523136	0.714481083
15:58:24	0.214775597	-0.28383942	0.715221881	15:58:28	0.212232193	-0.305767395	0.71596268
15:58:32	0.209688789	-0.314530518	0.716703478	15:58:36	0.207145385	-0.323293641	0.717444276
15:58:40	0.204601981	-0.324398792	0.718185074	15:58:44	0.202058577	-0.322951262	0.718925872
15:58:48	0.199515172	-0.320057294	0.71966667	15:58:52	0.196971768	-0.312823977	0.720407468
15:58:56	0.194428364	-0.305590661	0.721148266	15:59:00	0.19188496	-0.295219814	0.721889064
15:59:04	0.192628083	-0.281844075	0.722629862	15:59:08	0.193371206	-0.266892465	0.72337066
15:59:12	0.194114329	-0.247213171	0.724111458	15:59:16	0.194857453	-0.227533876	0.724852256
15:59:20	0.195600576	-0.205923807	0.725593054	15:59:24	0.196343699	-0.183670123	0.726333852
15:59:28	0.197086822	-0.163264021	0.72707465	15:59:32	0.197829945	-0.148400684	0.727815448
15:59:36	0.199521534	-0.132972	0.729841337	15:59:40	0.20195435	-0.12059729	0.732871525
15:59:44	0.204387166	-0.109387838	0.735901714	15:59:48	0.206819982	-0.098599392	0.738931903
15:59:52	0.209252799	-0.089073927	0.741962092	15:59:56	0.211685615	-0.079548462	0.744992281
16:00:00	0.714118431	0.713618491	1.24802247	16:00:04	0.714606695	0.70520503	1.251052658
16:00:08	0.715757364	0.709685173	1.254082847	16:00:12	0.216962077	0.214197531	0.757113036
16:00:16	0.217731396	0.218450366	0.759553304	16:00:20	0.217137753	0.221890752	0.760146873
16:00:24	0.21654411	0.225331138	0.760740442	16:00:28	0.215950467	0.2181453	0.761334011
16:00:32	0.215356823	0.210959472	0.76192758	16:00:36	0.21476318	0.195687915	0.762521149
16:00:40	0.214169537	0.177721119	0.763114718	16:00:44	0.213575894	0.159754321	0.763708287
16:00:48	0.212982251	0.146102365	0.764301856	16:00:52	0.212388607	0.132450408	0.764895425
16:00:56	0.211794964	0.12325922	0.765488994	16:01:00	0.211201321	0.1185288	0.766082563
16:01:04	0.211567466	0.114370495	0.766676132	16:01:08	0.21193361	0.122966793	0.767269702
16:01:12	0.212299755	0.13156309	0.767863271	16:01:16	0.212665899	0.136384856	0.76845684
16:01:20	0.213032044	0.137432089	0.769050409	16:01:24	0.213398189	0.138479323	0.769643978
16:01:28	0.213764333	0.131882196	0.770237547	16:01:32	0.214130478	0.125285069	0.770831116
16:01:36	0.214496623	0.117762178	0.771424685	16:01:40	0.214862767	0.109930698	0.772018254
16:01:44	0.215228912	0.102099219	0.772611823	16:01:48	0.215595057	0.089255268	0.773205392
16:01:52	0.215961201	0.076411318	0.773798961	16:01:56	0.216327346	0.067742628	0.77439253

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
16:02:00	0.216693491	0.060465686	0.774986099	16:02:04	0.215600685	0.052319092	0.775579668
16:02:08	0.214507879	0.046626811	0.776173238	16:02:12	0.213415074	0.04093453	0.776766807
16:02:16	0.229865227	0.036819498	0.777360376	16:02:20	0.229204737	0.013625229	0.777953945
16:02:24	0.228544246	-0.00956903	0.778547514	16:02:28	0.227883756	-0.034726583	0.779141083
16:02:32	0.227223265	-0.059884144	0.779734652	16:02:36	0.226562775	-0.08655572	0.780328221
16:02:40	0.225902284	-0.11474131	0.78092179	16:02:44	0.225241793	-0.142677874	0.781515359
16:02:48	0.224581303	-0.169867327	0.782108928	16:02:52	0.223920812	-0.197056779	0.782702497
16:02:56	0.223260322	-0.22631184	0.783296066	16:03:00	0.222599831	-0.257632509	0.783889635
16:03:04	0.22399457	-0.287728088	0.784483205	16:03:08	0.225389309	-0.295372566	0.785076774
16:03:12	0.226784047	-0.303017043	0.785670343	16:03:16	0.228178786	-0.303713638	0.786263912
16:03:20	0.255184384	-0.282196045	0.786857481	16:03:24	0.29082188	-0.25553311	0.791529317
16:03:28	0.343535235	-0.210893777	0.819337491	16:03:32	0.369524103	-0.174386714	0.810936255
16:03:36	0.395512972	-0.131489369	0.802535018	16:03:40	0.374777469	-0.110053448	0.794133781
16:03:44	0.315179457	-0.111782833	0.785732545	16:03:48	0.272402338	-0.096823744	0.777331308
16:03:52	0.277683009	-0.053218169	0.768930072	16:03:56	0.334963504	0.021017866	0.760528835
16:04:00	0.392244	0.094888055	0.752127598	16:04:04	0.449841729	0.168947342	0.743726362
16:04:08	0.507439458	0.226831885	0.735325125	16:04:12	0.458960658	0.221485845	0.726923888
16:04:16	0.428717744	0.21814648	0.718522652	16:04:20	0.426221023	0.222482727	0.710121415
16:04:24	0.345331394	0.180090177	0.595504438	16:04:28	0.37314611	0.203725339	0.628172627
16:04:32	0.400960826	0.227360498	0.660840817	16:04:36	0.415014536	0.24651205	0.674864011
16:04:40	0.38874425	0.245346207	0.685381001	16:04:44	0.327395083	0.223270385	0.695897991
16:04:48	0.401570758	0.273606058	0.706414982	16:04:52	0.387798169	0.271517138	0.716931972
16:04:56	0.374025581	0.27107181	0.727448962	16:05:00	0.360252992	0.272270072	0.737965953
16:05:04	0.342470165	0.271077898	0.744621322	16:05:08	0.321076972	0.275920548	0.746384953
16:05:12	0.29968378	0.280763189	0.748148583	16:05:16	0.266050656	0.273116598	0.749912214
16:05:20	0.260982061	0.280765806	0.751675844	16:05:24	0.372691318	0.358024482	0.753439475
16:05:28	0.524326957	0.462855185	0.755203105	16:05:32	0.508997466	0.468160536	0.756966736
16:05:36	0.493667975	0.470794413	0.758730367	16:05:40	0.478338484	0.470756799	0.760493997
16:05:44	0.463008993	0.470719167	0.762257628	16:05:48	0.447679502	0.46734106	0.764021258
16:05:52	0.432350011	0.463962953	0.765784889	16:05:56	0.41702052	0.459693272	0.767548519
16:06:00	0.401691029	0.455126387	0.76931215	16:06:04	0.385919013	0.450295719	0.77107578
16:06:08	0.370146997	0.448478194	0.772839411	16:06:12	0.354374981	0.446660687	0.774603042
16:06:16	0.338602965	0.448413512	0.776366672	16:06:20	0.322830949	0.453736704	0.778130303
16:06:24	0.307058933	0.459059879	0.779893933	16:06:28	0.291286917	0.4665566	0.781657564
16:06:32	0.275514901	0.474053322	0.783421194	16:06:36	0.259742886	0.474076327	0.785184825
16:06:40	0.24397087	0.466625543	0.786948455	16:06:44	0.228198854	0.459174796	0.788712086
16:06:48	0.212426838	0.440092645	0.790475717	16:06:52	0.196654822	0.421010458	0.792239347
16:06:56	0.195644883	0.405792167	0.794002978	16:07:00	0.227577018	0.405274568	0.795766608
16:07:04	0.258677413	0.404261182	0.797530239	16:07:08	0.275989946	0.402326895	0.799293869
16:07:12	0.29330248	0.400392624	0.8010575	16:07:16	0.310615013	0.400152254	0.80282113
16:07:20	0.327927546	0.401605784	0.804584761	16:07:24	0.34524008	0.403059314	0.806348392
16:07:28	0.362552613	0.401797846	0.808112022	16:07:32	0.369439176	0.394321601	0.795749347
16:07:36	0.372296414	0.379293729	0.777927279	16:07:40	0.529670576	0.451221163	0.969462533
16:07:44	0.53451247	0.432226487	0.954329506	16:07:48	0.539354365	0.41189546	0.939196479
16:07:52	0.54419626	0.391564438	0.924063452	16:07:56	0.549038154	0.369421683	0.908930425
16:08:00	0.535325482	0.334407106	0.868657534	16:08:04	0.59854118	0.34524834	0.934396221
16:08:08	0.597929126	0.316593008	0.913653719	16:08:12	0.369816116	0.152327885	0.892911218
16:08:16	0.363107705	0.127592609	0.872168716	16:08:20	0.356399294	0.105375336	0.851426214
16:08:24	0.349690884	0.083158064	0.830683713	16:08:28	0.342982473	0.069377702	0.809941211
16:08:32	0.417544499	0.104041378	0.789198709	16:08:36	0.513850679	0.151226109	0.768456207
16:08:40	0.430805482	0.091061975	0.747713706	16:08:44	0.439385081	0.085513962	0.726971204
16:08:48	0.387456368	0.024835646	0.706228702	16:08:52	0.136065623	-0.154738913	0.685486201
16:08:56	0.119764492	-0.176865972	0.664743699	16:09:00	0.10461637	-0.192534362	0.645563427
16:09:04	0.091859623	-0.206777272	0.629644981	16:09:08	0.079102877	-0.241877204	0.613726536
16:09:12	0.096930331	-0.258746369	0.639247087	16:09:16	0.119654593	-0.265053056	0.671402398
16:09:20	0.142378855	-0.263716161	0.703557709	16:09:24	0.165103117	-0.262379266	0.73571302
16:09:28	0.149351998	-0.283976949	0.715737453	16:09:32	0.135099307	-0.304681442	0.697792129

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
16:09:36	0.139261466	-0.306742487	0.704797365	16:09:40	0.143423625	-0.301136926	0.711802602
16:09:44	0.147585784	-0.295531365	0.718807838	16:09:48	0.151747943	-0.278273226	0.725813074
16:09:52	0.155910103	-0.26101505	0.73281831	16:09:56	0.168201986	-0.245140669	0.739823546
16:10:00	0.225804634	-0.204333795	0.746828782	16:10:04	0.28443308	-0.162915459	0.753834018
16:10:08	0.346843581	-0.11159407	0.760839254	16:10:12	0.372684587	-0.082071191	0.76784449
16:10:16	0.424481127	-0.03597805	0.774849727	16:10:20	0.538920759	0.048554253	0.781854963
16:10:24	0.341335713	-0.052906499	0.788860199	16:10:28	0.359710355	-0.027956496	0.795865435
16:10:32	0.378084996	-0.003006475	0.802870671	16:10:36	0.395129402	0.023458514	0.809875907
16:10:40	0.40483291	0.047855628	0.816881143	16:10:44	0.414536419	0.072252741	0.823886379
16:10:48	0.41231483	0.096868683	0.830891616	16:10:52	0.401803648	0.116543335	0.837896852
16:10:56	0.391292466	0.135755332	0.844902088	16:11:00	0.380781284	0.15481311	0.851907324
16:11:04	0.369384339	0.173342902	0.85891256	16:11:08	0.357987394	0.194535325	0.865917796
16:11:12	0.346590448	0.21572775	0.872923032	16:11:16	0.335193503	0.221170329	0.879928268
16:11:20	0.286236213	0.198973821	0.836042423	16:11:24	0.330715151	0.232473199	0.918754741
16:11:28	0.300401115	0.227703937	0.900128925	16:11:32	0.27008708	0.222934674	0.88150311
16:11:36	0.239773045	0.222341777	0.862877294	16:11:40	0.231338713	0.238967394	0.850355466
16:11:44	0.228840609	0.259131505	0.8385177	16:11:48	0.226342506	0.283923063	0.826679934
16:11:52	0.223844402	0.308714621	0.814842168	16:11:56	0.221346298	0.330041369	0.803004402
16:12:00	0.218848194	0.347903307	0.791166636	16:12:04	0.214900789	0.36490134	0.779328869
16:12:08	0.210953384	0.37822874	0.767491103	16:12:12	0.207005979	0.391556141	0.755653337
16:12:16	0.203058574	0.400286356	0.743815571	16:12:20	0.199111169	0.404419351	0.731977805
16:12:24	0.195163764	0.408552364	0.720140039	16:12:28	0.191216359	0.41727073	0.708302273
16:12:32	0.187268954	0.425989061	0.696464506	16:12:36	0.160070751	0.420847987	0.653123881
16:12:40	0.173914881	0.440171576	0.665392135	16:12:44	0.18775901	0.457983104	0.677660389
16:12:48	0.20160314	0.47125838	0.689928643	16:12:52	0.215447269	0.484533621	0.702196897
16:12:56	0.229291399	0.497095609	0.714465151	16:13:00	0.243135529	0.508944344	0.726733405
16:13:04	0.258746523	0.52184628	0.739001659	16:13:08	0.268499747	0.531256489	0.743813871
16:13:12	0.275422903	0.538979739	0.745817655	16:13:16	0.282346059	0.553110256	0.747821439
16:13:20	0.20437034	0.523041135	0.749825222	16:13:24	0.226747141	0.552790631	0.751829006
16:13:28	0.249123942	0.58119804	0.753832789	16:13:32	0.271500743	0.609605413	0.755836573
16:13:36	0.293877544	0.630423563	0.757840356	16:13:40	0.316254345	0.643652454	0.75984414
16:13:44	0.338631146	0.656881345	0.761847924	16:13:48	0.315602246	0.630214473	0.763851707
16:13:52	0.272741721	0.591726275	0.765855491	16:13:56	0.229881195	0.550282991	0.767859274
16:14:00	0.187020669	0.505884583	0.769863058	16:14:04	0.163563544	0.473052242	0.771866842
16:14:08	0.167522496	0.458241745	0.773870625	16:14:12	0.171481448	0.443431213	0.775874409
16:14:16	0.175440399	0.437734079	0.7787878192	16:14:20	0.179399351	0.441150345	0.779881976
16:14:24	0.183358303	0.444566575	0.78188576	16:14:28	0.187319969	0.435998152	0.783889543
16:14:32	0.191950582	0.427828478	0.785893327	16:14:36	0.196581195	0.424911577	0.78789711
16:14:40	0.201211808	0.427247415	0.789900894	16:14:44	0.20584242	0.429583253	0.791904677
16:14:48	0.210473033	0.43338244	0.793908461	16:14:52	0.215103646	0.437181663	0.795912245
16:14:56	0.219734259	0.439403807	0.797916028	16:15:00	-0.275635129	-0.059951058	0.299919812
16:15:04	-0.27422122	-0.061223385	0.301923595	16:15:08	-0.277477535	-0.073699284	0.303927379
16:15:12	0.21926615	0.413824836	0.805931163	16:15:16	0.198921181	0.391162656	0.784781269
16:15:20	0.187719917	0.373950915	0.77602032	16:15:24	0.182879307	0.360530643	0.775877519
16:15:28	0.178038698	0.34475502	0.775734718	16:15:32	0.173198088	0.328979398	0.775591916
16:15:36	0.168357479	0.313485897	0.775449115	16:15:40	0.163516869	0.298274534	0.775306314
16:15:44	0.15867626	0.283063172	0.775163512	16:15:48	0.15383565	0.252796669	0.775020711
16:15:52	0.148995041	0.222530183	0.77487791	16:15:56	0.14839968	0.196225776	0.774735108
16:16:00	0.150331936	0.171905227	0.774592307	16:16:04	0.15249664	0.147723233	0.774449505
16:16:08	0.154661345	0.125605862	0.774306704	16:16:12	0.156826049	0.10348849	0.774163903
16:16:16	0.158990754	0.085437786	0.774021101	16:16:20	0.161155458	0.071453748	0.7738783
16:16:24	0.163320163	0.05746971	0.773735499	16:16:28	0.165484868	0.058175225	0.773592697
16:16:32	0.167649572	0.058880745	0.773449896	16:16:36	0.169814277	0.054965372	0.773307095
16:16:40	0.171978981	0.046429107	0.773164293	16:16:44	0.174143686	0.037892842	0.773021492
16:16:48	0.176308391	0.023447433	0.77287869	16:16:52	0.178473095	0.009002038	0.772735889
16:16:56	0.1806378	-0.002926863	0.772593088	16:17:00	0.182802504	-0.012339252	0.772450286
16:17:04	0.18350393	-0.022623879	0.772307485	16:17:08	0.18377732	-0.042353598	0.772164684

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
16:17:12	0.18405071	-0.062083317	0.772021882	16:17:16	0.1843241	-0.073940946	0.771879081
16:17:20	0.18459749	-0.077926467	0.77173628	16:17:24	0.18487088	-0.081911988	0.771593478
16:17:28	0.185144269	-0.094518488	0.771450677	16:17:32	0.185417659	-0.107124988	0.771307875
16:17:36	0.185691049	-0.124735734	0.771165074	16:17:40	0.185964439	-0.14735069	0.771022273
16:17:44	0.186237829	-0.169965663	0.770879471	16:17:48	0.186511219	-0.189377448	0.77073667
16:17:52	0.186784609	-0.208789232	0.770593869	16:17:56	0.187057998	-0.226340342	0.770451067
16:18:00	0.187331388	-0.242030812	0.770308266	16:18:04	0.188117723	-0.257415524	0.770165465
16:18:08	0.188904057	-0.266109267	0.770022663	16:18:12	0.189690391	-0.274802975	0.769879862
16:18:16	0.190476726	-0.288684544	0.76973706	16:18:20	0.19126306	-0.307753939	0.769594259
16:18:24	0.192049394	-0.326823335	0.769451458	16:18:28	0.192835729	-0.313516595	0.769308656
16:18:32	0.193622063	-0.300209856	0.769165855	16:18:36	0.194408398	-0.300920746	0.769023054
16:18:40	0.195194732	-0.315649266	0.768880252	16:18:44	0.195981066	-0.33037782	0.768737451
16:18:48	0.196767401	-0.334994565	0.76859465	16:18:52	0.199003279	-0.338747258	0.770415858
16:18:56	0.202655173	-0.339967103	0.774155646	16:19:00	0.206307067	-0.34062402	0.777895435
16:19:04	0.209453695	-0.341582153	0.781635223	16:19:08	0.212600324	-0.330711872	0.785375012
16:19:12	0.215746953	-0.319841556	0.7891148	16:19:16	0.218893581	-0.304423654	0.792854589
16:19:20	0.221652351	-0.284689291	0.796068862	16:19:24	0.221718073	-0.266560212	0.795634283
16:19:28	0.221783795	-0.240801371	0.795199705	16:19:32	0.221849517	-0.215042566	0.794765126
16:19:36	0.221915239	-0.195261903	0.794330547	16:19:40	0.221980961	-0.181459417	0.793895968
16:19:44	0.222046682	-0.167656931	0.793461389	16:19:48	0.222112404	-0.151634693	0.793026811
16:19:52	0.222178126	-0.135612455	0.792592232	16:19:56	0.222243848	-0.115913847	0.792157653
16:20:00	0.22230957	-0.092538869	0.791723074	16:20:04	0.221811871	-0.069499755	0.791288495
16:20:08	0.221314173	-0.043245319	0.790853917	16:20:12	0.220816474	-0.016990901	0.790419338
16:20:16	0.220318775	0.002974644	0.789984759	16:20:20	0.219821077	0.016651306	0.78955018
16:20:24	0.219323378	0.03032796	0.789115602	16:20:28	0.21882568	0.032090902	0.788681023
16:20:32	0.218327981	0.033853845	0.788246444	16:20:36	0.216959369	0.034038358	0.787811865
16:20:40	0.205813214	0.02733532	0.787377286	16:20:44	0.194667059	0.020632283	0.786942708
16:20:48	0.193019149	0.026856498	0.786508129	16:20:52	0.191932782	0.033415432	0.78607355
16:20:56	0.190846415	0.03997437	0.785638971	16:21:00	0.189760048	0.046533308	0.785204392
16:21:04	0.189724063	0.053718362	0.784769814	16:21:08	0.189688077	0.065771465	0.784335235
16:21:12	0.189652092	0.077824569	0.783900656	16:21:16	0.189616107	0.087881468	0.783466077
16:21:20	0.189580121	0.095942161	0.783031499	16:21:24	0.189544136	0.104002855	0.78259692
16:21:28	0.18950815	0.102323866	0.782162341	16:21:32	0.189472165	0.100644878	0.781727762
16:21:36	0.18943618	0.098965888	0.781293183	16:21:40	0.189400194	0.0972869	0.780858605
16:21:44	0.189364209	0.095607911	0.780424026	16:21:48	0.189328223	0.088912275	0.779989447
16:21:52	0.189292238	0.082216637	0.779554868	16:21:56	0.189256253	0.076551665	0.779120289
16:22:00	0.189220267	0.071917357	0.778685711	16:22:04	0.19001605	0.067778853	0.778251132
16:22:08	0.190811833	0.067581102	0.777816553	16:22:12	0.191607617	0.06738335	0.777381974
16:22:16	0.1924034	0.066809809	0.776947396	16:22:20	0.193199183	0.065860486	0.776512817
16:22:24	0.193994966	0.064911164	0.776078238	16:22:28	0.194790749	0.066931193	0.775643659
16:22:32	0.195586532	0.068951223	0.77520908	16:22:36	0.196382316	0.070971253	0.774774502
16:22:40	0.197178099	0.072991282	0.774339923	16:22:44	0.197973882	0.075011312	0.773905344
16:22:48	0.199129184	0.084416841	0.773957883	16:22:52	0.200860587	0.094165774	0.77479099
16:22:56	0.20259199	0.096212731	0.775624096	16:23:00	0.204323393	0.090557714	0.776457203
16:23:04	0.205029236	0.084291373	0.777290309	16:23:08	0.20573508	0.087098304	0.778123416
16:23:12	0.206440923	0.089905234	0.778956522	16:23:16	0.207146767	0.091418604	0.779789628
16:23:20	0.207852611	0.091638412	0.780622735	16:23:24	0.208558454	0.09185822	0.781455841
16:23:28	0.209264298	0.093308906	0.782288948	16:23:32	0.209970141	0.094759591	0.783122054
16:23:36	0.210675985	0.093849706	0.783955161	16:23:40	0.211381828	0.090579252	0.784788267
16:23:44	0.212087672	0.087308798	0.785621374	16:23:48	0.212793515	0.073211133	0.786454448
16:23:52	0.213499359	0.059113468	0.787287586	16:23:56	0.214205203	0.04957622	0.788120693
16:24:00	0.214911046	0.044599397	0.788953799	16:24:04	0.215511204	0.039559568	0.789786906
16:24:08	0.216111361	0.043615355	0.790620012	16:24:12	0.216711519	0.047671142	0.791453119
16:24:16	0.217311677	0.046664824	0.792286225	16:24:20	0.217911834	0.04059641	0.793119332
16:24:24	0.218511992	0.034527987	0.793952438	16:24:28	0.219112149	0.025672299	0.794785544
16:24:32	0.219712307	0.016816612	0.795618651	16:24:36	0.220312465	0.008448708	0.796451757
16:24:40	0.220912622	0.000568596	0.797284864	16:24:44	0.22151278	-0.007311525	0.79811797

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
16:24:48	0.222112938	-0.002607442	0.798951077	16:24:52	0.222713095	0.002096642	0.799784183
16:24:56	0.223313253	0.007757612	0.80061729	16:25:00	0.22391341	0.014375487	0.801450396
16:25:04	0.224671654	0.021087594	0.802283502	16:25:08	0.225429898	0.03322466	0.803116609
16:25:12	0.226188142	0.045361717	0.803949715	16:25:16	0.226946386	0.060199577	0.804782822
16:25:20	0.227696695	0.077733506	0.805594677	16:25:24	0.228393747	0.095235689	0.806325474
16:25:28	0.2290908	0.092679938	0.80705627	16:25:32	0.229787852	0.090124192	0.807787067
16:25:36	0.230484904	0.093878681	0.808517864	16:25:40	0.231181956	0.103943407	0.80924866
16:25:44	0.231879008	0.114008136	0.809979457	16:25:48	0.232576061	0.129913084	0.810710254
16:25:52	0.233273113	0.145818032	0.811441051	16:25:56	0.233970165	0.160657842	0.812171847
16:26:00	0.234667217	0.174432515	0.812902644	16:26:04	0.23606553	0.188625197	0.813633441
16:26:08	0.237463842	0.180617879	0.814364237	16:26:12	0.238862155	0.172610561	0.815095034
16:26:16	0.240260467	0.16219281	0.815825831	16:26:20	0.24165878	0.149364629	0.816556628
16:26:24	0.243057092	0.136536447	0.817287424	16:26:28	0.244455405	0.144031986	0.818018221
16:26:32	0.245853717	0.151527525	0.818749018	16:26:36	0.24725203	0.161050218	0.819479814
16:26:40	0.248650342	0.172600065	0.820210611	16:26:44	0.250048655	0.184149912	0.820941408
16:26:48	0.251446967	0.190862211	0.821672204	16:26:52	0.252845279	0.197574512	0.822403001
16:26:56	0.254243592	0.198832228	0.823133798	16:27:00	0.255641904	0.198271753	0.823864595
16:27:04	0.255971703	0.197074349	0.824595391	16:27:08	0.256301502	0.197754878	0.825326188
16:27:12	0.2566613	0.198435408	0.826056985	16:27:16	0.256961099	0.197258544	0.826787781
16:27:20	0.257290897	0.195462545	0.827518578	16:27:24	0.257620696	0.193666546	0.828249375
16:27:28	0.257950494	0.206096827	0.828980171	16:27:32	0.258280293	0.218527109	0.829710968
16:27:36	0.258610091	0.221165912	0.830441765	16:27:40	0.25893989	0.214013247	0.831172562
16:27:44	0.259269689	0.206860582	0.831903358	16:27:48	0.259599487	0.195658146	0.832634155
16:27:52	0.259929286	0.184455715	0.833364952	16:27:56	0.260259084	0.164522896	0.834095748
16:28:00	0.260588883	0.135859693	0.834826545	16:28:04	0.261580411	0.11043483	0.835557342
16:28:08	0.262571939	0.093541653	0.836288138	16:28:12	0.263563467	0.076648481	0.837018935
16:28:16	0.264554996	0.068307601	0.837749732	16:28:20	0.265546524	0.068519013	0.838480529
16:28:24	0.266538052	0.068730433	0.839211325	16:28:28	0.26752958	0.064415435	0.839942122
16:28:32	0.268521109	0.060100436	0.840672919	16:28:36	0.269512637	0.063129631	0.841403715
16:28:40	0.270504165	0.07350303	0.842134512	16:28:44	0.271495693	0.083876429	0.842865309
16:28:48	0.272672339	0.094360169	0.843846924	16:28:52	0.273972796	0.104917716	0.844996293
16:28:56	0.275273253	0.117855062	0.846145662	16:29:00	0.27657371	0.131585673	0.847295032
16:29:04	0.277643385	0.145178719	0.848444401	16:29:08	0.27871306	0.155070585	0.849593771
16:29:12	0.279782735	0.164962451	0.85074314	16:29:16	0.280852409	0.176965284	0.851892509
16:29:20	0.281922084	0.191079085	0.853041879	16:29:24	0.282991759	0.205192884	0.854191248
16:29:28	0.284061434	0.210063388	0.855340617	16:29:32	0.285131108	0.214933897	0.856489987
16:29:36	0.286200783	0.218741878	0.857639356	16:29:40	0.287270458	0.221487343	0.858788726
16:29:44	0.288340133	0.224232808	0.859938095	16:29:48	0.289409807	0.223275035	0.861087464
16:29:52	0.290479482	0.222317261	0.862236834	16:29:56	0.291549157	0.221359487	0.863386203
16:30:00	0.792618831	0.720401714	1.364535573	16:30:04	0.796151711	0.720912218	1.365684942
16:30:08	0.799684182	0.72395466	1.366834311	16:30:12	0.303216654	0.226997102	0.867983681
16:30:16	0.306749125	0.233776971	0.86913305	16:30:20	0.310281597	0.244294276	0.87028242
16:30:24	0.313814068	0.254811576	0.871431789	16:30:28	0.31734654	0.257362771	0.872581158
16:30:32	0.320879012	0.259913966	0.873730528	16:30:36	0.324411483	0.258771155	0.874879897
16:30:40	0.327943955	0.253934347	0.876029266	16:30:44	0.331476426	0.247962264	0.877178636
16:30:48	0.335008898	0.238584364	0.878328005	16:30:52	0.338541369	0.229206467	0.879477375
16:30:56	0.342073841	0.221524501	0.880626744	16:31:00	0.345606313	0.215538468	0.881776113
16:31:04	0.346530411	0.207997625	0.882925483	16:31:08	0.34745451	0.193856714	0.884074852
16:31:12	0.348378609	0.1797158	0.885224222	16:31:16	0.349302707	0.163916484	0.886373591
16:31:20	0.350226806	0.146458758	0.88752296	16:31:24	0.351150905	0.129001036	0.88867233
16:31:28	0.352075003	0.115430635	0.889821699	16:31:32	0.351600549	0.101026578	0.889076147
16:31:36	0.350810125	0.087717153	0.887902485	16:31:40	0.350019702	0.075690703	0.886728823
16:31:44	0.349229279	0.063664263	0.88555516	16:31:48	0.348438856	0.060646045	0.884381498
16:31:52	0.347648433	0.057627837	0.883207836	16:31:56	0.34685801	0.054609628	0.882034174
16:32:00	0.346067587	0.051591402	0.880860512	16:32:04	0.346770861	0.049463562	0.879686849
16:32:08	0.347474135	0.047335723	0.878513187	16:32:12	0.348177409	0.045207884	0.877339525
16:32:16	0.348880683	0.046689122	0.876165863	16:32:20	0.349583956	0.051779455	0.874992201

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
16:32:24	0.35028723	0.056869787	0.873818538	16:32:28	0.350990504	0.06915383	0.872644876
16:32:32	0.351693778	0.081437863	0.871471214	16:32:36	0.352397052	0.08948211	0.870297552
16:32:40	0.353100326	0.093286554	0.86912389	16:32:44	0.3538036	0.097091006	0.867950227
16:32:48	0.354506874	0.107752198	0.866776565	16:32:52	0.355210148	0.118413391	0.865602903
16:32:56	0.355913422	0.124310525	0.864429241	16:33:00	0.356616695	0.125443583	0.863255579
16:33:04	0.355300011	0.127766192	0.862081916	16:33:08	0.353983326	0.137269649	0.860908254
16:33:12	0.352666642	0.14677311	0.859734592	16:33:16	0.351349957	0.154706198	0.85856093
16:33:20	0.350033273	0.161068918	0.857387268	16:33:24	0.348716588	0.167431637	0.856213605
16:33:28	0.347399904	0.161839258	0.855039943	16:33:32	0.346083219	0.156246879	0.853866281
16:33:36	0.344766535	0.153970513	0.852692619	16:33:40	0.34344985	0.15501015	0.851518957
16:33:44	0.342133166	0.156049788	0.850345294	16:33:48	0.340816481	0.151809471	0.849171632
16:33:52	0.339499797	0.147569155	0.84799797	16:33:56	0.338183112	0.149766709	0.846824308
16:34:00	0.337568229	0.158820467	0.846601527	16:34:04	0.337519811	0.168211885	0.846530376
16:34:08	0.337471393	0.166565119	0.846459224	16:34:12	0.337422975	0.164918353	0.846388073
16:34:16	0.337374557	0.169339248	0.846316922	16:34:20	0.337326139	0.179827803	0.84624577
16:34:24	0.337277721	0.19031636	0.846174619	16:34:28	0.337229303	0.208804957	0.846103468
16:34:32	0.337180885	0.227293555	0.846032316	16:34:36	0.337132467	0.242849165	0.845961165
16:34:40	0.337084049	0.255471783	0.845890013	16:34:44	0.337035631	0.268094401	0.845818862
16:34:48	0.336987212	0.269603452	0.845747711	16:34:52	0.336938794	0.271112503	0.845676559
16:34:56	0.336890376	0.271051866	0.845605408	16:35:00	0.336841958	0.269421534	0.845534257
16:35:04	0.338420542	0.268916985	0.845463105	16:35:08	0.339998451	0.26887989	0.845391954
16:35:12	0.341556534	0.268830972	0.845320803	16:35:16	0.343114616	0.268782058	0.845249651
16:35:20	0.344672699	0.277170796	0.8451785	16:35:24	0.346230781	0.285559529	0.845107349
16:35:28	0.347788864	0.2881189	0.845036197	16:35:32	0.349346947	0.29067828	0.844965046
16:35:36	0.350905029	0.290023412	0.844893895	16:35:40	0.352463112	0.28829712	0.844822743
16:35:44	0.354021194	0.285596629	0.844751592	16:35:48	0.355579277	0.279973489	0.844680441
16:35:52	0.35713736	0.274350358	0.844609289	16:35:56	0.358695442	0.265747585	0.844538138
16:36:00	0.360253525	0.256151596	0.844466987	16:36:04	0.359995888	0.248582152	0.844395835
16:36:08	0.359738251	0.250339301	0.844324684	16:36:12	0.359480615	0.25209645	0.844253533
16:36:16	0.359222978	0.2496118	0.844182381	16:36:20	0.358965341	0.245713216	0.84411123
16:36:24	0.358707704	0.242677955	0.844040079	16:36:28	0.358450068	0.242232659	0.843968927
16:36:32	0.358192431	0.241787365	0.843897776	16:36:36	0.357934794	0.244429451	0.843826625
16:36:40	0.357677158	0.248100667	0.843755473	16:36:44	0.357419521	0.253954308	0.843684322
16:36:48	0.357161884	0.266355237	0.843613171	16:36:52	0.356904247	0.278756165	0.843542019
16:36:56	0.356646611	0.288906386	0.843470868	16:37:00	0.356388974	0.298306367	0.843399717
16:37:04	0.355329753	0.30472073	0.843328565	16:37:08	0.354270532	0.303611661	0.843257414
16:37:12	0.353211311	0.302502591	0.843186262	16:37:16	0.351918728	0.310451018	0.842798924
16:37:20	0.350474125	0.32137436	0.842205614	16:37:24	0.349029523	0.326544806	0.841612304
16:37:28	0.347584921	0.314456596	0.841018994	16:37:32	0.346140319	0.302368386	0.840425683
16:37:36	0.344695717	0.289169961	0.839832373	16:37:40	0.343251114	0.275601463	0.839239063
16:37:44	0.341806512	0.255751574	0.838645753	16:37:48	0.34036191	0.217057522	0.838052442
16:37:52	0.338917308	0.178363468	0.837459132	16:37:56	0.337472706	0.150717102	0.836865822
16:38:00	0.336028104	0.123070743	0.836272512	16:38:04	0.33812674	0.097997679	0.835679201
16:38:08	0.340225377	0.074308316	0.835085891	16:38:12	0.342324014	0.050618954	0.834492581
16:38:16	0.344422651	0.048109575	0.833899271	16:38:20	0.346521288	0.052660173	0.83330596
16:38:24	0.348619924	0.057210772	0.83271265	16:38:28	0.350718561	0.061761379	0.83211934
16:38:32	0.352817198	0.066311978	0.83152603	16:38:36	0.354915835	0.066091146	0.830932719
16:38:40	0.357014472	0.064279831	0.830339409	16:38:44	0.359113108	0.06114732	0.829746099
16:38:48	0.361211745	0.054051256	0.829152789	16:38:52	0.363310382	0.046955191	0.828559478
16:38:56	0.365409019	0.047078292	0.827966168	16:39:00	0.367507656	0.049607818	0.827372858
16:39:04	0.367705983	0.048483344	0.826779548	16:39:08	0.36790431	0.039795139	0.826186237
16:39:12	0.368102637	0.031106934	0.825592927	16:39:16	0.368300964	0.027070132	0.824999617
16:39:20	0.368499292	0.024583815	0.824406307	16:39:24	0.368697619	0.026647661	0.823812996
16:39:28	0.368895946	0.033261633	0.823219686	16:39:32	0.369094273	0.039875623	0.822626376
16:39:36	0.3692926	0.049806513	0.822033066	16:39:40	0.369490928	0.060843043	0.821439755
16:39:44	0.369689255	0.071365969	0.820846445	16:39:48	0.370862743	0.081956596	0.821574395
16:39:52	0.373416532	0.093369999	0.824193726	16:39:56	0.375954033	0.112424018	0.826813057

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
16:40:00	0.378491535	0.134028151	0.829432388	16:40:04	0.378386469	0.142698659	0.832051719
16:40:08	0.378281402	0.140010753	0.83467105	16:40:12	0.378176335	0.137322839	0.837290381
16:40:16	0.378071268	0.129387365	0.839909712	16:40:20	0.377966202	0.11970269	0.842529043
16:40:24	0.377861135	0.118898474	0.845148374	16:40:28	0.377756068	0.126974708	0.847767705
16:40:32	0.376848413	0.134572532	0.849299597	16:40:36	0.374289359	0.149753951	0.848593983
16:40:40	0.371730304	0.167791357	0.847888368	16:40:44	0.369171249	0.186326419	0.847182754
16:40:48	0.366612194	0.20635444	0.846477139	16:40:52	0.364053139	0.22638246	0.845771525
16:40:56	0.361494085	0.240654911	0.84506591	16:41:00	0.35893503	0.253008841	0.844360296
16:41:04	0.360745946	0.267251553	0.843654681	16:41:08	0.362556862	0.279346003	0.842949066
16:41:12	0.364367778	0.291440452	0.842243452	16:41:16	0.366178694	0.301256187	0.841537837
16:41:20	0.36798961	0.310312362	0.840832223	16:41:24	0.369800526	0.317917578	0.840126608
16:41:28	0.371611442	0.321169962	0.839420994	16:41:32	0.373422358	0.324422346	0.838715379
16:41:36	0.375233274	0.339987845	0.838009765	16:41:40	0.37704419	0.359657719	0.83730415
16:41:44	0.378855106	0.37355513	0.836598535	16:41:48	0.380666023	0.370135145	0.835892921
16:41:52	0.382476939	0.36671516	0.835187306	16:41:56	0.384287855	0.360750701	0.834481692
16:42:00	0.386098771	0.353938076	0.833776077	16:42:04	0.389691648	0.346555287	0.833070463
16:42:08	0.393284526	0.334275401	0.832364848	16:42:12	0.396877404	0.321995505	0.831659234
16:42:16	0.400470282	0.314169336	0.830953619	16:42:20	0.40406316	0.307827754	0.830248004
16:42:24	0.407656038	0.302033956	0.82954239	16:42:28	0.411248915	0.297883517	0.828836775
16:42:32	0.414841793	0.293733078	0.828131161	16:42:36	0.418434671	0.287601689	0.827425546
16:42:40	0.422027549	0.280809978	0.826719932	16:42:44	0.425620427	0.27297397	0.826014317
16:42:48	0.429213304	0.262005061	0.825308703	16:42:52	0.432806182	0.251036153	0.824603088
16:42:56	0.43639906	0.244747403	0.823897473	16:43:00	0.439991938	0.240018706	0.823191859
16:43:04	0.43845285	0.232061055	0.822486244	16:43:08	0.436913762	0.223593803	0.82178063
16:43:12	0.435374674	0.215126547	0.821075015	16:43:16	0.433835586	0.205905468	0.820369401
16:43:20	0.432296498	0.196433112	0.819663786	16:43:24	0.43075741	0.1874016	0.818958172
16:43:28	0.429218323	0.17969263	0.818252557	16:43:32	0.427679235	0.171983651	0.817546942
16:43:36	0.426140147	0.162618185	0.816841328	16:43:40	0.424601059	0.152700565	0.816135713
16:43:44	0.423061971	0.143540068	0.815430099	16:43:48	0.421573492	0.136681124	0.814793055
16:43:52	0.420981575	0.130356615	0.815370776	16:43:56	0.420389657	0.13910289	0.815948497
16:44:00	0.419797739	0.147849173	0.816526217	16:44:04	0.421934074	0.159946216	0.817103938
16:44:08	0.424070408	0.177216784	0.817681659	16:44:12	0.426206743	0.194487347	0.81825938
16:44:16	0.428343077	0.207490572	0.8188371	16:44:20	0.430479411	0.219071345	0.819414821
16:44:24	0.432615746	0.228624889	0.819992542	16:44:28	0.43475208	0.232096742	0.820570263
16:44:32	0.436888414	0.235568596	0.821147983	16:44:36	0.438922579	0.242442145	0.821725704
16:44:40	0.440950224	0.250466009	0.822303425	16:44:44	0.442977868	0.257961548	0.822881146
16:44:48	0.445005513	0.263872115	0.823458866	16:44:52	0.447033158	0.269782681	0.824036587
16:44:56	0.449060802	0.281731296	0.824614308	16:45:00	-0.048911553	-0.204307406	0.325192029
16:45:04	-0.049164048	-0.193569657	0.325769749	16:45:08	-0.049416542	-0.188425085	0.32634747
16:45:12	0.450330963	0.316719488	0.826925191	16:45:16	0.450078469	0.322824824	0.827502912
16:45:20	0.449825974	0.329250409	0.828080632	16:45:24	0.449573479	0.334650073	0.828658353
16:45:28	0.449320985	0.336971985	0.829236074	16:45:32	0.44906849	0.339293897	0.829813795
16:45:36	0.448815995	0.342688007	0.830391515	16:45:40	0.448563501	0.347154305	0.830969236
16:45:44	0.448311006	0.351620603	0.831546957	16:45:48	0.448058512	0.350545034	0.832124678
16:45:52	0.447806017	0.349469473	0.832702398	16:45:56	0.447553522	0.352593977	0.833280119
16:46:00	0.447301028	0.359918554	0.83385784	16:46:04	0.446957844	0.367189072	0.834435561
16:46:08	0.446614661	0.375928181	0.835013281	16:46:12	0.446271478	0.38466729	0.835591002
16:46:16	0.445928295	0.388239979	0.836168723	16:46:20	0.445585111	0.386646257	0.836746444
16:46:24	0.445241928	0.385052536	0.837324164	16:46:28	0.444898745	0.36821797	0.837901885
16:46:32	0.444555562	0.351383404	0.838479606	16:46:36	0.444212378	0.333636687	0.839057326
16:46:40	0.443869195	0.314977824	0.839635047	16:46:44	0.443526012	0.296318958	0.840212768
16:46:48	0.443182829	0.275040782	0.840790489	16:46:52	0.442839646	0.253762605	0.841368209
16:46:56	0.442496462	0.238650816	0.84194593	16:47:00	0.442153279	0.229705412	0.842523651
16:47:04	0.441763911	0.220732478	0.843101372	16:47:08	0.441374543	0.221619643	0.843679092
16:47:12	0.441193827	0.222631181	0.844539518	16:47:16	0.441065712	0.221957884	0.845471214
16:47:20	0.440937598	0.219568389	0.846402911	16:47:24	0.440809483	0.217178897	0.847334608
16:47:28	0.440681369	0.211032869	0.848266304	16:47:32	0.440553254	0.20488684	0.849198001

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
16:47:36	0.440425139	0.204452337	0.850129698	16:47:40	0.440297025	0.209729358	0.851061394
16:47:44	0.44016891	0.21500638	0.851993091	16:47:48	0.440040796	0.220283401	0.852924787
16:47:52	0.439912681	0.225560425	0.853856484	16:47:56	0.439784566	0.235467521	0.854788181
16:48:00	0.439656452	0.250004694	0.855719877	16:48:04	0.438607009	0.263992677	0.856651574
16:48:08	0.437557567	0.265094389	0.857583271	16:48:12	0.436508124	0.266196102	0.858514967
16:48:16	0.435458682	0.26897946	0.859446664	16:48:20	0.434409239	0.273444464	0.860378361
16:48:24	0.433359797	0.277909469	0.861310057	16:48:28	0.432310355	0.282374473	0.862241754
16:48:32	0.431260912	0.286839476	0.86317345	16:48:36	0.43021147	0.293239617	0.864105147
16:48:40	0.429162027	0.301574899	0.865036844	16:48:44	0.428112585	0.309910178	0.86596854
16:48:48	0.427063142	0.303414294	0.866900237	16:48:52	0.4260137	0.296918405	0.867831934
16:48:56	0.424964257	0.295036195	0.86876363	16:49:00	0.423914815	0.297767661	0.869695327
16:49:04	0.426092312	0.302422656	0.870627023	16:49:08	0.42826981	0.317268373	0.87155872
16:49:12	0.430447308	0.332114085	0.872490417	16:49:16	0.432624805	0.337900443	0.873422113
16:49:20	0.434802303	0.340667006	0.87435381	16:49:24	0.4369798	0.343433568	0.875285507
16:49:28	0.439157298	0.345027599	0.876217203	16:49:32	0.441334796	0.346621629	0.8771489
16:49:36	0.443512293	0.347627994	0.878080596	16:49:40	0.445689791	0.348046676	0.879012293
16:49:44	0.448090894	0.348598655	0.87994399	16:49:48	0.450496977	0.351903755	0.880875686
16:49:52	0.452903061	0.355208865	0.881807383	16:49:56	0.455309144	0.365483343	0.88273908
16:50:00	0.4575678	0.382639328	0.883471025	16:50:04	0.456679197	0.379719271	0.883076167
16:50:08	0.455790593	0.408880846	0.882681309	16:50:12	0.45490199	0.419842421	0.88228645
16:50:16	0.454013387	0.431730238	0.881891592	16:50:20	0.453124783	0.444544299	0.881496734
16:50:24	0.45223618	0.457358359	0.881101875	16:50:28	0.451347577	0.460948844	0.880707017
16:50:32	0.450458973	0.464539328	0.880312159	16:50:36	0.44957037	0.471360111	0.879917301
16:50:40	0.448681767	0.481411209	0.879522442	16:50:44	0.447793163	0.491462308	0.879127584
16:50:48	0.44690456	0.508867087	0.878732726	16:50:52	0.446015956	0.526271884	0.878337867
16:50:56	0.445127353	0.546243183	0.877943009	16:51:00	0.44423875	0.56878102	0.877548151
16:51:04	0.443667326	0.591507905	0.877153292	16:51:08	0.443095903	0.603626349	0.876758434
16:51:12	0.442524479	0.615744793	0.876363576	16:51:16	0.441953055	0.621679593	0.875968717
16:51:20	0.441381632	0.621430748	0.875573859	16:51:24	0.440810208	0.621181904	0.875179001
16:51:28	0.440238785	0.624391243	0.874784142	16:51:32	0.439667361	0.627600547	0.874389284
16:51:36	0.439095938	0.628302683	0.873994426	16:51:40	0.438524514	0.626497651	0.873599567
16:51:44	0.43795309	0.624692618	0.873204709	16:51:48	0.437381667	0.61950906	0.872809851
16:51:52	0.436810243	0.614325465	0.872414993	16:51:56	0.43623882	0.601817342	0.872020134
16:52:00	0.435667396	0.581984654	0.871625276	16:52:04	0.434838371	0.561998414	0.871230418
16:52:08	0.434009346	0.526632294	0.870835559	16:52:12	0.433180321	0.491266174	0.870440701
16:52:16	0.432351296	0.463311666	0.870045843	16:52:20	0.43152227	0.437827712	0.869650984
16:52:24	0.430693245	0.412343741	0.869256126	16:52:28	0.42986422	0.383628006	0.868861268
16:52:32	0.429035195	0.354912271	0.868466409	16:52:36	0.42820617	0.333562617	0.868071551
16:52:40	0.427387758	0.31958537	0.867691074	16:52:44	0.42685016	0.305775511	0.867691074
16:52:48	0.426312561	0.289471635	0.867691074	16:52:52	0.425774963	0.273167758	0.867691074
16:52:56	0.425237364	0.258581399	0.867691074	16:53:00	0.424699766	0.244567545	0.867691074
16:53:04	0.425082903	0.231102528	0.867691074	16:53:08	0.425466041	0.214121823	0.867691074
16:53:12	0.425849178	0.197141116	0.867691074	16:53:16	0.426232316	0.189265615	0.867691074
16:53:20	0.426615453	0.190495318	0.867691074	16:53:24	0.426998591	0.191725021	0.867691074
16:53:28	0.427381729	0.194618984	0.867691074	16:53:32	0.427764866	0.20250572	0.867691074
16:53:36	0.428148004	0.207270794	0.867691074	16:53:40	0.428531141	0.208914211	0.867691074
16:53:44	0.428914279	0.210557627	0.867691074	16:53:48	0.429297416	0.219611882	0.867691074
16:53:52	0.429680554	0.228666138	0.867691074	16:53:56	0.430063691	0.236987965	0.867691074
16:54:00	0.430496304	0.244606856	0.867691074	16:54:04	0.429292221	0.25125014	0.867691074
16:54:08	0.428088139	0.24984877	0.867691074	16:54:12	0.426884056	0.248447401	0.867691074
16:54:16	0.425679973	0.243045243	0.867691074	16:54:20	0.424475891	0.233642292	0.867691074
16:54:24	0.423271808	0.224239343	0.867691074	16:54:28	0.422067726	0.206220345	0.867691074
16:54:32	0.420863643	0.188201344	0.867691074	16:54:36	0.41965956	0.167493043	0.867691074
16:54:40	0.418455478	0.145888299	0.867691074	16:54:44	0.417251395	0.124283564	0.867691074
16:54:48	0.416047312	0.108911469	0.867691074	16:54:52	0.41484323	0.093539364	0.867691074
16:54:56	0.413639147	0.081952953	0.867691074	16:55:00	0.412435064	0.074152236	0.867691074
16:55:04	0.411672187	0.066614515	0.867691074	16:55:08	0.410909311	0.055390742	0.867691074

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
16:55:12	0.410146434	0.044166969	0.867691074	16:55:16	0.409383557	0.027143128	0.867691074
16:55:20	0.40862068	0.004319236	0.867691074	16:55:24	0.407857803	-0.018504675	0.867691074
16:55:28	0.407094926	-0.042486133	0.867691074	16:55:32	0.40633205	-0.066467573	0.867691074
16:55:36	0.405569173	-0.083738522	0.867691074	16:55:40	0.404806296	-0.098772681	0.867691074
16:55:44	0.404043419	-0.111099357	0.867691074	16:55:48	0.403280542	-0.115303763	0.867691074
16:55:52	0.402517665	-0.119508205	0.867691074	16:55:56	0.401754789	-0.126968561	0.867691074
16:56:00	0.400991912	-0.135514198	0.867691074	16:56:04	0.399924409	-0.142555654	0.867691074
16:56:08	0.398856906	-0.144539678	0.867691074	16:56:12	0.397789402	-0.146523701	0.867691074
16:56:16	0.396721899	-0.150772156	0.867691074	16:56:20	0.395654396	-0.155775433	0.867691074
16:56:24	0.394586893	-0.163338177	0.867691074	16:56:28	0.39351939	-0.178579429	0.867691074
16:56:32	0.392451887	-0.193820681	0.867691074	16:56:36	0.391384384	-0.198449727	0.867691074
16:56:40	0.390052783	-0.199698783	0.867333244	16:56:44	0.388691518	-0.199417398	0.866935222
16:56:48	0.387330253	-0.194491468	0.8665372	16:56:52	0.385968989	-0.189565573	0.866139178
16:56:56	0.384607724	-0.178412297	0.865741156	16:57:00	0.383268248	-0.165170227	0.865343134
16:57:04	0.384132973	-0.146810348	0.864945112	16:57:08	0.384997697	-0.117038779	0.86454709
16:57:12	0.385862421	-0.087267211	0.864149068	16:57:16	0.386727146	-0.056305087	0.863751046
16:57:20	0.38759187	-0.024946083	0.863353024	16:57:24	0.388456594	-0.000342515	0.862955002
16:57:28	0.389321319	0.017505635	0.86255698	16:57:32	0.390186043	0.035353784	0.862158958
16:57:36	0.391050767	0.064943388	0.861760936	16:57:40	0.391915492	0.098446797	0.861362914
16:57:44	0.392780216	0.128871769	0.860964892	16:57:48	0.39364494	0.150061414	0.86056687
16:57:52	0.394509664	0.171251055	0.860168849	16:57:56	0.395374389	0.186856588	0.859770827
16:58:00	0.396239113	0.202462124	0.859372805	16:58:04	0.395588963	0.217836992	0.858974783
16:58:08	0.394938814	0.235228846	0.858576761	16:58:12	0.394288664	0.252620701	0.858178739
16:58:16	0.393638515	0.269630868	0.857780717	16:58:20	0.392988365	0.286513808	0.857382695
16:58:24	0.392338215	0.301261754	0.856984673	16:58:28	0.391688066	0.309604727	0.856586651
16:58:32	0.391037916	0.317947699	0.856188629	16:58:36	0.390387767	0.33179533	0.855790607
16:58:40	0.389737617	0.347477852	0.855392585	16:58:44	0.389087467	0.366497019	0.854994563
16:58:48	0.388437318	0.395526152	0.854596541	16:58:52	0.387787168	0.424555285	0.854198519
16:58:56	0.387137018	0.442072803	0.853800497	16:59:00	0.386486869	0.455753144	0.853402475
16:59:04	0.386190656	0.46698489	0.853004453	16:59:08	0.385894443	0.470238011	0.852606432
16:59:12	0.385830149	0.473629376	0.852522639	16:59:16	0.386021203	0.475214746	0.852784823
16:59:20	0.386212257	0.476147352	0.853047006	16:59:24	0.386403311	0.480146999	0.85330919
16:59:28	0.386594365	0.493347713	0.853571373	16:59:32	0.386817108	0.506567316	0.853833556
16:59:36	0.387075305	0.516491721	0.85409574	16:59:40	0.387333502	0.525310664	0.854357923
16:59:44	0.387591699	0.533868803	0.854620107	16:59:48	0.387849896	0.541644478	0.85488229
16:59:52	0.388108093	0.549420153	0.855144473	16:59:56	0.38836629	0.572265554	0.855406657
17:00:00	0.888624487	1.100134174	1.35566884	17:00:04	0.890765367	1.12447139	1.355931024
17:00:08	0.892906247	1.13484754	1.356193207	17:00:12	0.395047127	0.64522369	0.85645539
17:00:16	0.397188008	0.653193504	0.856717574	17:00:20	0.399328888	0.660361207	0.856979757
17:00:24	0.401469768	0.664674192	0.857241941	17:00:28	0.403610649	0.660422957	0.857504124
17:00:32	0.405751529	0.656171722	0.857766307	17:00:36	0.407892409	0.643746664	0.858028491
17:00:40	0.410033289	0.628596961	0.858290674	17:00:44	0.41217417	0.614286286	0.858552858
17:00:48	0.41431505	0.602492656	0.858815041	17:00:52	0.41645593	0.590699025	0.859077224
17:00:56	0.41859681	0.579304284	0.859339408	17:01:00	0.420737691	0.568042564	0.859601591
17:01:04	0.421835195	0.559601455	0.859863775	17:01:08	0.4229327	0.56148807	0.860125958
17:01:12	0.424030205	0.563374719	0.860388141	17:01:16	0.42512771	0.565774414	0.860650325
17:01:20	0.426225215	0.568345111	0.860912508	17:01:24	0.42732272	0.569340967	0.861174692
17:01:28	0.428420225	0.56561223	0.861436875	17:01:32	0.42951773	0.561883493	0.861699058
17:01:36	0.430615235	0.550521849	0.861961242	17:01:40	0.431668117	0.536589293	0.862223425
17:01:44	0.432655653	0.521824945	0.862485609	17:01:48	0.433643189	0.504682082	0.862747792
17:01:52	0.434630724	0.487539219	0.863009975	17:01:56	0.43561826	0.475558867	0.863272159
17:02:00	0.436605796	0.465299365	0.863534342	17:02:04	0.43781859	0.453698332	0.863796526
17:02:08	0.439031384	0.437669909	0.864058709	17:02:12	0.440244177	0.421641486	0.864320892
17:02:16	0.441456971	0.399161065	0.864583076	17:02:20	0.442669765	0.37452997	0.864845259
17:02:24	0.443882559	0.352105544	0.865107443	17:02:28	0.444936154	0.336206202	0.865153926
17:02:32	0.445965417	0.320292357	0.86516744	17:02:36	0.446994679	0.304378515	0.865180954
17:02:40	0.448023942	0.28846467	0.865194468	17:02:44	0.449053204	0.273872048	0.865207983

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
17:02:48	0.450082467	0.263243091	0.865221497	17:02:52	0.45111173	0.252614133	0.865235011
17:02:56	0.452140992	0.249009937	0.865248525	17:03:00	0.453170255	0.24774733	0.86526204
17:03:04	0.452225626	0.243604278	0.865275554	17:03:08	0.451280997	0.234349703	0.865289068
17:03:12	0.450336369	0.225095128	0.865302582	17:03:16	0.44939174	0.233286433	0.865316097
17:03:20	0.448447111	0.247293033	0.865329611	17:03:24	0.447502482	0.261299633	0.865343125
17:03:28	0.446557854	0.270353757	0.865356639	17:03:32	0.445613225	0.274455405	0.865370154
17:03:36	0.444668596	0.272813924	0.865383668	17:03:40	0.443723968	0.269258068	0.865397182
17:03:44	0.442779339	0.265850011	0.865410696	17:03:48	0.44183471	0.262885356	0.865424211
17:03:52	0.440890081	0.259920702	0.865437725	17:03:56	0.439945453	0.269218506	0.865451239
17:04:00	0.439000824	0.282603798	0.865464753	17:04:04	0.440556745	0.29965492	0.865478268
17:04:08	0.442112667	0.323231925	0.865491782	17:04:12	0.443668588	0.346808933	0.865505296
17:04:16	0.44522451	0.360300106	0.86551881	17:04:20	0.446780432	0.370429345	0.865532324
17:04:24	0.448336353	0.378419972	0.865545839	17:04:28	0.449892275	0.379994769	0.865559353
17:04:32	0.451448196	0.381569567	0.865572867	17:04:36	0.453004118	0.367975458	0.865586381
17:04:40	0.454560039	0.349325044	0.865599896	17:04:44	0.456115961	0.329855247	0.86561341
17:04:48	0.457671882	0.307927285	0.865626924	17:04:52	0.459227804	0.285999322	0.865640438
17:04:56	0.460783725	0.264475646	0.865653953	17:05:00	0.462339647	0.243086734	0.865667467
17:05:04	0.462114607	0.224446812	0.865680981	17:05:08	0.461889473	0.217238624	0.865694495
17:05:12	0.46166434	0.210030437	0.865708001	17:05:16	0.461439206	0.209047849	0.865721524
17:05:20	0.461214073	0.210140458	0.865735038	17:05:24	0.460988939	0.212065824	0.865748552
17:05:28	0.460763805	0.216489444	0.865762067	17:05:32	0.460538672	0.220913068	0.865775581
17:05:36	0.460313538	0.230532255	0.865789095	17:05:40	0.460088404	0.245347011	0.865802609
17:05:44	0.459863271	0.260161767	0.865816124	17:05:48	0.459638137	0.268293303	0.865829638
17:05:52	0.459413003	0.276424841	0.865843152	17:05:56	0.45918787	0.275077214	0.865856666
17:06:00	0.458962736	0.264250425	0.86587018	17:06:04	0.461690805	0.255183994	0.865883695
17:06:08	0.464418875	0.216996915	0.865897209	17:06:12	0.467146944	0.178809837	0.865910723
17:06:16	0.470238966	0.1421075	0.866417363	17:06:20	0.473561779	0.106810549	0.867236705
17:06:24	0.476884592	0.071513579	0.868056046	17:06:28	0.480207405	0.05852268	0.868875388
17:06:32	0.483530218	0.045531782	0.86969473	17:06:36	0.486853031	0.029900675	0.870514071
17:06:40	0.490175844	0.011629396	0.871333413	17:06:44	0.493498657	-0.006641882	0.872152755
17:06:48	0.49682147	-0.010904823	0.872972096	17:06:52	0.500144283	-0.015167763	0.873791438
17:06:56	0.503467096	-0.021855301	0.87461078	17:07:00	0.506789909	-0.030967437	0.875430122
17:07:04	0.508189456	-0.041226038	0.876249463	17:07:08	0.509589003	-0.038475405	0.877068805
17:07:12	0.510988549	-0.035724736	0.877888147	17:07:16	0.512388096	-0.034567455	0.878707488
17:07:20	0.513787643	-0.035003525	0.87952683	17:07:24	0.515187189	-0.035439595	0.880346172
17:07:28	0.516586736	-0.034497195	0.881165513	17:07:32	0.517986283	-0.03355476	0.881984855
17:07:36	0.51938583	-0.028941178	0.882804197	17:07:40	0.520785376	-0.020656379	0.883623539
17:07:44	0.522184923	-0.012371579	0.88444288	17:07:48	0.52358447	-0.005983943	0.885262222
17:07:52	0.524984016	0.000403658	0.886081564	17:07:56	0.526383563	0.00770241	0.886900905
17:08:00	0.52778311	0.015912279	0.887720247	17:08:04	0.527675105	0.023223537	0.888539589
17:08:08	0.5275671	0.037102547	0.88935893	17:08:12	0.527459095	0.050981558	0.890178272
17:08:16	0.527351091	0.065561244	0.890997614	17:08:20	0.527243086	0.080374482	0.891816956
17:08:24	0.527135081	0.095187739	0.892636297	17:08:28	0.526769488	0.117561222	0.893106629
17:08:32	0.526159264	0.139788884	0.893268845	17:08:36	0.525544411	0.162388907	0.893431061
17:08:40	0.524929558	0.185364058	0.893593277	17:08:44	0.524314705	0.2083392	0.893755493
17:08:48	0.523699853	0.243733095	0.893917709	17:08:52	0.523085	0.279126992	0.894079925
17:08:56	0.522470147	0.315362645	0.894242142	17:09:00	0.521855295	0.351878886	0.894404358
17:09:04	0.522236187	0.388988672	0.894566574	17:09:08	0.52261708	0.416501597	0.89472879
17:09:12	0.522997972	0.444014523	0.894891006	17:09:16	0.523378865	0.471222224	0.895053222
17:09:20	0.523759757	0.498124709	0.895215438	17:09:24	0.52414065	0.525027195	0.895377654
17:09:28	0.524521543	0.548572134	0.89553987	17:09:32	0.524902435	0.572117074	0.895702086
17:09:36	0.525283328	0.585913561	0.895864303	17:09:40	0.52566422	0.589961562	0.896026519
17:09:44	0.526045113	0.594009563	0.896188735	17:09:48	0.526426005	0.58345409	0.896350951
17:09:52	0.526806898	0.572898617	0.896513167	17:09:56	0.527187791	0.569845391	0.896675383
17:10:00	0.527568683	0.574294412	0.896837599	17:10:04	0.528241021	0.578917141	0.896999815
17:10:08	0.528913358	0.581406081	0.897162031	17:10:12	0.529585696	0.583895038	0.897324247
17:10:16	0.530258033	0.582601606	0.897486464	17:10:20	0.530930371	0.577525821	0.89764868

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
17:10:24	0.531602708	0.572450035	0.897810896	17:10:28	0.532275046	0.570722664	0.897973112
17:10:32	0.532947383	0.568995276	0.898135328	17:10:36	0.533619721	0.571752783	0.898297544
17:10:40	0.534292058	0.578995148	0.89845976	17:10:44	0.534964396	0.586237514	0.898621976
17:10:48	0.535636733	0.582536663	0.898784192	17:10:52	0.536309071	0.578835811	0.898946408
17:10:56	0.536981408	0.575956258	0.899108624	17:11:00	0.537653746	0.573898002	0.899270841
17:11:04	0.538451582	0.571914555	0.899433057	17:11:08	0.539249418	0.560384889	0.899595273
17:11:12	0.540047254	0.548855223	0.899757489	17:11:16	0.54084509	0.5397056	0.899919705
17:11:20	0.541642926	0.532936022	0.900081921	17:11:24	0.542440763	0.527125844	0.900244137
17:11:28	0.543238599	0.524193832	0.900406353	17:11:32	0.544036435	0.521261838	0.900568569
17:11:36	0.544834271	0.51332336	0.900730785	17:11:40	0.545632107	0.500378398	0.900893002
17:11:44	0.546429943	0.487433453	0.901055218	17:11:48	0.54722778	0.476775022	0.901217434
17:11:52	0.548025616	0.46611659	0.90137965	17:11:56	0.548812758	0.45270966	0.901541866
17:12:00	0.549588659	0.436553896	0.901704082	17:12:04	0.550153992	0.420272616	0.901866298
17:12:08	0.550719325	0.423530359	0.902028514	17:12:12	0.551284658	0.426788102	0.90219073
17:12:16	0.552023697	0.429565792	0.902588304	17:12:20	0.553051291	0.431931887	0.903376844
17:12:24	0.554078884	0.434297991	0.904165384	17:12:28	0.555106478	0.431355434	0.904953923
17:12:32	0.556134071	0.428412876	0.905742463	17:12:36	0.557161664	0.428230101	0.906531002
17:12:40	0.558189258	0.430807099	0.907319542	17:12:44	0.559216851	0.433384096	0.908108082
17:12:48	0.560244444	0.428390693	0.908896621	17:12:52	0.561272038	0.42339728	0.909685161
17:12:56	0.562299631	0.412458652	0.910473701	17:13:00	0.563327224	0.395574809	0.91126224
17:13:04	0.56361947	0.378252633	0.91205078	17:13:08	0.563911716	0.375960322	0.91283932
17:13:12	0.564203962	0.373668017	0.913627859	17:13:16	0.564496207	0.368969449	0.914416399
17:13:20	0.564788453	0.36186462	0.915204939	17:13:24	0.565080699	0.354759792	0.915993478
17:13:28	0.565372945	0.347654964	0.916782018	17:13:32	0.565665191	0.332725914	0.917570558
17:13:36	0.565957436	0.319208054	0.918359097	17:13:40	0.566249682	0.309923763	0.919147637
17:13:44	0.566541928	0.300639473	0.919936176	17:13:48	0.566834174	0.288601371	0.920724716
17:13:52	0.56712642	0.27656327	0.921513256	17:13:56	0.567418666	0.264803417	0.922301795
17:14:00	0.567710911	0.253321808	0.923090335	17:14:04	0.566585974	0.240995447	0.923878875
17:14:08	0.565461036	0.232168625	0.924667414	17:14:12	0.564336098	0.223341804	0.925455954
17:14:16	0.56321116	0.209913205	0.926244494	17:14:20	0.559551737	0.190372062	0.923599021
17:14:24	0.555371945	0.170520734	0.920248492	17:14:28	0.551192154	0.155781707	0.916897964
17:14:32	0.547012362	0.141042679	0.913547435	17:14:36	0.54283257	0.130378767	0.910196907
17:14:40	0.538652778	0.123789954	0.906846379	17:14:44	0.534472986	0.117201158	0.90349585
17:14:48	0.530293195	0.113073236	0.900145322	17:14:52	0.526113403	0.108945295	0.896794793
17:14:56	0.521933611	0.105866361	0.893444265	17:15:00	0.017753819	-0.396163603	0.390093737
17:15:04	0.01661833	-0.396378906	0.386743208	17:15:08	0.015482841	-0.40696089	0.38339268
17:15:12	0.515261422	0.083002007	0.88128064	17:15:16	0.515878644	0.073464788	0.880304886
17:15:20	0.516492345	0.063925487	0.879329132	17:15:24	0.51709097	0.054377182	0.878353379
17:15:28	0.517689595	0.059305191	0.877377625	17:15:32	0.51828822	0.064233182	0.876401871
17:15:36	0.518886845	0.071808042	0.875426117	17:15:40	0.519485471	0.082029773	0.874450364
17:15:44	0.520084096	0.092251503	0.87347461	17:15:48	0.520682721	0.113144863	0.872498856
17:15:52	0.521281346	0.134038241	0.871523103	17:15:56	0.521879972	0.143684768	0.870547349
17:16:00	0.522478597	0.14208448	0.869571595	17:16:04	0.520525844	0.138963337	0.868595842
17:16:08	0.51857309	0.146739062	0.867620088	17:16:12	0.516620337	0.154514787	0.866644334
17:16:16	0.514667584	0.166048218	0.86566858	17:16:20	0.51271483	0.18133938	0.864692827
17:16:24	0.510762077	0.196630543	0.863717073	17:16:28	0.508809324	0.214303499	0.862741319
17:16:32	0.50685657	0.231976455	0.861765566	17:16:36	0.504903817	0.238832039	0.860789812
17:16:40	0.502951064	0.242081838	0.859814058	17:16:44	0.500998311	0.245331632	0.858838304
17:16:48	0.499045557	0.254047403	0.857862551	17:16:52	0.497092804	0.262763175	0.856886797
17:16:56	0.495140051	0.270530442	0.855911043	17:17:00	0.493187297	0.277349207	0.85493529
17:17:04	0.493529342	0.285535864	0.853959536	17:17:08	0.493871386	0.299854472	0.852983782
17:17:12	0.494213431	0.31417308	0.852008029	17:17:16	0.494555476	0.334714427	0.851032275
17:17:20	0.49489752	0.361478517	0.850056521	17:17:24	0.495239565	0.388242602	0.849080767
17:17:28	0.495581609	0.401404383	0.848105014	17:17:32	0.495923654	0.414566155	0.84712926
17:17:36	0.496265698	0.424004481	0.846153506	17:17:40	0.496607743	0.429719353	0.845177753
17:17:44	0.496949787	0.436214272	0.844201999	17:17:48	0.497291832	0.445049371	0.843226245
17:17:52	0.497633877	0.45388447	0.842250491	17:17:56	0.497975921	0.467227185	0.841274738

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
17:18:00	0.499012942	0.482486685	0.841240618	17:18:04	0.499850658	0.497627382	0.841725715
17:18:08	0.500688374	0.509664746	0.842210813	17:18:12	0.50152609	0.52170211	0.84269591
17:18:16	0.502363806	0.527956139	0.843181008	17:18:20	0.503201522	0.528426834	0.843666105
17:18:24	0.504039238	0.528897547	0.844151202	17:18:28	0.504876954	0.522552708	0.8446363
17:18:32	0.50571467	0.516207868	0.845121397	17:18:36	0.506552387	0.510308443	0.845606495
17:18:40	0.507390103	0.504854468	0.846091592	17:18:44	0.508227819	0.499400492	0.84657669
17:18:48	0.509065535	0.495876936	0.847061787	17:18:52	0.509903251	0.49235338	0.847546884
17:18:56	0.510740967	0.488829824	0.848031982	17:19:00	0.511578683	0.485306268	0.848517079
17:19:04	0.510790423	0.481927997	0.849002177	17:19:08	0.510002163	0.481893238	0.849487274
17:19:12	0.50920058	0.481850538	0.849972372	17:19:16	0.508383278	0.485382123	0.850457469
17:19:20	0.507565975	0.492497381	0.850942566	17:19:24	0.506748672	0.49961264	0.851427664
17:19:28	0.505931369	0.509777564	0.851912761	17:19:32	0.505114066	0.519942471	0.852397859
17:19:36	0.504296763	0.519625493	0.852882956	17:19:40	0.50347946	0.508826595	0.853368054
17:19:44	0.502662157	0.498027696	0.853853151	17:19:48	0.501844854	0.493551238	0.854338248
17:19:52	0.501027551	0.489074779	0.854823346	17:19:56	0.500210248	0.490980698	0.855308443
17:20:00	0.499392945	0.4950141	0.855793541	17:20:04	0.501994828	0.501085609	0.856278638
17:20:08	0.504596711	0.507876214	0.856763736	17:20:12	0.507198594	0.514666837	0.857248833
17:20:16	0.509800477	0.515643464	0.85773393	17:20:20	0.51240236	0.510806095	0.858219028
17:20:24	0.515004243	0.505968726	0.858704125	17:20:28	0.517606126	0.501718622	0.859189223
17:20:32	0.520208009	0.497468518	0.85967432	17:20:36	0.522809892	0.488253909	0.860159417
17:20:40	0.525411775	0.474074775	0.860644515	17:20:44	0.528013657	0.459895651	0.861129612
17:20:48	0.53061554	0.453279955	0.86161471	17:20:52	0.533217423	0.446664259	0.862099807
17:20:56	0.535819306	0.438539647	0.862584905	17:21:00	0.538421189	0.428906119	0.863070002
17:21:04	0.538828065	0.417964172	0.863555099	17:21:08	0.539234941	0.417649817	0.864040197
17:21:12	0.539641817	0.41733547	0.864525294	17:21:16	0.540048693	0.41364846	0.865010392
17:21:20	0.540455569	0.406588793	0.865495489	17:21:24	0.540862445	0.399529127	0.865980587
17:21:28	0.541269321	0.397308308	0.866465684	17:21:32	0.541676197	0.395087498	0.866950781
17:21:36	0.542144612	0.396556944	0.867519259	17:21:40	0.542685525	0.401723191	0.868185965
17:21:44	0.543226438	0.406889433	0.868852671	17:21:48	0.543767351	0.402794376	0.869519377
17:21:52	0.544308263	0.39869932	0.870186084	17:21:56	0.544849176	0.39197904	0.87085279
17:22:00	0.545390089	0.382633541	0.871519496	17:22:04	0.546580291	0.373675074	0.872186202
17:22:08	0.547770493	0.358798662	0.872852908	17:22:12	0.548960695	0.34392225	0.873519614
17:22:16	0.550150897	0.330623345	0.87418632	17:22:20	0.551341099	0.318901949	0.874853026
17:22:24	0.552531301	0.307180551	0.875519732	17:22:28	0.553721503	0.307079307	0.876186438
17:22:32	0.554911705	0.306978062	0.876853144	17:22:36	0.556101907	0.304886654	0.87751985
17:22:40	0.557292109	0.300805081	0.878186556	17:22:44	0.558482311	0.296723508	0.878853263
17:22:48	0.559672513	0.296645536	0.879519969	17:22:52	0.560862715	0.296567563	0.880186675
17:22:56	0.562052917	0.299771477	0.880853381	17:23:00	0.563243119	0.306257284	0.881520087
17:23:04	0.564439036	0.312746497	0.882186793	17:23:08	0.565634952	0.319235709	0.882853499
17:23:12	0.566830868	0.325724922	0.883520205	17:23:16	0.568026785	0.33112112	0.884186911
17:23:20	0.569222701	0.335424301	0.884853617	17:23:24	0.570418617	0.339727483	0.885520323
17:23:28	0.571614534	0.344030665	0.886187029	17:23:32	0.57281045	0.358531173	0.886853735
17:23:36	0.574006366	0.375390573	0.887520442	17:23:40	0.575202283	0.399326654	0.888187148
17:23:44	0.576398199	0.423262735	0.888853854	17:23:48	0.577594115	0.437521658	0.88952056
17:23:52	0.578790032	0.451780582	0.890187266	17:23:56	0.580027692	0.467731251	0.890853972
17:24:00	0.581269309	0.485351148	0.891520678	17:24:04	0.581864581	0.50258577	0.892187384
17:24:08	0.582459853	0.518350771	0.89285409	17:24:12	0.583005487	0.534086166	0.893453541
17:24:16	0.582123996	0.541853677	0.892119358	17:24:20	0.581242505	0.542503955	0.890785175
17:24:24	0.580361014	0.543154233	0.889450991	17:24:28	0.579479523	0.550572063	0.888116808
17:24:32	0.578598031	0.557989876	0.886782625	17:24:36	0.57771654	0.563901668	0.885448442
17:24:40	0.576835049	0.568307404	0.884114259	17:24:44	0.575953558	0.572713158	0.882780075
17:24:48	0.575072066	0.579814883	0.881445892	17:24:52	0.574190575	0.586916626	0.880111709
17:24:56	0.573309084	0.596770139	0.878777526	17:25:00	0.572427593	0.609375458	0.877443343
17:25:04	0.571095202	0.621711984	0.876109159	17:25:08	0.569762811	0.632153053	0.874774976
17:25:12	0.568430419	0.642594121	0.873440793	17:25:16	0.567098028	0.652291203	0.872106661
17:25:20	0.565765637	0.661244371	0.870772427	17:25:24	0.564433246	0.670197504	0.869438243
17:25:28	0.563100855	0.682955054	0.86810406	17:25:32	0.562085277	0.695901451	0.867199132

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
17:25:36	0.561706423	0.706570857	0.867156911	17:25:40	0.561327569	0.714583728	0.86711469
17:25:44	0.560948715	0.722596599	0.867072468	17:25:48	0.560569861	0.726840547	0.867030247
17:25:52	0.560191007	0.731084495	0.866988025	17:25:56	0.559812153	0.738946899	0.866945804
17:26:00	0.559433299	0.750427761	0.866903583	17:26:04	0.561969766	0.763646399	0.866861361
17:26:08	0.564506233	0.772637537	0.86681914	17:26:12	0.5670427	0.781628674	0.866776919
17:26:16	0.569579167	0.78687757	0.866734697	17:26:20	0.572115634	0.78838426	0.866692476
17:26:24	0.574652101	0.78989095	0.866650254	17:26:28	0.577188568	0.784653129	0.866608033
17:26:32	0.579725035	0.779415308	0.866565812	17:26:36	0.582261502	0.77021912	0.86652359
17:26:40	0.584797969	0.757064602	0.866481369	17:26:44	0.587334436	0.743910083	0.866439148
17:26:48	0.589870903	0.738768654	0.866396926	17:26:52	0.59240737	0.733627259	0.866354705
17:26:56	0.594943837	0.722209738	0.866312484	17:27:00	0.597480304	0.704516125	0.866270262
17:27:04	0.596191221	0.68454216	0.866228041	17:27:08	0.594902139	0.661840106	0.866185819
17:27:12	0.593641023	0.639154723	0.866143598	17:27:16	0.59238948	0.618506209	0.866101377
17:27:20	0.591137937	0.599888839	0.866059155	17:27:24	0.589886393	0.58127147	0.866016934
17:27:28	0.58863485	0.576785033	0.865974713	17:27:32	0.587383307	0.572298596	0.865932491
17:27:36	0.586131764	0.570884831	0.86589027	17:27:40	0.584880221	0.572543738	0.865848048
17:27:44	0.583628677	0.574202662	0.865805827	17:27:48	0.582377134	0.563985119	0.865776306
17:27:52	0.581125591	0.553767576	0.865721384	17:27:56	0.579874048	0.541015649	0.865679163
17:28:00	0.578622505	0.525729375	0.865636942	17:28:04	0.579898254	0.51194958	0.86559472
17:28:08	0.581174003	0.49588878	0.865552499	17:28:12	0.582449752	0.47982798	0.865510277
17:28:16	0.583725502	0.464237145	0.865468056	17:28:20	0.585001251	0.448802977	0.865425835
17:28:24	0.586277	0.43454485	0.865383613	17:28:28	0.58755275	0.423814895	0.865341392
17:28:32	0.588828499	0.41308494	0.865299171	17:28:36	0.590104248	0.403847988	0.865256949
17:28:40	0.591379997	0.39610404	0.865214728	17:28:44	0.592655747	0.388360091	0.865172506
17:28:48	0.593931496	0.390555063	0.865130285	17:28:52	0.595207245	0.392750035	0.865088064
17:28:56	0.596482994	0.394611022	0.865045842	17:29:00	0.597758744	0.396138018	0.865003621
17:29:04	0.598791113	0.39751995	0.8649614	17:29:08	0.599823516	0.402545103	0.864919178
17:29:12	0.60085902	0.407570255	0.864876957	17:29:16	0.601888288	0.412859249	0.864834736
17:29:20	0.602920674	0.418412084	0.864792514	17:29:24	0.60395306	0.42396492	0.864750293
17:29:28	0.604985447	0.413887886	0.864708071	17:29:32	0.607078139	0.404442884	0.866102475
17:29:36	0.610222428	0.393136649	0.868921703	17:29:40	0.613366718	0.37934234	0.871740932
17:29:44	0.616511008	0.365548031	0.874560161	17:29:48	0.619655297	0.359512654	0.87737939
17:29:52	0.622799587	0.353477277	0.880198619	17:29:56	0.625943877	0.351360185	0.883017848
17:30:00	1.129088167	0.853161375	1.385837076	17:30:04	1.13261047	0.855187895	1.388656305
17:30:08	1.136132774	0.86015364	1.391475534	17:30:12	0.639655077	0.365119384	0.894294763
17:30:16	0.643177381	0.360446305	0.897113992	17:30:20	0.646636253	0.346096589	0.899933221
17:30:24	0.650070835	0.331732396	0.902752449	17:30:28	0.653505417	0.312508785	0.905571678
17:30:32	0.656939999	0.293285173	0.908390907	17:30:36	0.660374581	0.279577626	0.911210136
17:30:40	0.663809163	0.271386125	0.914029365	17:30:44	0.667243744	0.263194633	0.916848594
17:30:48	0.670678326	0.265604023	0.919667823	17:30:52	0.674112908	0.268013413	0.922487051
17:30:56	0.67754749	0.273318335	0.92530628	17:31:00	0.680982072	0.281518804	0.928125509
17:31:04	0.683268447	0.289034846	0.930944738	17:31:08	0.685554821	0.30669184	0.933763967
17:31:12	0.687841195	0.324348827	0.936583196	17:31:16	0.69012757	0.339597829	0.939402424
17:31:20	0.692413944	0.352438836	0.942221653	17:31:24	0.694700319	0.365279846	0.945040882
17:31:28	0.696986693	0.35596488	0.947860111	17:31:32	0.699273068	0.34664991	0.95067934
17:31:36	0.701559442	0.33865872	0.953498569	17:31:40	0.703845816	0.331991299	0.956317797
17:31:44	0.706132191	0.325323886	0.959137026	17:31:48	0.712917341	0.321338124	0.968051714
17:31:52	0.664226267	0.284283835	0.901800825	17:31:56	0.615535193	0.244856822	0.835549936
17:32:00	0.592053075	0.218083752	0.803455043	17:32:04	0.601872454	0.211161189	0.816279142
17:32:08	0.611691834	0.205805428	0.829103241	17:32:12	0.621511214	0.200449668	0.841927339
17:32:16	0.631330594	0.197596189	0.854751438	17:32:20	0.641149974	0.197244994	0.867575536
17:32:24	0.650969354	0.196893798	0.880399635	17:32:28	0.576134706	0.144130534	0.778524707
17:32:32	0.579554563	0.13801355	0.782677995	17:32:36	0.58297442	0.129919869	0.786831283
17:32:40	0.586394277	0.119849474	0.790984571	17:32:44	0.589814134	0.109779079	0.795137859
17:32:48	0.593233991	0.102314979	0.799291147	17:32:52	0.596653848	0.094850897	0.803444435
17:32:56	0.600073705	0.089108837	0.807597723	17:33:00	0.603493562	0.085088816	0.811751011
17:33:04	0.606790292	0.0809954	0.815904299	17:33:08	0.610087022	0.083270932	0.820057587

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
17:33:12	0.613383752	0.085546465	0.824210875	17:33:16	0.616680482	0.091504655	0.828364163
17:33:20	0.619977212	0.098690422	0.832517451	17:33:24	0.623273942	0.105876172	0.836670739
17:33:28	0.626570672	0.121179892	0.840824027	17:33:32	0.629867402	0.136483631	0.844977315
17:33:36	0.633164132	0.147499948	0.849130603	17:33:40	0.634630085	0.144562735	0.850803343
17:33:44	0.635605489	0.141333115	0.851811432	17:33:48	0.636580894	0.126895353	0.852819521
17:33:52	0.637556298	0.112457591	0.85382761	17:33:56	0.638531703	0.105897018	0.854835699
17:34:00	0.639507108	0.107213634	0.855843788	17:34:04	0.641550642	0.109166946	0.856851877
17:34:08	0.643594177	0.116887603	0.857859966	17:34:12	0.645735268	0.124666413	0.858868055
17:34:16	0.647876457	0.133893584	0.859876144	17:34:20	0.650017646	0.144569075	0.860884233
17:34:24	0.652158834	0.155244566	0.861892322	17:34:28	0.654300023	0.148419516	0.862900411
17:34:32	0.656441211	0.141594484	0.8639085	17:34:36	0.6585824	0.135353946	0.864916589
17:34:40	0.660723588	0.12969792	0.865924679	17:34:44	0.662864777	0.124041894	0.866932768
17:34:48	0.665005965	0.126911006	0.867940857	17:34:52	0.667147154	0.129780136	0.868948946
17:34:56	0.669288342	0.136731062	0.869957035	17:35:00	0.671429531	0.147763784	0.870965124
17:35:04	0.672929923	0.158414537	0.871973213	17:35:08	0.674430315	0.160495171	0.872981302
17:35:12	0.675930707	0.162575804	0.873989391	17:35:16	0.677431099	0.157182846	0.87499748
17:35:20	0.67893149	0.144316312	0.876005569	17:35:24	0.680431882	0.131449779	0.877013658
17:35:28	0.681932274	0.117811494	0.878021747	17:35:32	0.683432666	0.104173226	0.879029836
17:35:36	0.684933058	0.093766073	0.880037925	17:35:40	0.68643345	0.084435995	0.881046014
17:35:44	0.687933842	0.075105916	0.882054104	17:35:48	0.689434234	0.06995772	0.883062193
17:35:52	0.690934625	0.064809523	0.884070282	17:35:56	0.692435017	0.062742223	0.885078371
17:36:00	0.693935409	0.063755856	0.88608646	17:36:04	0.695205403	0.064632151	0.887094549
17:36:08	0.696475396	0.056746398	0.888102638	17:36:12	0.697745389	0.048860645	0.889110727
17:36:16	0.699015382	0.046245537	0.890118816	17:36:20	0.700285376	0.048901074	0.891126905
17:36:24	0.701769363	0.05168417	0.892424938	17:36:28	0.703331103	0.048248357	0.893828319
17:36:32	0.704892843	0.044812545	0.8952317	17:36:36	0.706454583	0.043456091	0.896635081
17:36:40	0.708016323	0.044178995	0.898038462	17:36:44	0.709578063	0.042030555	0.899441844
17:36:48	0.711139803	0.031268046	0.900845225	17:36:52	0.712701543	0.020505538	0.902248606
17:36:56	0.714263283	0.009743029	0.903651987	17:37:00	0.715825023	-0.00101948	0.905055368
17:37:04	0.717773007	-0.011551754	0.906458749	17:37:08	0.720031807	-0.023497402	0.90786213
17:37:12	0.724877991	-0.03390075	0.909265511	17:37:16	0.729724174	-0.038139001	0.910668893
17:37:20	0.734570357	-0.036212225	0.912072274	17:37:24	0.739416541	-0.034285449	0.913475655
17:37:28	0.744262724	-0.040683141	0.914879036	17:37:32	0.749108908	-0.047080833	0.916282417
17:37:36	0.753955091	-0.050474514	0.917685798	17:37:40	0.758801274	-0.050864184	0.919089179
17:37:44	0.763647458	-0.051253854	0.92049256	17:37:48	0.768493641	-0.033662199	0.921895942
17:37:52	0.773339824	-0.016070509	0.923299323	17:37:56	0.778186008	-0.000800771	0.924702704
17:38:00	0.783032191	0.012147084	0.926106085	17:38:04	0.787420251	0.024821824	0.927509466
17:38:08	0.791808312	0.0374966	0.928912847	17:38:12	0.796196372	0.050171375	0.930316228
17:38:16	0.800584433	0.062347033	0.931719609	17:38:20	0.804972493	0.07402361	0.933122991
17:38:24	0.809360553	0.085700222	0.934526372	17:38:28	0.813748614	0.097376799	0.935929753
17:38:32	0.818136674	0.109053376	0.937333134	17:38:36	0.822524734	0.11553797	0.938736515
17:38:40	0.826912795	0.120291891	0.940139896	17:38:44	0.831300855	0.125045811	0.941543277
17:38:48	0.835688916	0.13509507	0.942946658	17:38:52	0.840076976	0.145144365	0.94435004
17:38:56	0.844465036	0.148992037	0.945753421	17:39:00	0.887854209	0.169886117	1
17:39:04	0.881638434	0.161211421	0.986321111	17:39:08	0.87542266	0.147803108	0.972642222
17:39:12	0.869206886	0.134394794	0.958963333	17:39:16	0.834982227	0.112060531	0.945284444
17:39:20	0.809848202	0.102914766	0.931605555	17:39:24	0.784714178	0.095237964	0.917926666
17:39:28	0.776170891	0.101857606	0.904247777	17:39:32	0.76958579	0.10964449	0.890568888
17:39:36	0.763000688	0.118571798	0.876889999	17:39:40	0.761942917	0.131934213	0.870700174
17:39:44	0.767962737	0.14951547	0.873048854	17:39:48	0.774451752	0.162376994	0.875397534
17:39:52	0.780940767	0.175238554	0.877746214	17:39:56	0.741112164	0.162970372	0.880094895
17:40:00	0.74438574	0.178874257	0.882443575	17:40:04	0.74917512	0.195681672	0.884792255
17:40:08	0.753005346	0.219017457	0.887140935	17:40:12	0.753177855	0.240172934	0.889489615
17:40:16	0.753350363	0.262885664	0.891838295	17:40:20	0.753522872	0.287155648	0.894186976
17:40:24	0.75369538	0.31142565	0.896535656	17:40:28	0.753867888	0.329765723	0.898884336
17:40:32	0.754040397	0.348105805	0.901233016	17:40:36	0.754212905	0.365662081	0.903581696
17:40:40	0.754385414	0.382434566	0.905930376	17:40:44	0.754557922	0.399207046	0.908279057

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
17:40:48	0.75473043	0.426872515	0.910627737	17:40:52	0.754902939	0.454537985	0.912976417
17:40:56	0.755075447	0.478545033	0.915325097	17:41:00	0.755247956	0.498893664	0.917673777
17:41:04	0.75678443	0.520055328	0.920022457	17:41:08	0.758320904	0.533365243	0.922371138
17:41:12	0.759327842	0.546359514	0.924002341	17:41:16	0.759746775	0.562103474	0.924836848
17:41:20	0.760165708	0.58094764	0.925671355	17:41:24	0.760584641	0.599791798	0.926505862
17:41:28	0.761003574	0.617245682	0.927340369	17:41:32	0.761422507	0.634699556	0.928174876
17:41:36	0.76184144	0.65783293	0.929009383	17:41:40	0.762260374	0.686645787	0.92984389
17:41:44	0.762679307	0.708779985	0.930678397	17:41:48	0.76309824	0.710878211	0.931512904
17:41:52	0.763517173	0.712976436	0.932347411	17:41:56	0.763936106	0.723135023	0.933181918
17:42:00	0.764355039	0.741353952	0.934016425	17:42:04	0.765655435	0.760098307	0.934850932
17:42:08	0.766955831	0.774218014	0.935685439	17:42:12	0.768256227	0.788337684	0.936519946
17:42:16	0.769556624	0.803921166	0.937354453	17:42:20	0.77085702	0.820968424	0.93818896
17:42:24	0.772157416	0.838015682	0.939023467	17:42:28	0.773457812	0.84806784	0.939857974
17:42:32	0.774758208	0.858119998	0.940692481	17:42:36	0.776058604	0.868172156	0.941526988
17:42:40	0.777359	0.878224314	0.942361495	17:42:44	0.778659396	0.888276471	0.943196002
17:42:48	0.779959793	0.896596144	0.944030509	17:42:52	0.781260189	0.904915782	0.944865016
17:42:56	0.782560585	0.904723853	0.945699523	17:43:00	0.783860981	0.896020287	0.94653403
17:43:04	0.78428669	0.886795368	0.947368536	17:43:08	0.784712399	0.867572085	0.948203043
17:43:12	0.785138108	0.848348801	0.94903755	17:43:16	0.785563817	0.831835736	0.949872057
17:43:20	0.785721611	0.817873261	0.950343562	17:43:24	0.785219323	0.803517285	0.949920711
17:43:28	0.784717034	0.786822196	0.949497861	17:43:32	0.784214746	0.770127106	0.94907501
17:43:36	0.783712458	0.757830379	0.94865216	17:43:40	0.78321017	0.758728758	0.948229309
17:43:44	0.782707881	0.759627137	0.947806459	17:43:48	0.782205593	0.758348753	0.947383608
17:43:52	0.781703305	0.757070388	0.946960757	17:43:56	0.781201017	0.757142157	0.946537907
17:44:00	0.780698728	0.758564097	0.946115056	17:44:04	0.778958574	0.758504907	0.945692206
17:44:08	0.777218419	0.756215998	0.945269355	17:44:12	0.775478265	0.753927089	0.944846504
17:44:16	0.77373811	0.754335395	0.944423654	17:44:20	0.771997956	0.757440915	0.944000803
17:44:24	0.770276365	0.760557501	0.943577953	17:44:28	0.768759711	0.758004563	0.943155102
17:44:32	0.767243057	0.755451625	0.942732251	17:44:36	0.765726403	0.747479334	0.942309401
17:44:40	0.764209749	0.734087671	0.94188655	17:44:44	0.762693095	0.720695991	0.9414637
17:44:48	0.761176441	0.699909984	0.941040849	17:44:52	0.759659787	0.679123977	0.940617999
17:44:56	0.758143133	0.660704868	0.940195148	17:45:00	0.256626479	0.144652657	0.439772297
17:45:04	0.256531092	0.129447623	0.439349447	17:45:08	0.256435705	0.115669522	0.438926596
17:45:12	0.756340319	0.601891403	0.938503746	17:45:16	0.756244932	0.591460411	0.938080895
17:45:20	0.756149545	0.58437652	0.937658044	17:45:24	0.756054158	0.577292629	0.937235194
17:45:28	0.755958771	0.563843716	0.936812343	17:45:32	0.755863384	0.550394803	0.936389493
17:45:36	0.755767998	0.53563824	0.935966642	17:45:40	0.755672611	0.519574008	0.935543791
17:45:44	0.755577224	0.503509775	0.935120941	17:45:48	0.755481837	0.481034022	0.93469809
17:45:52	0.75538645	0.458558269	0.93427524	17:45:56	0.755361383	0.435591389	0.933947666
17:46:00	0.755732057	0.412327361	0.934156289	17:46:04	0.757266809	0.389757222	0.934364912
17:46:08	0.75880156	0.375583911	0.934573535	17:46:12	0.760336312	0.361410605	0.934782159
17:46:16	0.761871063	0.353801986	0.934990782	17:46:20	0.763405814	0.352758056	0.935199405
17:46:24	0.764940566	0.351714126	0.935408029	17:46:28	0.766475317	0.342287895	0.935616652
17:46:32	0.768010069	0.332861672	0.935825275	17:46:36	0.76954482	0.320870955	0.936033898
17:46:40	0.771079571	0.308025409	0.936242522	17:46:44	0.772614323	0.292939014	0.936451145
17:46:48	0.774149074	0.271130066	0.936659768	17:46:52	0.775683825	0.249321117	0.936868391
17:46:56	0.777218577	0.239870823	0.937077015	17:47:00	0.778753328	0.242779202	0.937285638
17:47:04	0.778473968	0.244606199	0.937494261	17:47:08	0.778194609	0.244424257	0.937702885
17:47:12	0.777915249	0.244242316	0.937911508	17:47:16	0.777635889	0.246007367	0.938120131
17:47:20	0.777356529	0.249719431	0.938328754	17:47:24	0.77707717	0.253431476	0.938537378
17:47:28	0.77679781	0.249966635	0.938746001	17:47:32	0.77651845	0.246501794	0.938954624
17:47:36	0.77623909	0.233577356	0.939163247	17:47:40	0.775959731	0.21119332	0.939371871
17:47:44	0.775680371	0.188809284	0.939580494	17:47:48	0.775401011	0.159193415	0.939789117
17:47:52	0.775131133	0.129583145	0.939997741	17:47:56	0.774769246	0.105879651	0.940077827
17:48:00	0.774191279	0.088008905	0.939865143	17:48:04	0.776274071	0.071724196	0.939652458
17:48:08	0.778356863	0.055439487	0.939439774	17:48:12	0.780439655	0.039154778	0.93922709
17:48:16	0.782522447	0.025046813	0.939014405	17:48:20	0.784605239	0.013115593	0.938801721

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
17:48:24	0.786688031	0.001184373	0.938589036	17:48:28	0.788770823	-0.000709825	0.938376352
17:48:32	0.790853615	-0.002604024	0.938163668	17:48:36	0.792936407	-0.004498187	0.937950983
17:48:40	0.795019199	-0.006392386	0.937738299	17:48:44	0.797101991	-0.008286584	0.937525615
17:48:48	0.799184783	-0.002287215	0.93731293	17:48:52	0.801267575	0.003712154	0.937100246
17:48:56	0.803350367	0.011923691	0.936887561	17:49:00	0.805433159	0.02234743	0.936674877
17:49:04	0.805127583	0.031347429	0.936462193	17:49:08	0.804822006	0.040347499	0.936249508
17:49:12	0.80451643	0.049347498	0.936036824	17:49:16	0.804210854	0.0599886	0.93582414
17:49:20	0.803905277	0.07227077	0.935611455	17:49:24	0.803599701	0.08455294	0.935398771
17:49:28	0.803294124	0.107815259	0.935186086	17:49:32	0.802988548	0.131077578	0.934973402
17:49:36	0.802682971	0.155560617	0.934760718	17:49:40	0.802377395	0.181264374	0.934548033
17:49:44	0.802071818	0.20696815	0.934335349	17:49:48	0.801766242	0.222053696	0.934122665
17:49:52	0.801460665	0.237139225	0.93390998	17:49:56	0.801155089	0.254746631	0.933697296
17:50:00	0.800849513	0.274875878	0.933484611	17:50:04	0.801625518	0.29564984	0.933271927
17:50:08	0.802401524	0.315097418	0.933059243	17:50:12	0.80317753	0.334544988	0.932846558
17:50:16	0.803953536	0.345491996	0.932633874	17:50:20	0.804729542	0.347938443	0.93242119
17:50:24	0.805505548	0.350384881	0.932208505	17:50:28	0.806281554	0.358022379	0.931995821
17:50:32	0.806298101	0.365207166	0.930754135	17:50:36	0.80621155	0.3704946	0.929372758
17:50:40	0.806124999	0.373947198	0.927991382	17:50:44	0.806038447	0.377399445	0.926610006
17:50:48	0.805951896	0.379571318	0.925228629	17:50:52	0.805865345	0.381743192	0.923847253
17:50:56	0.805778793	0.38647432	0.922465877	17:51:00	0.805692242	0.393764711	0.921084501
17:51:04	0.80465014	0.400485504	0.919703124	17:51:08	0.803608038	0.407822199	0.918321748
17:51:12	0.802565936	0.41515889	0.916940372	17:51:16	0.802033881	0.422206577	0.915558995
17:51:20	0.802081838	0.429006966	0.914177619	17:51:24	0.802129795	0.435807355	0.912796243
17:51:28	0.802177752	0.438584078	0.911414866	17:51:32	0.802225709	0.441360802	0.91003349
17:51:36	0.802273666	0.443796157	0.908652114	17:51:40	0.802321623	0.445890141	0.907270737
17:51:44	0.80236958	0.447984125	0.905889361	17:51:48	0.80265836	0.459213164	0.90483428
17:51:52	0.804209139	0.47119446	0.9054891	17:51:56	0.805759918	0.489540044	0.90614392
17:52:00	0.807310697	0.514249916	0.90679874	17:52:04	0.809895162	0.53957595	0.90745356
17:52:08	0.812479627	0.572286084	0.90810838	17:52:12	0.815064091	0.604996208	0.9087632
17:52:16	0.817648556	0.638312455	0.90941802	17:52:20	0.820233021	0.672234833	0.91007284
17:52:24	0.822817486	0.706157194	0.91072766	17:52:28	0.82540195	0.734103207	0.91138248
17:52:32	0.827986415	0.762049203	0.9120373	17:52:36	0.83057088	0.781879198	0.91269212
17:52:40	0.833155345	0.793593158	0.91334694	17:52:44	0.835739809	0.805307119	0.91400176
17:52:48	0.838324274	0.822468252	0.91465658	17:52:52	0.840908739	0.839629421	0.9153114
17:52:56	0.843493204	0.852488654	0.91596622	17:53:00	0.846077668	0.861046022	0.91662104
17:53:04	0.849503564	0.870104918	0.91727586	17:53:08	0.85292946	0.870509705	0.91793068
17:53:12	0.856355356	0.870914526	0.9185855	17:53:16	0.859781251	0.872223927	0.91924032
17:53:20	0.863207147	0.874437941	0.91989514	17:53:24	0.866633043	0.876651956	0.92054996
17:53:28	0.870058939	0.878279522	0.92120478	17:53:32	0.873484834	0.879907124	0.9218596
17:53:36	0.87691073	0.882096943	0.92251442	17:53:40	0.880336626	0.885973592	0.92316924
17:53:44	0.883762522	0.88985024	0.92382406	17:53:48	0.887188417	0.892909926	0.92447888
17:53:52	0.890614313	0.895969647	0.9251337	17:53:56	0.894040209	0.893258433	0.92578852
17:54:00	0.897466105	0.884776285	0.92644334	17:54:04	0.899243677	0.875311597	0.92709816
17:54:08	0.895088783	0.865184062	0.92775298	17:54:12	0.882427463	0.84998598	0.9284078
17:54:16	0.886835323	0.847917799	0.92906262	17:54:20	0.884966991	0.845063779	0.92971744
17:54:24	0.88309866	0.842209759	0.93037226	17:54:28	0.879912341	0.83982838	0.929241319
17:54:32	0.876284204	0.837183606	0.927511752	17:54:36	0.872656067	0.837008053	0.925782185
17:54:40	0.869027929	0.839301724	0.924052617	17:54:44	0.865399792	0.841595358	0.92232305
17:54:48	0.861771655	0.839360486	0.920593483	17:54:52	0.858143517	0.837125614	0.918863915
17:54:56	0.85451538	0.832750344	0.917134348	17:55:00	0.850887243	0.826234676	0.915404781
17:55:04	0.847398662	0.819802195	0.913675213	17:55:08	0.848372121	0.813599967	0.911945646
17:55:12	0.850886698	0.808316375	0.910216079	17:55:16	0.852753889	0.7924899	0.908486512
17:55:20	0.851700461	0.764765556	0.906756944	17:55:24	0.850647033	0.737041194	0.905027377
17:55:28	0.849593605	0.709899409	0.90329781	17:55:32	0.848540177	0.682757605	0.901568242
17:55:36	0.847486749	0.65798396	0.899838675	17:55:40	0.846433321	0.635578448	0.898109108
17:55:44	0.845379893	0.613172945	0.896379541	17:55:48	0.844326465	0.602820011	0.894649973
17:55:52	0.843273037	0.592467077	0.892920406	17:55:56	0.843027624	0.580356361	0.89228563

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
17:56:00	0.843381158	0.56636324	0.892462377	17:56:04	0.841281288	0.550907684	0.892639123
17:56:08	0.839181419	0.538963596	0.89281587	17:56:12	0.837081549	0.527019511	0.892992617
17:56:16	0.834981679	0.517794002	0.893169363	17:56:20	0.832881809	0.511287075	0.89334611
17:56:24	0.83078194	0.504780147	0.893522856	17:56:28	0.82868207	0.503250006	0.893699603
17:56:32	0.8265822	0.501719864	0.893876349	17:56:36	0.82448233	0.510682875	0.894053096
17:56:40	0.822382461	0.530139038	0.894229843	17:56:44	0.820282591	0.549595203	0.894406589
17:56:48	0.818182721	0.555791959	0.894583336	17:56:52	0.816082852	0.561988715	0.894760082
17:56:56	0.813982982	0.569075171	0.894936829	17:57:00	0.811883112	0.577051337	0.895113575
17:57:04	0.812582668	0.586696189	0.895290322	17:57:08	0.813282225	0.59634104	0.895467069
17:57:12	0.813991781	0.605985901	0.895643815	17:57:16	0.814681337	0.619518353	0.895820562
17:57:20	0.815380894	0.636938406	0.895997308	17:57:24	0.81608045	0.654358459	0.896174055
17:57:28	0.816780006	0.664366581	0.896350801	17:57:32	0.817479563	0.674374721	0.896527548
17:57:36	0.818179119	0.674838011	0.896704294	17:57:40	0.818878675	0.665756485	0.896881041
17:57:44	0.819578232	0.65667496	0.897057788	17:57:48	0.820277788	0.644514546	0.897234534
17:57:52	0.820977344	0.63235414	0.897411281	17:57:56	0.821676901	0.620990037	0.897588027
17:58:00	0.822376457	0.610422246	0.897764774	17:58:04	0.822798545	0.59968906	0.89794152
17:58:08	0.823220633	0.590165774	0.898118267	17:58:12	0.823642721	0.580642489	0.898295014
17:58:16	0.824064808	0.571664402	0.89847176	17:58:20	0.824486896	0.563231515	0.898648507
17:58:24	0.824908984	0.554798627	0.898825253	17:58:28	0.825331072	0.543144376	0.899002
17:58:32	0.82575316	0.531490126	0.899178746	17:58:36	0.826175248	0.526735007	0.899355493
17:58:40	0.826597335	0.528879016	0.899532239	17:58:44	0.827019423	0.531023026	0.899708986
17:58:48	0.827441511	0.518620157	0.899885733	17:58:52	0.827863599	0.506217288	0.900062479
17:58:56	0.828285687	0.494992207	0.900239226	17:59:00	0.828707775	0.484944914	0.900415972
17:59:04	0.82963997	0.475201687	0.900592719	17:59:08	0.830572166	0.480450773	0.900769465
17:59:12	0.831504361	0.485699858	0.900946212	17:59:16	0.832436557	0.488817875	0.901122959
17:59:20	0.833368752	0.489804825	0.901299705	17:59:24	0.834300948	0.490791774	0.901476452
17:59:28	0.835233143	0.496370369	0.901653198	17:59:32	0.836165339	0.501948965	0.901829945
17:59:36	0.837097534	0.514631237	0.902006691	17:59:40	0.837993069	0.534395334	0.902133766
17:59:44	0.838846832	0.55413453	0.902204244	17:59:48	0.839727639	0.573210609	0.902274721
17:59:52	0.840722283	0.592354544	0.902345198	17:59:56	0.841716927	0.610751745	0.902415676
18:00:00	1.342711571	1.088313118	1.402486153	18:00:04	1.341943881	1.079151001	1.40255663
18:00:08	1.341176191	1.08248764	1.402627108	18:00:12	0.840408501	0.585824279	0.902697585
18:00:16	0.839640811	0.589160927	0.902768063	18:00:20	0.838873121	0.592497567	0.90283854
18:00:24	0.838105431	0.595834206	0.902909017	18:00:28	0.837337741	0.588544622	0.902979495
18:00:32	0.836570051	0.581255047	0.903049972	18:00:36	0.835802361	0.565879743	0.903120449
18:00:40	0.83503467	0.5478092	0.903190927	18:00:44	0.83426698	0.529738656	0.903261404
18:00:48	0.83349929	0.515982953	0.903331881	18:00:52	0.8327316	0.502227249	0.903402359
18:00:56	0.83196391	0.492932315	0.903472836	18:01:00	0.83119622	0.488098148	0.903543314
18:01:04	0.830506376	0.483310385	0.903613791	18:01:08	0.829816532	0.491277224	0.903684268
18:01:12	0.829126688	0.499244063	0.903754746	18:01:16	0.828436844	0.50343637	0.903825223
18:01:20	0.827747	0.503854145	0.9038957	18:01:24	0.827057156	0.50427192	0.903966178
18:01:28	0.826367312	0.497045335	0.904036655	18:01:32	0.825677468	0.48981875	0.904107132
18:01:36	0.824987624	0.4816664	0.90417761	18:01:40	0.82429778	0.473205462	0.904248087
18:01:44	0.823607936	0.464744524	0.904318565	18:01:48	0.822918092	0.451271115	0.904389042
18:01:52	0.82228248	0.437797706	0.904459519	18:01:56	0.821538404	0.428499557	0.904529997
18:02:00	0.82084856	0.420593157	0.904600474	18:02:04	0.8221039	0.413846256	0.904670951
18:02:08	0.82335924	0.409553669	0.904741429	18:02:12	0.82461458	0.405261081	0.904811906
18:02:16	0.82586992	0.392088656	0.904882384	18:02:20	0.82712526	0.370036384	0.904952861
18:02:24	0.8283806	0.347984122	0.905023338	18:02:28	0.82963594	0.323968566	0.905093816
18:02:32	0.83089128	0.299953002	0.905164293	18:02:36	0.83214662	0.274423423	0.90523477
18:02:40	0.83340196	0.24737983	0.905305248	18:02:44	0.8346573	0.220585262	0.905375725
18:02:48	0.83591264	0.194537807	0.905446202	18:02:52	0.837167981	0.168490351	0.90551668
18:02:56	0.838423321	0.140377288	0.905587157	18:03:00	0.839678661	0.110198615	0.905657635
18:03:04	0.839373236	0.079089595	0.905728112	18:03:08	0.839067811	0.070431677	0.905798589
18:03:12	0.838762386	0.061773758	0.905869067	18:03:16	0.838449099	0.060059035	0.905939544
18:03:20	0.838134852	0.065291693	0.906010021	18:03:24	0.837820605	0.07052435	0.906080499
18:03:28	0.837506358	0.083554752	0.906150976	18:03:32	0.83719211	0.104382935	0.906221453

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
18:03:36	0.836877863	0.131601401	0.906291931	18:03:40	0.836517272	0.16518249	0.906299616
18:03:44	0.836144646	0.198756441	0.906290995	18:03:48	0.835772019	0.23899219	0.906282373
18:03:52	0.835399393	0.279227921	0.906273752	18:03:56	0.835026766	0.319097824	0.90626513
18:04:00	0.83465414	0.358601881	0.906256509	18:04:04	0.835720353	0.398963608	0.906247887
18:04:08	0.836786566	0.423150591	0.906239266	18:04:12	0.837852779	0.447337565	0.906230644
18:04:16	0.838918992	0.462661085	0.906222023	18:04:20	0.839985205	0.469121142	0.906213401
18:04:24	0.841051418	0.475581199	0.90620478	18:04:28	0.842117631	0.483271992	0.906196159
18:04:32	0.843183843	0.490962783	0.906187537	18:04:36	0.844250056	0.50237269	0.906178916
18:04:40	0.845316269	0.517501709	0.906170294	18:04:44	0.846382482	0.532630728	0.906161673
18:04:48	0.847448695	0.539386985	0.906153051	18:04:52	0.848514908	0.546143244	0.90614443
18:04:56	0.849581121	0.554543095	0.906135808	18:05:00	0.850647334	0.564586537	0.906127187
18:05:04	0.85117274	0.574307617	0.906118565	18:05:08	0.851698146	0.592215604	0.906109944
18:05:12	0.852223552	0.610123582	0.906101322	18:05:16	0.852748958	0.622838361	0.906092701
18:05:20	0.853274364	0.633822066	0.906084079	18:05:24	0.85379977	0.644805772	0.906075458
18:05:28	0.854325175	0.659562008	0.906066836	18:05:32	0.854850581	0.674318217	0.906058215
18:05:36	0.855375987	0.686402953	0.906049593	18:05:40	0.855901393	0.695816196	0.906040972
18:05:44	0.856426799	0.705229423	0.906032351	18:05:48	0.856952205	0.711302174	0.906023729
18:05:52	0.857477611	0.717374926	0.906015108	18:05:56	0.858003017	0.722556102	0.906006486
18:06:00	0.858528423	0.727440076	0.905997865	18:06:04	0.858947849	0.732260876	0.905989243
18:06:08	0.859367276	0.740094819	0.905980622	18:06:12	0.859786702	0.747928779	0.905972
18:06:16	0.860206128	0.759333072	0.905963379	18:06:20	0.860625555	0.774307732	0.905954757
18:06:24	0.861044981	0.789282374	0.905946136	18:06:28	0.861464408	0.806430564	0.905937514
18:06:32	0.861883834	0.823578753	0.905928893	18:06:36	0.861986735	0.833064549	0.905491407
18:06:40	0.861694393	0.83484096	0.904524492	18:06:44	0.861398786	0.83661546	0.903557578
18:06:48	0.861103179	0.826758556	0.902590663	18:06:52	0.860807572	0.816901617	0.901623749
18:06:56	0.860511965	0.802109128	0.900656835	18:07:00	0.860216358	0.782381072	0.89968992
18:07:04	0.860159086	0.762795084	0.898723006	18:07:08	0.860101815	0.750506925	0.897756091
18:07:12	0.860044543	0.738218783	0.896789177	18:07:16	0.859987272	0.727624542	0.895822263
18:07:20	0.85993	0.7187242	0.894855348	18:07:24	0.859872729	0.709823858	0.893888434
18:07:28	0.859815457	0.698208519	0.892921519	18:07:32	0.859758185	0.686593162	0.891954605
18:07:36	0.859700914	0.669827996	0.890987691	18:07:40	0.859643642	0.647912993	0.890020776
18:07:44	0.859586371	0.625998	0.889053862	18:07:48	0.859529099	0.602746656	0.888086947
18:07:52	0.859471828	0.579495317	0.887120033	18:07:56	0.859414556	0.554432245	0.886153118
18:08:00	0.859357284	0.527557441	0.885186204	18:08:04	0.859103421	0.500565453	0.88421929
18:08:08	0.858849559	0.472123633	0.883252375	18:08:12	0.858595696	0.443681816	0.882285461
18:08:16	0.858341833	0.422793995	0.881318546	18:08:20	0.85808797	0.404424178	0.880351632
18:08:24	0.857834107	0.386054362	0.879384718	18:08:28	0.857580244	0.376121455	0.878417803
18:08:32	0.857326381	0.36618854	0.877450889	18:08:36	0.857072518	0.355815327	0.876483974
18:08:40	0.856818655	0.345001824	0.87551706	18:08:44	0.856564792	0.334188321	0.874550146
18:08:48	0.856310929	0.304312582	0.873583231	18:08:52	0.855260273	0.27396187	0.87153673
18:08:56	0.853437646	0.260465222	0.868444273	18:09:00	0.851615018	0.252739952	0.865351815
18:09:04	0.849703491	0.244961709	0.862259358	18:09:08	0.847791963	0.216326444	0.859166901
18:09:12	0.845880436	0.187691179	0.856074443	18:09:16	0.843968909	0.166699479	0.852981986
18:09:20	0.842057381	0.153351362	0.849889529	18:09:24	0.840145854	0.140003245	0.846797071
18:09:28	0.838234327	0.126655128	0.843704614	18:09:32	0.83664045	0.113496358	0.841042546
18:09:36	0.837839721	0.109669181	0.842164957	18:09:40	0.839038992	0.113508611	0.843287368
18:09:44	0.840238264	0.11734804	0.844409779	18:09:48	0.841437535	0.132840048	0.845532189
18:09:52	0.842636806	0.148332092	0.8466546	18:09:56	0.843836077	0.157594339	0.847777011
18:10:00	0.845035348	0.164780035	0.848899422	18:10:04	0.846227984	0.171961774	0.850021833
18:10:08	0.847420619	0.186792142	0.851144243	18:10:12	0.848613254	0.20162251	0.852266654
18:10:16	0.84980589	0.217551447	0.853389065	18:10:20	0.850998525	0.234578972	0.854511476
18:10:24	0.852191161	0.251606513	0.855633887	18:10:28	0.853383796	0.266314589	0.856756297
18:10:32	0.854583984	0.281027185	0.857878708	18:10:36	0.855785408	0.298048419	0.859001119
18:10:40	0.856986833	0.317377572	0.86012353	18:10:44	0.858188258	0.336706725	0.86124594
18:10:48	0.859389682	0.363363071	0.862368351	18:10:52	0.860591107	0.390019427	0.863490762
18:10:56	0.861792531	0.416213127	0.864613173	18:11:00	0.862993956	0.442252608	0.865735584
18:11:04	0.864070112	0.468217423	0.866857994	18:11:08	0.865146268	0.496844869	0.867980405

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
18:11:12	0.866222425	0.525472316	0.869102816	18:11:16	0.867298581	0.538349917	0.870225227
18:11:20	0.868374737	0.545977571	0.871347638	18:11:24	0.869450894	0.553605225	0.872470048
18:11:28	0.87052705	0.567547168	0.873592459	18:11:32	0.871603206	0.581489112	0.87471487
18:11:36	0.872679363	0.599607422	0.875837281	18:11:40	0.873755519	0.621902094	0.876959692
18:11:44	0.874831675	0.644196765	0.878082102	18:11:48	0.875907832	0.671118884	0.879204513
18:11:52	0.876983988	0.698041003	0.880326924	18:11:56	0.878060144	0.721498312	0.881449335
18:12:00	0.8791363	0.741490812	0.882571745	18:12:04	0.880126493	0.761432069	0.883694156
18:12:08	0.881116686	0.777702696	0.884816567	18:12:12	0.882106879	0.793973322	0.885938978
18:12:16	0.883097071	0.805646763	0.887061389	18:12:20	0.884087264	0.812722983	0.888183799
18:12:24	0.885077457	0.819799221	0.88930621	18:12:28	0.88606765	0.831460813	0.890428621
18:12:32	0.887057842	0.843122369	0.891551032	18:12:36	0.888048035	0.854783961	0.892673443
18:12:40	0.889038228	0.866445517	0.893795853	18:12:44	0.890028421	0.876595013	0.894918264
18:12:48	0.891018613	0.882208257	0.896040675	18:12:52	0.892008806	0.887821465	0.897163086
18:12:56	0.892998999	0.89272142	0.898285497	18:13:00	0.893989192	0.896908123	0.899407907
18:13:04	0.895214418	0.901234925	0.900530318	18:13:08	0.896439644	0.905561728	0.901652729
18:13:12	0.89766487	0.90988853	0.90277514	18:13:16	0.899677914	0.921092205	0.904964978
18:13:20	0.901759923	0.938744255	0.907248257	18:13:24	0.903841932	0.95639634	0.909531536
18:13:28	0.905923941	0.972706338	0.911814815	18:13:32	0.90800595	0.9890163	0.914098094
18:13:36	0.910087959	0.997737039	0.916381373	18:13:40	0.912169968	0.998868519	0.918664652
18:13:44	0.914251977	1	0.920947931	18:13:48	0.916333986	0.988301351	0.92323121
18:13:52	0.918415995	0.976602701	0.925514489	18:13:56	0.920498005	0.961948965	0.927797768
18:14:00	0.922580014	0.944340106	0.930081047	18:14:04	0.924033093	0.926356351	0.932364326
18:14:08	0.925486172	0.910052143	0.934647605	18:14:12	0.926939251	0.893747899	0.936930884
18:14:16	0.92839233	0.886557053	0.939214163	18:14:20	0.929848623	0.888481523	0.941497442
18:14:24	0.93132264	0.890416522	0.943780721	18:14:28	0.932684715	0.880298522	0.945912327
18:14:32	0.933618445	0.869925194	0.947463563	18:14:36	0.934552175	0.864804638	0.949014799
18:14:40	0.935485904	0.864936822	0.950566035	18:14:44	0.936419634	0.865069005	0.952117271
18:14:48	0.937353364	0.866664538	0.953668507	18:14:52	0.938287094	0.868260106	0.955219743
18:14:56	0.939220824	0.868278595	0.956770979	18:15:00	0.440154554	0.366720076	0.458322214
18:15:04	0.441292139	0.365283036	0.45987345	18:15:08	0.442429724	0.355426274	0.461424686
18:15:12	0.943567309	0.845569529	0.962975922	18:15:16	0.944704894	0.835712766	0.964527158
18:15:20	0.945842479	0.825856022	0.966078394	18:15:24	0.946980064	0.815999259	0.96762963
18:15:28	0.947204536	0.803242853	0.967943674	18:15:32	0.946163316	0.789731988	0.966542814
18:15:36	0.945122096	0.776503244	0.965141955	18:15:40	0.944080877	0.763556639	0.963741095
18:15:44	0.943039657	0.750610034	0.962340235	18:15:48	0.941998437	0.722608288	0.960939376
18:15:52	0.9409657218	0.69460656	0.959538516	18:15:56	0.939915998	0.668036383	0.958137656
18:16:00	0.938874779	0.641943392	0.956736797	18:16:04	0.937383865	0.615582341	0.955335937
18:16:08	0.935892952	0.591285913	0.953935078	18:16:12	0.934402038	0.566989484	0.952534218
18:16:16	0.932911125	0.546759722	0.951133358	18:16:20	0.931420212	0.530596627	0.949732499
18:16:24	0.929929298	0.514433532	0.948331639	18:16:28	0.928438385	0.51295999	0.946930779
18:16:32	0.926947471	0.511486452	0.94552992	18:16:36	0.925456558	0.505392022	0.94412906
18:16:40	0.923965645	0.4946767	0.9427282	18:16:44	0.922474731	0.483961378	0.941327341
18:16:48	0.920983818	0.467336912	0.939926481	18:16:52	0.919492905	0.450712459	0.938525622
18:16:56	0.918001991	0.436604501	0.937124762	18:17:00	0.916511078	0.425013055	0.935723902
18:17:04	0.916183586	0.414115106	0.934323043	18:17:08	0.915856094	0.394027211	0.932922183
18:17:12	0.915528603	0.373939315	0.931521323	18:17:16	0.915201111	0.36172351	0.930120464
18:17:20	0.914873619	0.357379813	0.928719604	18:17:24	0.914546127	0.353036116	0.927318744
18:17:28	0.914218636	0.34007144	0.925917885	18:17:32	0.913891144	0.327106763	0.924517025
18:17:36	0.913563652	0.309137842	0.923116166	18:17:40	0.913236161	0.28616471	0.921715306
18:17:44	0.912908669	0.26319156	0.920314446	18:17:48	0.91257742	0.24341936	0.918913587
18:17:52	0.912245493	0.223646756	0.917512727	18:17:56	0.911913567	0.205734826	0.916111867
18:18:00	0.91158164	0.189683536	0.914711008	18:18:04	0.909743757	0.172734569	0.913310148
18:18:08	0.907905874	0.16247657	0.911909289	18:18:12	0.90567326	0.151983314	0.909973603
18:18:16	0.902758406	0.135895524	0.907113539	18:18:20	0.899843551	0.114619907	0.904253475
18:18:24	0.896928697	0.093344291	0.901393412	18:18:28	0.894013843	0.104444809	0.898533348
18:18:32	0.891098989	0.115545327	0.895673284	18:18:36	0.888184134	0.112628216	0.89281322
18:18:40	0.88526928	0.095693475	0.889953157	18:18:44	0.882354426	0.078758699	0.887093093

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	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
18:18:48	0.879439572	0.071935734	0.884233029	18:18:52	0.876524718	0.065112769	0.881372965
18:18:56	0.873609863	0.059978587	0.878512902	18:19:00	0.870695009	0.055407334	0.875652838
18:19:04	0.869030265	0.051581216	0.873331762	18:19:08	0.868764364	0.06041734	0.872905998
18:19:12	0.868498462	0.0692535	0.872480234	18:19:16	0.86823256	0.082637245	0.872054471
18:19:20	0.867966658	0.100568649	0.871628707	18:19:24	0.867700756	0.118500052	0.871202943
18:19:28	0.867434854	0.144061217	0.870777179	18:19:32	0.867168952	0.169622346	0.870351415
18:19:36	0.866903051	0.189205334	0.869925652	18:19:40	0.866637149	0.202810143	0.869499888
18:19:44	0.866371247	0.216414953	0.869074124	18:19:48	0.866105345	0.232239516	0.86864836
18:19:52	0.865839443	0.248064079	0.868222597	18:19:56	0.865573541	0.267565011	0.867796833
18:20:00	0.86530764	0.290742313	0.867371069	18:20:04	0.862300033	0.312285309	0.866945305
18:20:08	0.859292427	0.337043628	0.866519541	18:20:12	0.856284821	0.361801929	0.866093778
18:20:16	0.853277214	0.380271357	0.865668014	18:20:20	0.850269608	0.392451903	0.86524225
18:20:24	0.847262002	0.404632439	0.864816486	18:20:28	0.844254395	0.404899265	0.864390722
18:20:32	0.841246789	0.40516609	0.863964959	18:20:36	0.838239183	0.404373624	0.863539195
18:20:40	0.835231577	0.402521849	0.863113431	18:20:44	0.83222397	0.400670074	0.862687667
18:20:48	0.829216364	0.406083795	0.862261904	18:20:52	0.826208758	0.411497508	0.86183614
18:20:56	0.823201151	0.416911225	0.861410376	18:21:00	0.820193545	0.422324943	0.860984612
18:21:04	0.821306313	0.430194751	0.860558848	18:21:08	0.82241908	0.442932607	0.860133085
18:21:12	0.823531867	0.455670477	0.859707321	18:21:16	0.824644672	0.466412151	0.859281557
18:21:20	0.825757477	0.47515762	0.858855793	18:21:24	0.826870281	0.483903091	0.858430029
18:21:28	0.827983086	0.482908877	0.858004266	18:21:32	0.82909589	0.481914665	0.857578502
18:21:36	0.830208695	0.480920452	0.857152738	18:21:40	0.8313215	0.47992624	0.856726974
18:21:44	0.832434304	0.478932026	0.856301211	18:21:48	0.833547109	0.472921166	0.855875447
18:21:52	0.834659913	0.466910304	0.855449683	18:21:56	0.835772718	0.461930108	0.855023919
18:22:00	0.836885523	0.457980576	0.854598155	18:22:04	0.835763815	0.452699085	0.852649423
18:22:08	0.834493576	0.45126981	0.850499442	18:22:12	0.833223336	0.449840534	0.84834946
18:22:16	0.831953096	0.448035469	0.846199479	18:22:20	0.830682857	0.445854622	0.844049497
18:22:24	0.829412617	0.443673775	0.841899516	18:22:28	0.828142377	0.444462281	0.839749535
18:22:32	0.826872137	0.445250786	0.837599553	18:22:36	0.825601898	0.446039292	0.835449572
18:22:40	0.824331658	0.446827797	0.83329959	18:22:44	0.823061418	0.447616302	0.831149609
18:22:48	0.821791178	0.455576003	0.828999627	18:22:52	0.820520939	0.463535704	0.826849646
18:22:56	0.819250699	0.463793429	0.824699665	18:23:00	0.818045393	0.456387884	0.822637663
18:23:04	0.817753997	0.449527105	0.821357158	18:23:08	0.817462601	0.451739596	0.820076653
18:23:12	0.817171205	0.453952088	0.818796148	18:23:16	0.816879809	0.454871018	0.817515643
18:23:20	0.816588413	0.454496387	0.816235138	18:23:24	0.816297017	0.454121756	0.814954633
18:23:28	0.816005621	0.454978004	0.813674128	18:23:32	0.815714225	0.455834249	0.812393623
18:23:36	0.815422829	0.454329925	0.811113118	18:23:40	0.815131433	0.450465032	0.809832613
18:23:44	0.814840037	0.446600139	0.808552108	18:23:48	0.814548641	0.431908035	0.807271603
18:23:52	0.814257245	0.417215931	0.805991098	18:23:56	0.813965849	0.407084243	0.804710593
18:24:00	0.813674453	0.401512982	0.803430088	18:24:04	0.8131634	0.395810777	0.802149583
18:24:08	0.812652348	0.39920419	0.800869078	18:24:12	0.812141295	0.402597602	0.799588573
18:24:16	0.811630242	0.400928908	0.798308068	18:24:20	0.81111919	0.394198119	0.797027563
18:24:24	0.810608137	0.38746732	0.795747058	18:24:28	0.810097085	0.377949258	0.794466553
18:24:32	0.809586032	0.368431196	0.793186049	18:24:36	0.809073557	0.359400068	0.791905544
18:24:40	0.808556091	0.350853758	0.790625039	18:24:44	0.808038626	0.34230744	0.789344534
18:24:48	0.80752116	0.346345325	0.788064029	18:24:52	0.807003695	0.350383211	0.786783524
18:24:56	0.80648623	0.355377983	0.785503019	18:25:00	0.805968764	0.36132966	0.784222514
18:25:04	0.805519627	0.367322067	0.782942009	18:25:08	0.80507049	0.378739431	0.781661504
18:25:12	0.804621352	0.390156787	0.780380999	18:25:16	0.804172215	0.404274946	0.779100494
18:25:20	0.802856486	0.420577342	0.776645831	18:25:24	0.800999246	0.436556951	0.773457466
18:25:28	0.799142006	0.432478626	0.770269101	18:25:32	0.797284766	0.428400305	0.767080736
18:25:36	0.795427526	0.43063222	0.763892371	18:25:40	0.793570286	0.439174373	0.760704007
18:25:44	0.791713046	0.447716527	0.757515642	18:25:48	0.791993748	0.463373296	0.757224008
18:25:52	0.793104392	0.479524779	0.758056873	18:25:56	0.794215035	0.494611124	0.758889738
18:26:00	0.795325678	0.508632333	0.759722604	18:26:04	0.796001616	0.522394418	0.760555469
18:26:08	0.796677553	0.513956503	0.761388334	18:26:12	0.797353491	0.505518589	0.762221199
18:26:16	0.798029429	0.494670242	0.763054064	18:26:20	0.798705367	0.481411464	0.76388693

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
18:26:24	0.799381304	0.468152686	0.764719795	18:26:28	0.800057242	0.475217628	0.76555266
18:26:32	0.80073318	0.482282571	0.766385525	18:26:36	0.801409118	0.491374668	0.76721839
18:26:40	0.802085055	0.502493918	0.768051256	18:26:44	0.802760993	0.513613169	0.768884121
18:26:48	0.803436931	0.519894871	0.769716986	18:26:52	0.804112868	0.526176576	0.770549851
18:26:56	0.804788806	0.527003695	0.771382717	18:27:00	0.805464744	0.526012624	0.772215582
18:27:04	0.80674614	0.525382452	0.773048447	18:27:08	0.808027535	0.526630214	0.773881312
18:27:12	0.809308931	0.527877976	0.774714177	18:27:16	0.810590327	0.527268345	0.775547043
18:27:20	0.811871723	0.526039578	0.776379908	18:27:24	0.813153119	0.524810812	0.777212773
18:27:28	0.814434515	0.537808325	0.778045638	18:27:32	0.81571591	0.550805839	0.778878503
18:27:36	0.81705921	0.554048775	0.779711369	18:27:40	0.818522371	0.547571689	0.780544234
18:27:44	0.819985532	0.541094604	0.781377099	18:27:48	0.821448693	0.530567748	0.782209964
18:27:52	0.822911854	0.520040897	0.783042829	18:27:56	0.824375015	0.500783657	0.783875695
18:28:00	0.825838176	0.472796034	0.78470856	18:28:04	0.826770468	0.447335861	0.785541425
18:28:08	0.82770276	0.430407375	0.78637429	18:28:12	0.828635052	0.413478893	0.787207156
18:28:16	0.829567344	0.405102703	0.788040021	18:28:20	0.830499636	0.405278805	0.788872886
18:28:24	0.831431928	0.405454916	0.789705751	18:28:28	0.83236422	0.401104608	0.790538616
18:28:32	0.833296512	0.396754299	0.791371482	18:28:36	0.834228805	0.399748185	0.792204347
18:28:40	0.835161097	0.410086274	0.793037212	18:28:44	0.836093389	0.420424363	0.793870077
18:28:48	0.837025681	0.430762448	0.794702942	18:28:52	0.837957973	0.441100537	0.795535808
18:28:56	0.838890265	0.453818426	0.796368673	18:29:00	0.839822557	0.467329579	0.797201538
18:29:04	0.841083796	0.481036813	0.798034403	18:29:08	0.842345035	0.491042868	0.798867269
18:29:12	0.843606275	0.501048923	0.799700134	18:29:16	0.844867514	0.513165944	0.800532999
18:29:20	0.846128753	0.527393934	0.801365864	18:29:24	0.847389993	0.541621922	0.802198729
18:29:28	0.848651232	0.546606614	0.803031595	18:29:32	0.849912471	0.551591313	0.80386446
18:29:36	0.851173711	0.555513482	0.804697325	18:29:40	0.852736244	0.558552733	0.80553019
18:29:44	0.855658144	0.562402281	0.806363055	18:29:48	0.858580045	0.56254859	0.807195921
18:29:52	0.861501946	0.5626949	0.808028786	18:29:56	0.864423846	0.562841209	0.808861651
18:30:00	1.367345747	1.062987519	1.309694516	18:30:04	1.370704108	1.063393996	1.310558398
18:30:08	1.374062741	1.066332815	1.311422646	18:30:12	0.877421374	0.569271635	0.812286895
18:30:16	0.880780006	0.575947881	0.813151144	18:30:20	0.884138639	0.586361563	0.814015393
18:30:24	0.887497272	0.596775241	0.814879642	18:30:28	0.889389415	0.598348661	0.815743891
18:30:32	0.890237055	0.599299469	0.816668139	18:30:36	0.891084695	0.596556272	0.817472388
18:30:40	0.891932335	0.590119078	0.818336637	18:30:44	0.892779975	0.582546609	0.819200886
18:30:48	0.893627615	0.571568321	0.820065135	18:30:52	0.894475255	0.560590039	0.820929384
18:30:56	0.895322895	0.551307686	0.821793632	18:31:00	0.896170535	0.543721266	0.822657881
18:31:04	0.896802011	0.536005995	0.82352213	18:31:08	0.897433486	0.521690656	0.824386379
18:31:12	0.898064961	0.507375314	0.825250628	18:31:16	0.898696437	0.49140157	0.826114877
18:31:20	0.899327912	0.473769415	0.826979125	18:31:24	0.899959387	0.456137265	0.827843374
18:31:28	0.900590863	0.442392436	0.828707623	18:31:32	0.901222338	0.428647607	0.829571872
18:31:36	0.901853813	0.416185753	0.830436121	18:31:40	0.902485289	0.405006875	0.83130037
18:31:44	0.903116764	0.393828006	0.832164618	18:31:48	0.903748239	0.39165736	0.833028867
18:31:52	0.904379715	0.389486723	0.833893116	18:31:56	0.90501119	0.387316086	0.834757365
18:32:00	0.905642665	0.385145431	0.835621614	18:32:04	0.904526704	0.381933175	0.836485863
18:32:08	0.903410743	0.378720918	0.837350112	18:32:12	0.902294782	0.375508661	0.83821436
18:32:16	0.901178821	0.375905481	0.839078609	18:32:20	0.90006286	0.379911396	0.839942858
18:32:24	0.899978693	0.384532347	0.840411696	18:32:28	0.899950364	0.396380292	0.840702609
18:32:32	0.899922034	0.408228228	0.840993521	18:32:36	0.899893705	0.415836378	0.841284433
18:32:40	0.899865376	0.419204724	0.841575345	18:32:44	0.899837046	0.422573079	0.841866257
18:32:48	0.899808717	0.432798174	0.842157169	18:32:52	0.899780387	0.443023269	0.842448081
18:32:56	0.899752058	0.448484306	0.842738993	18:33:00	0.899723729	0.449181267	0.843029905
18:33:04	0.901063385	0.453087279	0.843320817	18:33:08	0.902403042	0.46417414	0.843611729
18:33:12	0.903742699	0.475261005	0.843902641	18:33:16	0.905082355	0.484777496	0.844193553
18:33:20	0.906422012	0.49272362	0.844484465	18:33:24	0.907761669	0.500669743	0.844775377
18:33:28	0.909101325	0.496660768	0.84506629	18:33:32	0.910440982	0.492651793	0.845357202
18:33:36	0.911780638	0.49195883	0.845648114	18:33:40	0.913120295	0.494581871	0.845939026
18:33:44	0.914459952	0.497204913	0.846229938	18:33:48	0.915799608	0.494548	0.84652085
18:33:52	0.917139265	0.491891088	0.846811762	18:33:56	0.918478922	0.495672045	0.847102674

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
18:34:00	0.919626093	0.505776136	0.847393586	18:34:04	0.919618315	0.51519178	0.847684498
18:34:08	0.919610537	0.513569238	0.84797541	18:34:12	0.919602759	0.511946697	0.848266322
18:34:16	0.919594981	0.516391817	0.848557234	18:34:20	0.919587203	0.526904597	0.848848146
18:34:24	0.919579425	0.537417378	0.849139058	18:34:28	0.919571646	0.555930201	0.84942997
18:34:32	0.919563868	0.574443023	0.849720883	18:34:36	0.91955609	0.590022858	0.850011795
18:34:40	0.919548312	0.602669701	0.850302707	18:34:44	0.919540534	0.615316544	0.850593619
18:34:48	0.919532756	0.61684982	0.850884531	18:34:52	0.919524978	0.618383096	0.851175443
18:34:56	0.919517199	0.618346683	0.851466355	18:35:00	0.919509421	0.616740576	0.851757267
18:35:04	0.919435583	0.615251044	0.852048179	18:35:08	0.919361744	0.614229367	0.852339091
18:35:12	0.919287905	0.613207686	0.852630003	18:35:16	0.919214067	0.61218601	0.852920915
18:35:20	0.919140228	0.619601985	0.853211827	18:35:24	0.919066389	0.627017955	0.853502739
18:35:28	0.918992551	0.628604563	0.853793651	18:35:32	0.918918712	0.63019118	0.854084564
18:35:36	0.918844874	0.62856355	0.854375476	18:35:40	0.918771035	0.625864494	0.854666388
18:35:44	0.918697196	0.62219124	0.8549573	18:35:48	0.918295657	0.6154	0.854804205
18:35:52	0.917868251	0.60859335	0.854616064	18:35:56	0.917440845	0.598807058	0.854427922
18:36:00	0.91701344	0.58802755	0.854239781	18:36:04	0.918198941	0.581318339	0.854051639
18:36:08	0.919384443	0.583935721	0.853863498	18:36:12	0.920569945	0.586553102	0.853675357
18:36:16	0.921755447	0.584928684	0.853487215	18:36:20	0.922940949	0.581890333	0.853299074
18:36:24	0.924126451	0.579715305	0.853110932	18:36:28	0.925311952	0.580130241	0.852922791
18:36:32	0.926497454	0.580545179	0.852734649	18:36:36	0.928106563	0.584300004	0.852546508
18:36:40	0.929944954	0.58922063	0.852358366	18:36:44	0.931783346	0.596323681	0.852170225
18:36:48	0.933621738	0.60997402	0.851982084	18:36:52	0.93546013	0.623624358	0.851793942
18:36:56	0.937298522	0.635023989	0.851605801	18:37:00	0.939136914	0.645673381	0.851417659
18:37:04	0.939331681	0.652835226	0.851229518	18:37:08	0.939526448	0.652473639	0.851041376
18:37:12	0.939721215	0.652112053	0.850853235	18:37:16	0.939915982	0.660947066	0.850665093
18:37:20	0.940110748	0.67284761	0.850476952	18:37:24	0.940305515	0.678995259	0.850288811
18:37:28	0.940500282	0.667884252	0.850100669	18:37:32	0.940695049	0.656773244	0.849912528
18:37:36	0.940889816	0.644552022	0.849724386	18:37:40	0.941084583	0.631960726	0.849536245
18:37:44	0.94127935	0.61308804	0.849348103	18:37:48	0.941474117	0.57537119	0.849159962
18:37:52	0.941668883	0.537654338	0.84897182	18:37:56	0.94186365	0.510985175	0.848783679
18:38:00	0.942058417	0.484316018	0.848595538	18:38:04	0.942143713	0.458042833	0.848407396
18:38:08	0.942229008	0.433153348	0.848219255	18:38:12	0.942314304	0.408263864	0.848031113
18:38:16	0.942399599	0.404554364	0.847842972	18:38:20	0.942484894	0.407904841	0.84765483
18:38:24	0.94257019	0.411255318	0.847466689	18:38:28	0.942135085	0.414295601	0.846573449
18:38:32	0.941253045	0.417069464	0.84507465	18:38:36	0.940371004	0.415071897	0.84357585
18:38:40	0.939488964	0.411483847	0.842077051	18:38:44	0.938606924	0.406574601	0.840578252
18:38:48	0.937724884	0.39777018	0.839079453	18:38:52	0.936842844	0.388829	0.837580653
18:38:56	0.935960803	0.387175367	0.836081854	18:39:00	0.935078763	0.387928157	0.834583055
18:39:04	0.934392926	0.386276646	0.833084256	18:39:08	0.933707089	0.377061404	0.831585457
18:39:12	0.933021251	0.367846162	0.830086657	18:39:16	0.932332962	0.363280862	0.828587858
18:39:20	0.931590416	0.360233705	0.827089059	18:39:24	0.93084787	0.361736711	0.82559026
18:39:28	0.930105324	0.367789843	0.824091461	18:39:32	0.929362777	0.373842993	0.822592661
18:39:36	0.928620231	0.383213043	0.821093862	18:39:40	0.927877685	0.393688734	0.819595063
18:39:44	0.927135139	0.40365082	0.818096264	18:39:48	0.926392593	0.413099328	0.816597465
18:39:52	0.925650047	0.422547836	0.815098665	18:39:56	0.9249075	0.43964667	0.813599866
18:40:00	0.924393417	0.4594318	0.812410615	18:40:04	0.925027741	0.468543047	0.811268957
18:40:08	0.925662064	0.466295881	0.810127299	18:40:12	0.926296387	0.464048705	0.808985641
18:40:16	0.926930711	0.45655397	0.807843983	18:40:20	0.927565034	0.447310034	0.806702326
18:40:24	0.928199357	0.446946557	0.805560668	18:40:28	0.92883368	0.45546353	0.80441901
18:40:32	0.929468004	0.463980503	0.803277352	18:40:36	0.930102327	0.481065445	0.802135694
18:40:40	0.93073665	0.501006375	0.800994036	18:40:44	0.931370974	0.52144496	0.799852378
18:40:48	0.932005297	0.543376504	0.79871072	18:40:52	0.93263962	0.565308047	0.797569062
18:40:56	0.933273943	0.581484021	0.796427404	18:41:00	0.933908267	0.595741474	0.795285746
18:41:04	0.933606387	0.608724782	0.794144088	18:41:08	0.933304507	0.619559826	0.793002431
18:41:12	0.933002627	0.63039487	0.791860773	18:41:16	0.932700747	0.638951201	0.790719115
18:41:20	0.932398867	0.646747971	0.789577457	18:41:24	0.932096987	0.653093781	0.788435799
18:41:28	0.931795107	0.655086761	0.787294141	18:41:32	0.931493227	0.65707974	0.786152483

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
18:41:36	0.931191347	0.671385834	0.785010825	18:41:40	0.930957459	0.689836831	0.78396129
18:41:44	0.930930176	0.702638521	0.783191688	18:41:48	0.930902894	0.698122814	0.782422087
18:41:52	0.930875611	0.693607108	0.781652485	18:41:56	0.930848329	0.686546927	0.780882884
18:42:00	0.930821046	0.67863858	0.780113282	18:42:04	0.929746292	0.668473488	0.77934368
18:42:08	0.928671537	0.653411298	0.778574079	18:42:12	0.927596782	0.638349099	0.777804477
18:42:16	0.926522027	0.627740627	0.777034876	18:42:20	0.925447272	0.618616741	0.776265274
18:42:24	0.924372517	0.61004064	0.775495673	18:42:28	0.923297762	0.603107897	0.774726071
18:42:32	0.922223007	0.596175155	0.773956469	18:42:36	0.921148252	0.587261461	0.773186868
18:42:40	0.920073497	0.577687447	0.772417266	18:42:44	0.918998742	0.567069135	0.771647665
18:42:48	0.918042595	0.553388623	0.770878063	18:42:52	0.917146048	0.539743639	0.770108462
18:42:56	0.9162495	0.530778812	0.76933886	18:43:00	0.915352953	0.523374038	0.768569258
18:43:04	0.915362488	0.516339497	0.767799657	18:43:08	0.915372023	0.508795355	0.767030055
18:43:12	0.915381558	0.501251209	0.766260454	18:43:16	0.915391092	0.49295324	0.765490852
18:43:20	0.915400627	0.484403994	0.764721251	18:43:24	0.915410162	0.476295592	0.763951649
18:43:28	0.915419697	0.469509732	0.763182048	18:43:32	0.915429232	0.462723863	0.762412446
18:43:36	0.915438766	0.454281507	0.761642844	18:43:40	0.915448301	0.445286997	0.760873243
18:43:44	0.916045323	0.437399802	0.760899636	18:43:48	0.916900159	0.431937672	0.761275346
18:43:52	0.917754995	0.42647555	0.761651056	18:43:56	0.918609831	0.436084212	0.762026766
18:44:00	0.919464667	0.445692883	0.762402475	18:44:04	0.920156683	0.456928989	0.762778185
18:44:08	0.920848698	0.473338622	0.763153895	18:44:12	0.921540714	0.489748249	0.763529605
18:44:16	0.92223273	0.501890538	0.763905315	18:44:20	0.922924746	0.512610376	0.764281025
18:44:24	0.923616761	0.521302983	0.764656735	18:44:28	0.924308777	0.5239139	0.765032445
18:44:32	0.925000793	0.526524818	0.765408154	18:44:36	0.925692809	0.532598333	0.765783864
18:44:40	0.926384824	0.539826049	0.766159574	18:44:44	0.92707684	0.546525441	0.766535284
18:44:48	0.927705375	0.55160202	0.766910994	18:44:52	0.92808094	0.556527807	0.767286704
18:44:56	0.928456505	0.567491643	0.767662414	18:45:00	0.428832071	0.080468162	0.268038124
18:45:04	0.429496939	0.091752737	0.268413833	18:45:08	0.430161808	0.097444135	0.268789543
18:45:12	0.930826677	0.603135534	0.769165253	18:45:16	0.931491546	0.609787696	0.769540963
18:45:20	0.932156414	0.616760107	0.769916673	18:45:24	0.932821283	0.622706598	0.770292383
18:45:28	0.933486152	0.625575336	0.770668093	18:45:32	0.934151021	0.628444074	0.771043803
18:45:36	0.934815889	0.63238501	0.771419513	18:45:40	0.935480758	0.637398134	0.771795222
18:45:44	0.936145627	0.642411258	0.772170932	18:45:48	0.936810496	0.641882515	0.772546642
18:45:52	0.937475364	0.641353781	0.772922352	18:45:56	0.938140233	0.64502511	0.773298062
18:46:00	0.938805102	0.652896513	0.773673772	18:46:04	0.940104014	0.661145859	0.774049482
18:46:08	0.941402926	0.670863795	0.774425192	18:46:12	0.942701838	0.680581732	0.774800901
18:46:16	0.94400075	0.685133248	0.775176611	18:46:20	0.945299662	0.684518355	0.775552321
18:46:24	0.946598574	0.683903461	0.775928031	18:46:28	0.947897487	0.668047722	0.776303741
18:46:32	0.949196399	0.652191984	0.776679451	18:46:36	0.950495311	0.635424095	0.777055161
18:46:40	0.951794223	0.617744059	0.777430871	18:46:44	0.953093135	0.600064021	0.777806581
18:46:48	0.954392047	0.579764672	0.77818229	18:46:52	0.955690959	0.559465323	0.778558
18:46:56	0.956989871	0.545332361	0.77893371	18:47:00	0.958288783	0.537365785	0.77930942
18:47:04	0.958779286	0.528917328	0.77968513	18:47:08	0.959269788	0.53032897	0.78006084
18:47:12	0.95976029	0.531740611	0.78043655	18:47:16	0.960250793	0.531436062	0.78081226
18:47:20	0.960741295	0.529415315	0.781187969	18:47:24	0.961171595	0.527358685	0.78148211
18:47:28	0.960987486	0.52117928	0.780943779	18:47:32	0.960803378	0.514999874	0.780405449
18:47:36	0.960619269	0.514531994	0.779867119	18:47:40	0.960435161	0.519775638	0.779328788
18:47:44	0.960251053	0.525019283	0.778790458	18:47:48	0.960066944	0.530262927	0.778252127
18:47:52	0.959882836	0.535506574	0.777713797	18:47:56	0.959698728	0.545380293	0.777175467
18:48:00	0.959514619	0.559884089	0.776637136	18:48:04	0.959417748	0.574439885	0.776098806
18:48:08	0.959320877	0.576109411	0.775560476	18:48:12	0.959224006	0.577778936	0.775022145
18:48:16	0.959127135	0.581130107	0.774483815	18:48:20	0.959030265	0.586162925	0.773945484
18:48:24	0.958933394	0.591195743	0.773407154	18:48:28	0.958836523	0.596228559	0.772868824
18:48:32	0.958739652	0.601261376	0.772330493	18:48:36	0.958642781	0.60822933	0.771792163
18:48:40	0.95854591	0.617132425	0.771253833	18:48:44	0.958449039	0.626035517	0.770715502
18:48:48	0.958352168	0.620107446	0.770177172	18:48:52	0.958255297	0.61417937	0.769638841
18:48:56	0.958158426	0.612864974	0.769100511	18:49:00	0.958061555	0.616164253	0.768562181
18:49:04	0.957898226	0.619423918	0.76802385	18:49:08	0.957734897	0.632874304	0.76748552

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
18:49:12	0.957571568	0.646324685	0.76694719	18:49:16	0.957408239	0.650715713	0.766408859
18:49:20	0.958378808	0.652762844	0.767406864	18:49:24	0.959429152	0.654857528	0.768512957
18:49:28	0.960479495	0.655779679	0.76961905	18:49:32	0.961529838	0.65670183	0.770725142
18:49:36	0.962580182	0.657036316	0.771831235	18:49:40	0.963630525	0.656783119	0.772937328
18:49:44	0.964680868	0.65652993	0.77404342	18:49:48	0.965731212	0.659026895	0.775149513
18:49:52	0.966781555	0.66152387	0.776255606	18:49:56	0.967831899	0.670990212	0.777361698
18:50:00	0.968882242	0.68742594	0.778467791	18:50:04	0.970992706	0.704493581	0.779573884
18:50:08	0.97310317	0.717242853	0.780679976	18:50:12	0.975213635	0.729992126	0.781786069
18:50:16	0.977410441	0.743719109	0.782892162	18:50:20	0.979720016	0.758439553	0.783998254
18:50:24	0.98202959	0.773159998	0.785104347	18:50:28	0.984339164	0.778656866	0.78621044
18:50:32	0.986648738	0.784153735	0.787316532	18:50:36	0.988958312	0.792880902	0.788422625
18:50:40	0.991267886	0.804838384	0.789528718	18:50:44	0.99357746	0.816795867	0.79063481
18:50:48	0.995887035	0.83610703	0.791740903	18:50:52	0.998196609	0.855418211	0.792846996
18:50:56	0.999846298	0.876902547	0.793059	18:51:00	1	0.900061686	0.791244069
18:51:04	0.998889401	0.922467176	0.789429138	18:51:08	0.997778802	0.934264226	0.787614207
18:51:12	0.996668203	0.946061276	0.785799276	18:51:16	0.995557604	0.951674682	0.783984345
18:51:20	0.994447005	0.951104444	0.782169414	18:51:24	0.993336406	0.950534205	0.780354483
18:51:28	0.992225806	0.95342215	0.778539552	18:51:32	0.991115207	0.95631006	0.776724621
18:51:36	0.990004608	0.956690801	0.77490969	18:51:40	0.988894009	0.954564375	0.773094759
18:51:44	0.98778341	0.952437949	0.771279828	18:51:48	0.986672811	0.946932996	0.769464897
18:51:52	0.985562212	0.941428007	0.767649966	18:51:56	0.984451613	0.92859849	0.765835035
18:52:00	0.983341014	0.908444408	0.764020105	18:52:04	0.983112962	0.888816399	0.762205174
18:52:08	0.98288491	0.85380851	0.760390243	18:52:12	0.982656858	0.81880062	0.758575312
18:52:16	0.982428806	0.791204343	0.756760381	18:52:20	0.982723465	0.7663902	0.755653678
18:52:24	0.983353872	0.741776174	0.755001887	18:52:28	0.98398428	0.713930384	0.754350096
18:52:32	0.984614688	0.686084595	0.753698305	18:52:36	0.985245095	0.665604885	0.753046514
18:52:40	0.985875503	0.652491257	0.752394723	18:52:44	0.986505911	0.639377628	0.751742931
18:52:48	0.987136318	0.623769982	0.75109114	18:52:52	0.987557815	0.608037808	0.750439349
18:52:56	0.987969564	0.59401734	0.749787558	18:53:00	0.988381313	0.580569377	0.749135767
18:53:04	0.987542809	0.566376158	0.748483976	18:53:08	0.986704305	0.548667252	0.747832185
18:53:12	0.985865801	0.530958344	0.747180393	18:53:16	0.985027297	0.522354641	0.746528602
18:53:20	0.984188793	0.522856142	0.745876811	18:53:24	0.98335029	0.523357644	0.74522502
18:53:28	0.982511786	0.525523405	0.744573229	18:53:32	0.981673282	0.53268194	0.743921438
18:53:36	0.980834778	0.536718813	0.743269647	18:53:40	0.979996274	0.537634028	0.742617856
18:53:44	0.97915777	0.538549243	0.741966064	18:53:48	0.978319266	0.546875296	0.741314273
18:53:52	0.977480763	0.55520135	0.740662482	18:53:56	0.976642259	0.562794976	0.740010691
18:54:00	0.975803755	0.569656175	0.7393589	18:54:04	0.975465615	0.576815633	0.738707109
18:54:08	0.975127475	0.575930439	0.738055318	18:54:12	0.974789335	0.575045245	0.737403526
18:54:16	0.974451195	0.570159261	0.736751735	18:54:20	0.974113055	0.561272486	0.736099944
18:54:24	0.973774915	0.552385712	0.735448153	18:54:28	0.973436775	0.534882888	0.734796362
18:54:32	0.973098635	0.517380063	0.734144571	18:54:36	0.972760495	0.497187936	0.73349278
18:54:40	0.972422355	0.476099368	0.732840988	18:54:44	0.972084216	0.455010808	0.732189197
18:54:48	0.971746076	0.440154887	0.731537406	18:54:52	0.971512177	0.425361094	0.731026853
18:54:56	0.971729661	0.414622058	0.731127886	18:55:00	0.971947146	0.407668715	0.731228919
18:55:04	0.97162316	0.400392609	0.731329952	18:55:08	0.971299173	0.389430452	0.731430985
18:55:12	0.970975187	0.378468295	0.731532018	18:55:16	0.9706512	0.36170607	0.731633051
18:55:20	0.970327214	0.339143793	0.731734084	18:55:24	0.970003228	0.316581499	0.731835117
18:55:28	0.969679241	0.292861656	0.73193615	18:55:32	0.969355255	0.269141832	0.732037183
18:55:36	0.969031269	0.252132499	0.732138216	18:55:40	0.968707282	0.237359956	0.73223925
18:55:44	0.968383296	0.225294895	0.732340283	18:55:48	0.968059309	0.221352105	0.732441316
18:55:52	0.967735323	0.217409279	0.732542349	18:55:56	0.967411337	0.210210539	0.732643382
18:56:00	0.96708735	0.201926518	0.732744415	18:56:04	0.967463179	0.195745408	0.732845448
18:56:08	0.967839007	0.194621733	0.732946481	18:56:12	0.968214835	0.193498057	0.733047514
18:56:16	0.968590664	0.19010995	0.733148547	18:56:20	0.968966492	0.18596702	0.73324958
18:56:24	0.96934232	0.179264624	0.733350613	18:56:28	0.969718149	0.164883719	0.733451646
18:56:32	0.970093977	0.150502814	0.733552679	18:56:36	0.970469806	0.146734116	0.733653712
18:56:40	0.970845634	0.146502832	0.733754745	18:56:44	0.971221462	0.147819671	0.733855778

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
18:56:48	0.971597291	0.153781056	0.733956811	18:56:52	0.971973119	0.159742405	0.734057845
18:56:56	0.972348947	0.171931136	0.734158878	18:57:00	0.972724776	0.186195671	0.734259911
18:57:04	0.972108522	0.203672762	0.734360944	18:57:08	0.971492269	0.232561543	0.734461977
18:57:12	0.970876015	0.261450324	0.73456301	18:57:16	0.970259762	0.29152966	0.734664043
18:57:20	0.969643508	0.322005876	0.734765076	18:57:24	0.969027255	0.345726656	0.734866109
18:57:28	0.968411002	0.362692018	0.734967142	18:57:32	0.967794748	0.379657379	0.735068175
18:57:36	0.967178495	0.408364196	0.735169208	18:57:40	0.966562241	0.440984817	0.735270241
18:57:44	0.965945988	0.470527001	0.735371274	18:57:48	0.965329734	0.490833858	0.735472307
18:57:52	0.964713481	0.511140711	0.73557334	18:57:56	0.964097227	0.525863456	0.735674373
18:58:00	0.963541822	0.540622474	0.735775406	18:58:04	0.963228355	0.556198034	0.73587644
18:58:08	0.962914889	0.57379058	0.735977473	18:58:12	0.962601422	0.591383125	0.736078506
18:58:16	0.962287955	0.608593984	0.736179539	18:58:20	0.961974488	0.625677615	0.736280572
18:58:24	0.961661021	0.640626253	0.736381605	18:58:28	0.961347554	0.649169917	0.736482638
18:58:32	0.961034087	0.65771358	0.736583671	18:58:36	0.96072062	0.671761903	0.736684704
18:58:40	0.960407153	0.687645116	0.736785737	18:58:44	0.960093686	0.706864974	0.73688677
18:58:48	0.959777223	0.736093013	0.736983744	18:58:52	0.95941323	0.76529272	0.737016318
18:58:56	0.959049237	0.78298081	0.737048892	18:59:00	0.958685244	0.796831725	0.737081467
18:59:04	0.958364101	0.808048611	0.737114041	18:59:08	0.958042958	0.811286872	0.737146615
18:59:12	0.957721816	0.814525133	0.737179189	18:59:16	0.957400673	0.815805191	0.737211763
18:59:20	0.957079531	0.816432485	0.737244337	18:59:24	0.956758388	0.820126819	0.737276911
18:59:28	0.956437246	0.83302222	0.737309485	18:59:32	0.956116103	0.845917622	0.737342059
18:59:36	0.955794961	0.855496692	0.737374633	18:59:40	0.955473818	0.863970299	0.737407208
18:59:44	0.955152676	0.872183103	0.737439782	18:59:48	0.954831533	0.879613443	0.737472356
18:59:52	0.95451039	0.887043783	0.73750493	18:59:56	0.954189248	0.909543848	0.737537504
19:00:00	1.453868105	1.437067133	1.237570078	19:00:04	1.453757133	1.460062054	1.237602652
19:00:08	1.453646161	1.46909591	1.237635226	19:00:12	0.953535189	0.978129765	0.7376678
19:00:16	0.953424216	0.984757285	0.737700374	19:00:20	0.953313244	0.990582694	0.737732949
19:00:24	0.953202272	0.993553385	0.737765523	19:00:28	0.9530913	0.987959856	0.737798097
19:00:32	0.952980327	0.982366326	0.737830671	19:00:36	0.952869355	0.968598973	0.737863245
19:00:40	0.952758383	0.952106976	0.737895819	19:00:44	0.952647411	0.936454007	0.737928393
19:00:48	0.952536438	0.923318082	0.737960967	19:00:52	0.952425466	0.910182157	0.737993541
19:00:56	0.952314494	0.897445121	0.738026115	19:01:00	0.952203522	0.884841107	0.73805869
19:01:04	0.951975435	0.875609834	0.738091264	19:01:08	0.951747348	0.876706283	0.738123838
19:01:12	0.951519261	0.877802768	0.738156412	19:01:16	0.951291174	0.879412298	0.738188986
19:01:20	0.951063087	0.88119283	0.73822156	19:01:24	0.950835	0.881398522	0.738254134
19:01:28	0.950606913	0.87687962	0.738286708	19:01:32	0.950378827	0.872360718	0.738319282
19:01:36	0.95015074	0.86020891	0.738351856	19:01:40	0.949922653	0.845512788	0.73838443
19:01:44	0.949694566	0.830023827	0.738417005	19:01:48	0.949466479	0.81215635	0.738449579
19:01:52	0.949238392	0.794288873	0.738482153	19:01:56	0.949010305	0.781583907	0.738514727
19:02:00	0.94832292	0.77032601	0.737924991	19:02:04	0.947767576	0.757671018	0.737266621
19:02:08	0.947212232	0.740588635	0.736608252	19:02:12	0.946656888	0.723506253	0.735949882
19:02:16	0.946101544	0.699971872	0.735291513	19:02:20	0.9455462	0.674286817	0.734633143
19:02:24	0.944990856	0.650808431	0.733974773	19:02:28	0.944435512	0.633950026	0.733316404
19:02:32	0.943880168	0.617091621	0.732658034	19:02:36	0.943324824	0.600233221	0.731999665
19:02:40	0.94276948	0.583374816	0.731341295	19:02:44	0.942214136	0.567837634	0.730682926
19:02:48	0.941658791	0.556264117	0.730024556	19:02:52	0.941103447	0.5446906	0.729366186
19:02:56	0.940548103	0.540141845	0.728707817	19:03:00	0.939992759	0.537934678	0.728049447
19:03:04	0.939880481	0.534287777	0.727391078	19:03:08	0.939719704	0.525500444	0.726732708
19:03:12	0.939558928	0.516713112	0.726074338	19:03:16	0.939398151	0.525371659	0.725415969
19:03:20	0.939237375	0.539845501	0.724757599	19:03:24	0.939076598	0.554319344	0.72409923
19:03:28	0.938915822	0.56384071	0.72344086	19:03:32	0.938755046	0.568409599	0.722782491
19:03:36	0.938594269	0.567235361	0.722124121	19:03:40	0.938433493	0.564146747	0.721465751
19:03:44	0.938272716	0.561205932	0.720807382	19:03:48	0.93811194	0.55870852	0.720149012
19:03:52	0.937951163	0.556211107	0.719490643	19:03:56	0.937790387	0.565976154	0.718832273
19:04:00	0.937629611	0.579828688	0.718173904	19:04:04	0.93762332	0.595948599	0.717515534
19:04:08	0.93761703	0.618594394	0.716857164	19:04:12	0.937610739	0.641240192	0.716198795
19:04:16	0.937604449	0.653800155	0.715540425	19:04:20	0.937598158	0.662998183	0.714882056

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
19:04:24	0.937591868	0.6700576	0.714223686	19:04:28	0.937585577	0.670701187	0.713565316
19:04:32	0.937579287	0.671344774	0.712906947	19:04:36	0.937572996	0.656819455	0.712248577
19:04:40	0.937566706	0.637237831	0.711590208	19:04:44	0.937244785	0.616648681	0.710504186
19:04:48	0.936382155	0.593279058	0.708685549	19:04:52	0.935519524	0.569909433	0.706866911
19:04:56	0.934656894	0.546944096	0.705048273	19:05:00	0.933794263	0.524113522	0.703229636
19:05:04	0.932366076	0.504756422	0.701410998	19:05:08	0.930937888	0.496831113	0.69959236
19:05:12	0.929509701	0.488905804	0.697773723	19:05:16	0.928081513	0.487206094	0.695955085
19:05:20	0.926653326	0.487581582	0.694136447	19:05:24	0.925225138	0.488789826	0.69231781
19:05:28	0.92379695	0.492496324	0.690499172	19:05:32	0.922368763	0.496202826	0.688680535
19:05:36	0.920940575	0.505104892	0.686861897	19:05:40	0.919512388	0.519202526	0.685043259
19:05:44	0.9180842	0.533300159	0.683224622	19:05:48	0.916656012	0.540714574	0.681405984
19:05:52	0.915227825	0.54812899	0.679587346	19:05:56	0.913799637	0.546064242	0.677768709
19:06:00	0.91237145	0.534520331	0.675950071	19:06:04	0.912430321	0.523862832	0.674779581
19:06:08	0.912736062	0.484231841	0.673943577	19:06:12	0.913041803	0.44460085	0.673107573
19:06:16	0.913347544	0.406237655	0.67227157	19:06:20	0.913653284	0.369142273	0.671435566
19:06:24	0.913959025	0.332046873	0.670599562	19:06:28	0.914264766	0.317257545	0.669763559
19:06:32	0.914570507	0.302468216	0.668927555	19:06:36	0.914876247	0.285038679	0.668091551
19:06:40	0.915181988	0.264968971	0.667255548	19:06:44	0.915487729	0.244899262	0.666419544
19:06:48	0.91579347	0.238837891	0.665583541	19:06:52	0.91609921	0.232776521	0.664747537
19:06:56	0.916404951	0.224290553	0.663911533	19:07:00	0.916710692	0.213379987	0.66307553
19:07:04	0.91629278	0.202038028	0.662239526	19:07:08	0.915874869	0.203705302	0.661403522
19:07:12	0.915456957	0.205372612	0.660567519	19:07:16	0.915039046	0.205446535	0.659731515
19:07:20	0.914621134	0.203927106	0.658895512	19:07:24	0.914203222	0.202407677	0.658059508
19:07:28	0.913785311	0.202266718	0.657223504	19:07:32	0.913367399	0.202125794	0.656387501
19:07:36	0.912949488	0.205656017	0.655551497	19:07:40	0.912531576	0.212857458	0.654715493
19:07:44	0.912113665	0.2200589	0.65387949	19:07:48	0.911695753	0.225363177	0.653043486
19:07:52	0.911277841	0.230667419	0.652207482	19:07:56	0.91085993	0.236882812	0.651371479
19:08:00	0.910442018	0.244009322	0.650535475	19:08:04	0.910338514	0.251323263	0.649699472
19:08:08	0.91023501	0.265204956	0.648863468	19:08:12	0.910129868	0.279085673	0.648027464
19:08:16	0.910001008	0.293652928	0.647191461	19:08:20	0.909872148	0.308453735	0.646355457
19:08:24	0.909743288	0.32325456	0.645519453	19:08:28	0.909614428	0.345769156	0.64468345
19:08:32	0.909485568	0.368283752	0.643847446	19:08:36	0.909356708	0.391173467	0.643011443
19:08:40	0.909227848	0.414438311	0.642175439	19:08:44	0.909098988	0.437703146	0.641339435
19:08:48	0.909203348	0.473525753	0.640819425	19:08:52	0.910837387	0.510260179	0.642372
19:08:56	0.912471425	0.547836362	0.643924574	19:09:00	0.914105464	0.585693131	0.645477148
19:09:04	0.915353722	0.623319941	0.647029723	19:09:08	0.91660198	0.651349889	0.648582297
19:09:12	0.917850239	0.679379838	0.650134872	19:09:16	0.919098497	0.707104562	0.651687446
19:09:20	0.920346755	0.734524071	0.653240021	19:09:24	0.921595013	0.76194358	0.654792595
19:09:28	0.922843272	0.786005542	0.656345169	19:09:32	0.92409153	0.810067505	0.657897744
19:09:36	0.925339788	0.824381016	0.659450318	19:09:40	0.926588046	0.82894604	0.661002893
19:09:44	0.927836305	0.833511064	0.662555467	19:09:48	0.929084563	0.823472614	0.664108042
19:09:52	0.930332821	0.813434164	0.665660616	19:09:56	0.931581079	0.810897962	0.66721319
19:10:00	0.932829337	0.815864006	0.668765765	19:10:04	0.934163883	0.820881467	0.670318339
19:10:08	0.935498429	0.823765139	0.671870914	19:10:12	0.936832975	0.826648828	0.673423488
19:10:16	0.93816752	0.825750128	0.674976062	19:10:20	0.939502066	0.821069074	0.676528637
19:10:24	0.940836612	0.816388021	0.678081211	19:10:28	0.942171157	0.815055382	0.679633786
19:10:32	0.943505703	0.813722726	0.68118636	19:10:36	0.944840249	0.816874965	0.682738935
19:10:40	0.944381171	0.823442911	0.681861301	19:10:44	0.9431251	0.829535782	0.67990381
19:10:48	0.941869029	0.824685437	0.677946319	19:10:52	0.940612959	0.819835092	0.675988828
19:10:56	0.939356888	0.815806044	0.674031337	19:11:00	0.938100817	0.812598294	0.672073846
19:11:04	0.936498716	0.809184281	0.670116355	19:11:08	0.934896616	0.79622405	0.668158864
19:11:12	0.933294515	0.783263819	0.666201374	19:11:16	0.931692414	0.772683631	0.664243883
19:11:20	0.930090313	0.764483487	0.662286392	19:11:24	0.928488212	0.757242744	0.660328901
19:11:28	0.926886111	0.752880167	0.65837141	19:11:32	0.925284011	0.748517608	0.656413919
19:11:36	0.92368191	0.739148564	0.654456428	19:11:40	0.922079809	0.724773037	0.652498937
19:11:44	0.920477708	0.710397527	0.650541446	19:11:48	0.918875607	0.69830853	0.648583955
19:11:52	0.917273506	0.686219534	0.646626464	19:11:56	0.915671405	0.671388413	0.644668973

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
19:12:00	0.914069305	0.653815159	0.642711482	19:12:04	0.910750187	0.635218418	0.640753991
19:12:08	0.907431069	0.6361607	0.6387965	19:12:12	0.904111951	0.637102982	0.636839009
19:12:16	0.900792833	0.637461667	0.634881519	19:12:20	0.897473715	0.637236755	0.632924028
19:12:24	0.894154597	0.637011852	0.630966537	19:12:28	0.889780358	0.630849346	0.627579445
19:12:32	0.88467945	0.624253684	0.62320778	19:12:36	0.879578542	0.620417804	0.618836116
19:12:40	0.874477635	0.619341697	0.614464451	19:12:44	0.869376727	0.61826559	0.610092786
19:12:48	0.86427582	0.609619082	0.605721121	19:12:52	0.859174912	0.600972566	0.601349457
19:12:56	0.854891063	0.586867869	0.598084837	19:13:00	0.853984367	0.568831026	0.599395972
19:13:04	0.854870578	0.551862903	0.600707108	19:13:08	0.855756788	0.549924646	0.602018244
19:13:12	0.856642999	0.547986394	0.603329338	19:13:16	0.85752921	0.543641879	0.604640515
19:13:20	0.858415421	0.536891104	0.605951651	19:13:24	0.859301632	0.53014033	0.607262787
19:13:28	0.860187843	0.523389555	0.608573923	19:13:32	0.861074054	0.508814558	0.609885058
19:13:36	0.861960265	0.495650751	0.611196194	19:13:40	0.862846476	0.486720514	0.61250733
19:13:44	0.863732687	0.477790277	0.613818466	19:13:48	0.864618897	0.466106229	0.615129601
19:13:52	0.865505108	0.454422181	0.616440737	19:13:56	0.866391319	0.443016381	0.617751873
19:14:00	0.86727753	0.431888825	0.619063009	19:14:04	0.8675242	0.420380058	0.620374145
19:14:08	0.86777087	0.412370831	0.62168528	19:14:12	0.86801754	0.404361604	0.622996416
19:14:16	0.86826421	0.391750599	0.624307552	19:14:20	0.86851088	0.374537817	0.625618688
19:14:24	0.86875755	0.357325036	0.626929823	19:14:28	0.86900422	0.345224553	0.628240959
19:14:32	0.86925089	0.33312407	0.629552095	19:14:36	0.869497561	0.325098704	0.630863231
19:14:40	0.869744231	0.321148436	0.632174366	19:14:44	0.869990901	0.317198186	0.633485502
19:14:48	0.870237571	0.315708808	0.634796638	19:14:52	0.870484241	0.314219414	0.636107774
19:14:56	0.870730911	0.313779024	0.637418909	19:15:00	0.370977581	-0.185612395	0.138730045
19:15:04	0.371868761	-0.184619632	0.140041181	19:15:08	0.372759941	-0.193993549	0.141352317
19:15:12	0.87365112	0.296632551	0.642663453	19:15:16	0.8745423	0.287258633	0.643974588
19:15:20	0.87543348	0.277884733	0.645285724	19:15:24	0.87632466	0.268510816	0.64659686
19:15:28	0.87721584	0.273613212	0.647907996	19:15:32	0.87810702	0.27871559	0.649219131
19:15:36	0.8789982	0.286464838	0.650530267	19:15:40	0.87988938	0.296860956	0.651841403
19:15:44	0.88078056	0.307257074	0.653152539	19:15:48	0.88167174	0.328324821	0.654463674
19:15:52	0.882562919	0.349392586	0.65577481	19:15:56	0.883454099	0.359213501	0.657085946
19:16:00	0.884345279	0.3577876	0.658397082	19:16:04	0.88402178	0.35563763	0.659708218
19:16:08	0.883698281	0.364384528	0.661019353	19:16:12	0.883374782	0.373131426	0.662330489
19:16:16	0.883051283	0.38563603	0.663641625	19:16:20	0.882727783	0.401898366	0.664952761
19:16:24	0.882404284	0.418160701	0.666263896	19:16:28	0.882080785	0.43680483	0.667575032
19:16:32	0.881726382	0.455430539	0.668844296	19:16:36	0.875603007	0.45980008	0.662297092
19:16:40	0.869479632	0.460563836	0.655749888	19:16:44	0.863356257	0.461327587	0.649202684
19:16:48	0.857232882	0.467557315	0.64265548	19:16:52	0.851109507	0.473787043	0.636108276
19:16:56	0.844986132	0.479068267	0.629561072	19:17:00	0.838862757	0.483400989	0.623013868
19:17:04	0.83669986	0.49009449	0.619981952	19:17:08	0.836164002	0.503889794	0.619154534
19:17:12	0.835628143	0.517685097	0.618327117	19:17:16	0.835092284	0.53770314	0.617499699
19:17:20	0.834556425	0.563943925	0.616672281	19:17:24	0.834020566	0.590184705	0.615844863
19:17:28	0.833484707	0.602823181	0.615017445	19:17:32	0.832948848	0.615461649	0.614190027
19:17:36	0.832412989	0.624376671	0.613362609	19:17:40	0.83187713	0.629568237	0.612535191
19:17:44	0.831341271	0.635539852	0.611707773	19:17:48	0.830805412	0.643851646	0.610880356
19:17:52	0.830269553	0.65216344	0.610052938	19:17:56	0.829733695	0.66498285	0.60922552
19:18:00	0.829197836	0.679304781	0.608398102	19:18:04	0.829178422	0.693934557	0.607570684
19:18:08	0.829159009	0.705460999	0.606743266	19:18:12	0.829139595	0.716987441	0.605915848
19:18:16	0.829120181	0.722730549	0.60508843	19:18:20	0.829100768	0.722690323	0.604261012
19:18:24	0.829081354	0.722650114	0.603433594	19:18:28	0.829061941	0.715794353	0.602606177
19:18:32	0.829042527	0.708938591	0.601778759	19:18:36	0.829023114	0.702528245	0.600951341
19:18:40	0.8290037	0.696563348	0.600123923	19:18:44	0.828984287	0.690598451	0.599296505
19:18:48	0.828964873	0.686563973	0.598469087	19:18:52	0.82894546	0.682529495	0.597641669
19:18:56	0.828926046	0.678495017	0.596814251	19:19:00	0.828906633	0.67446054	0.595986833
19:19:04	0.828111483	0.671078162	0.595159415	19:19:08	0.827316333	0.671039296	0.594331998
19:19:12	0.826521183	0.67100043	0.59350458	19:19:16	0.827594719	0.675659115	0.595209073
19:19:20	0.829888424	0.684628797	0.598566792	19:19:24	0.832182129	0.693598479	0.60192451
19:19:28	0.834475834	0.705617827	0.605282229	19:19:32	0.836769539	0.717637158	0.608639947

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	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
19:19:36	0.839063244	0.719174604	0.611997666	19:19:40	0.841356949	0.710230129	0.615355385
19:19:44	0.843650654	0.701285654	0.618713103	19:19:48	0.845944359	0.698663619	0.622070822
19:19:52	0.845915899	0.694657377	0.622282203	19:19:56	0.844999602	0.696504287	0.621290641
19:20:00	0.844083305	0.70047868	0.620299079	19:20:04	0.842910332	0.704300056	0.619307517
19:20:08	0.84173736	0.708840528	0.618315955	19:20:12	0.840564387	0.713381019	0.617324393
19:20:16	0.839391414	0.712107513	0.616332831	19:20:20	0.838218442	0.705020011	0.615341269
19:20:24	0.837045469	0.697932509	0.614349707	19:20:28	0.835872496	0.691432272	0.613358145
19:20:32	0.834699524	0.684932035	0.612366583	19:20:36	0.833526551	0.673467293	0.611375021
19:20:40	0.832353578	0.657038026	0.610383459	19:20:44	0.831180606	0.640608769	0.609391897
19:20:48	0.830007633	0.63174294	0.608400335	19:20:52	0.828834661	0.622877111	0.607408773
19:20:56	0.827661688	0.612502367	0.606417211	19:21:00	0.826488715	0.600618706	0.605425649
19:21:04	0.825661408	0.588941082	0.604434087	19:21:08	0.824834101	0.587891049	0.603442525
19:21:12	0.824006794	0.586841025	0.602450963	19:21:16	0.823179487	0.582418337	0.601459401
19:21:20	0.82235218	0.574622994	0.600467839	19:21:24	0.821524873	0.56682765	0.599476277
19:21:28	0.820697566	0.563871154	0.598484714	19:21:32	0.819870259	0.560914666	0.597493152
19:21:36	0.819042953	0.561611752	0.59650159	19:21:40	0.818215646	0.565962424	0.595510028
19:21:44	0.817388339	0.570313092	0.594518466	19:21:48	0.816561032	0.565402461	0.593526904
19:21:52	0.815733725	0.56049183	0.592535342	19:21:56	0.814906418	0.552955975	0.59154378
19:22:00	0.814079111	0.542794902	0.590552218	19:22:04	0.812816294	0.532374228	0.589560656
19:22:08	0.811553478	0.51603561	0.588569094	19:22:12	0.810290661	0.499696992	0.587577532
19:22:16	0.809027845	0.48493588	0.58658597	19:22:20	0.807765028	0.471752278	0.585594408
19:22:24	0.806502211	0.458568674	0.584602846	19:22:28	0.805239395	0.457005223	0.583611284
19:22:32	0.803976578	0.455441772	0.582619722	19:22:36	0.802713762	0.451888157	0.58162816
19:22:40	0.801450945	0.446344378	0.580636598	19:22:44	0.800188129	0.440800599	0.579645036
19:22:48	0.798594759	0.439063383	0.578205603	19:22:52	0.796464902	0.437006374	0.576039274
19:22:56	0.794335045	0.438231252	0.573872945	19:23:00	0.792205187	0.442738023	0.571706616
19:23:04	0.790774648	0.447661647	0.569540288	19:23:08	0.789344108	0.45258527	0.567373959
19:23:12	0.787913569	0.457508892	0.56520763	19:23:16	0.786483029	0.461339501	0.563041301
19:23:20	0.78505249	0.464077093	0.560874973	19:23:24	0.78362195	0.466814685	0.558708644
19:23:28	0.782191411	0.469552277	0.556542315	19:23:32	0.780760871	0.482487195	0.554375986
19:23:36	0.779330332	0.497781006	0.552209658	19:23:40	0.777899792	0.520151497	0.550043329
19:23:44	0.776469253	0.542521989	0.547877	19:23:48	0.775764812	0.555648139	0.546694473
19:23:52	0.775543649	0.569062363	0.546166747	19:23:56	0.775322486	0.584143449	0.545639021
19:24:00	0.775101323	0.600891407	0.545111295	19:24:04	0.774455753	0.617386382	0.544583568
19:24:08	0.773810184	0.632411737	0.544055842	19:24:12	0.773164615	0.647437074	0.543528116
19:24:16	0.772519046	0.655345214	0.543000389	19:24:20	0.771873477	0.656136122	0.542472663
19:24:24	0.771227907	0.656927029	0.541944937	19:24:28	0.770582338	0.664485489	0.541417211
19:24:32	0.769936769	0.672043931	0.540889484	19:24:36	0.7692912	0.678096353	0.540361758
19:24:40	0.768645631	0.682642718	0.539834032	19:24:44	0.768000061	0.687189102	0.539306305
19:24:48	0.767354492	0.694431456	0.538778579	19:24:52	0.766708923	0.701673829	0.538250853
19:24:56	0.766063354	0.711667971	0.537723127	19:25:00	0.765417785	0.724413919	0.5371954
19:25:04	0.765318588	0.737485534	0.536667674	19:25:08	0.765219391	0.74866169	0.536139948
19:25:12	0.765120194	0.759837846	0.535612222	19:25:16	0.765020997	0.770270017	0.535084495
19:25:20	0.7649218	0.779958273	0.534556769	19:25:24	0.764822603	0.789646493	0.534029043
19:25:28	0.764723406	0.803139131	0.533501316	19:25:32	0.764624209	0.816631769	0.53297359
19:25:36	0.764525012	0.827467873	0.532445864	19:25:40	0.764425815	0.835647444	0.531918138
19:25:44	0.764326618	0.843827015	0.531390411	19:25:48	0.764227421	0.848237662	0.530862685
19:25:52	0.764128224	0.852648309	0.530334959	19:25:56	0.764029027	0.860677412	0.529807233
19:26:00	0.76392983	0.872324973	0.529279506	19:26:04	0.763539695	0.883799109	0.52875178
19:26:08	0.763149559	0.891045743	0.528224054	19:26:12	0.762759423	0.898292378	0.527696327
19:26:16	0.762369287	0.901796771	0.527168601	19:26:20	0.761979151	0.901558959	0.526640875
19:26:24	0.761589015	0.901321146	0.526113149	19:26:28	0.761198879	0.894338823	0.525585422
19:26:32	0.760931911	0.887429917	0.525224578	19:26:36	0.762257442	0.87751191	0.527021436
19:26:40	0.763582974	0.863635572	0.528818294	19:26:44	0.764908506	0.849759233	0.530615151
19:26:48	0.766234038	0.843895984	0.532412009	19:26:52	0.76755957	0.83803277	0.534208867
19:26:56	0.768885101	0.825893429	0.536005725	19:27:00	0.770210633	0.807477996	0.537802583
19:27:04	0.7717083	0.78916517	0.539599441	19:27:08	0.773205967	0.768124254	0.541396299

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
19:27:12	0.774703633	0.747083338	0.543193157	19:27:16	0.7762013	0.728073585	0.544990015
19:27:20	0.777698967	0.711094977	0.546786873	19:27:24	0.779196634	0.694116369	0.548583731
19:27:28	0.780947469	0.691419604	0.550380589	19:27:32	0.782975768	0.68888823	0.552177447
19:27:36	0.785004068	0.689429529	0.553974305	19:27:40	0.787032367	0.693043499	0.555771163
19:27:44	0.789060667	0.696657486	0.557568021	19:27:48	0.791088966	0.688395007	0.559364879
19:27:52	0.793117266	0.680132527	0.561161737	19:27:56	0.795145565	0.669335664	0.562958594
19:28:00	0.797173865	0.656004453	0.564755452	19:28:04	0.798626661	0.642330193	0.56655231
19:28:08	0.800079458	0.626374928	0.568349168	19:28:12	0.801032191	0.610121583	0.569468484
19:28:16	0.801633387	0.594128657	0.570111495	19:28:20	0.802234583	0.578292398	0.570754506
19:28:24	0.802835778	0.56363218	0.571397517	19:28:28	0.803436974	0.552500134	0.572040528
19:28:32	0.80403817	0.541368088	0.57268354	19:28:36	0.804639365	0.531729046	0.573326551
19:28:40	0.805240561	0.523583006	0.573969562	19:28:44	0.805841757	0.515436967	0.574612573
19:28:48	0.806442952	0.517229848	0.575255584	19:28:52	0.807044148	0.519022729	0.575898596
19:28:56	0.807645344	0.520481625	0.576541607	19:29:00	0.808246539	0.52160653	0.577184618
19:29:04	0.808741444	0.522668078	0.577827629	19:29:08	0.809236348	0.527372846	0.57847064
19:29:12	0.809731253	0.532077614	0.579113652	19:29:16	0.810226157	0.537046223	0.579756663
19:29:20	0.810721061	0.542278674	0.580399674	19:29:24	0.811215966	0.547511125	0.581042685
19:29:28	0.81171087	0.537113706	0.581685696	19:29:32	0.812205775	0.526716288	0.582328708
19:29:36	0.812700679	0.513830796	0.582971719	19:29:40	0.813195583	0.498457229	0.58361473
19:29:44	0.813690488	0.483083662	0.584257741	19:29:48	0.814185392	0.475469028	0.584900752
19:29:52	0.814680297	0.467854394	0.585543764	19:29:56	0.815175201	0.464158044	0.586186775
19:30:00	1.315670106	0.964379976	1.086829786	19:30:04	1.316667163	0.964901236	1.087472797
19:30:08	1.31766422	0.968361721	1.088115808	19:30:12	0.818661277	0.471822205	0.58875882
19:30:16	0.819658334	0.465643866	0.589401831	19:30:20	0.820655391	0.4498267	0.590044842
19:30:24	0.821652449	0.434009537	0.590687853	19:30:28	0.822649506	0.413332954	0.591330864
19:30:32	0.823646563	0.392656372	0.591973876	19:30:36	0.82464362	0.377495854	0.592616887
19:30:40	0.825640677	0.367851382	0.593259898	19:30:44	0.826637734	0.35820692	0.593902909
19:30:48	0.827634792	0.359163339	0.59454592	19:30:52	0.828631849	0.360119758	0.595188932
19:30:56	0.829628906	0.363971709	0.595831943	19:31:00	0.830625963	0.370719208	0.596474954
19:31:04	0.831030522	0.377113528	0.597117965	19:31:08	0.831435081	0.393648802	0.597760976
19:31:12	0.83183964	0.410184067	0.598403988	19:31:16	0.8322442	0.424311349	0.599046999
19:31:20	0.832648759	0.436030635	0.59969001	19:31:24	0.833053318	0.447749924	0.600333021
19:31:28	0.833457877	0.437313237	0.600976032	19:31:32	0.833862436	0.426876546	0.601619044
19:31:36	0.834266995	0.417763635	0.602262055	19:31:40	0.834671554	0.409974493	0.602905066
19:31:44	0.835076113	0.402185359	0.603548077	19:31:48	0.835480672	0.394396226	0.604191088
19:31:52	0.835885232	0.386607083	0.6048341	19:31:56	0.836289791	0.376445216	0.605477111
19:32:00	0.83669435	0.363910624	0.606120122	19:32:04	0.83708973	0.351370561	0.606763133
19:32:08	0.83748511	0.3403973	0.607406144	19:32:12	0.83788049	0.329424039	0.608049156
19:32:16	0.83827587	0.32095306	0.608692167	19:32:20	0.83867125	0.314984365	0.609335178
19:32:24	0.83906663	0.309015669	0.609978189	19:32:28	0.83946201	0.301095858	0.6106212
19:32:32	0.83985739	0.29317603	0.611264212	19:32:36	0.84025277	0.283279505	0.611907223
19:32:40	0.84064815	0.271406266	0.612550234	19:32:44	0.84104353	0.259533028	0.613193245
19:32:48	0.84143891	0.250266084	0.613836256	19:32:52	0.84183429	0.240999158	0.614479268
19:32:56	0.84222967	0.233454254	0.615122279	19:33:00	0.84262505	0.227631388	0.61576529
19:33:04	0.843098272	0.221854923	0.616408301	19:33:08	0.843571493	0.222447406	0.617051312
19:33:12	0.844044715	0.223039889	0.617694324	19:33:16	0.844517936	0.22731503	0.618337335
19:33:20	0.844991158	0.232817747	0.618980346	19:33:24	0.845464379	0.238320447	0.619623357
19:33:28	0.845937601	0.251941118	0.620266368	19:33:32	0.846410823	0.265561807	0.62090938
19:33:36	0.846884044	0.274895074	0.621552391	19:33:40	0.847357266	0.27136611	0.622195402
19:33:44	0.847830487	0.267837146	0.622838413	19:33:48	0.848303709	0.253100041	0.623481424
19:33:52	0.84877693	0.238362936	0.624124436	19:33:56	0.849250152	0.231503019	0.624767447
19:34:00	0.849723373	0.232520291	0.625410458	19:34:04	0.850163754	0.233517988	0.626053469
19:34:08	0.850604135	0.240283031	0.62669648	19:34:12	0.851044516	0.247048073	0.627339492
19:34:16	0.851484897	0.255261419	0.627982503	19:34:20	0.851925279	0.264923085	0.628625514
19:34:24	0.85236566	0.274584751	0.629268525	19:34:28	0.852806041	0.266745876	0.629911536
19:34:32	0.853246422	0.258907019	0.630554548	19:34:36	0.853686803	0.251652656	0.631197559
19:34:40	0.854127184	0.244982805	0.63184057	19:34:44	0.854567565	0.238312954	0.632483581

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
19:34:48	0.855007946	0.240168241	0.633126592	19:34:52	0.855448327	0.242023547	0.633769604
19:34:56	0.855888708	0.247960648	0.634412615	19:35:00	0.856329089	0.257979544	0.635055626
19:35:04	0.856829414	0.268034173	0.635698637	19:35:08	0.857329739	0.269518682	0.636341648
19:35:12	0.857830064	0.271003192	0.63698466	19:35:16	0.858330389	0.265014109	0.637627671
19:35:20	0.858830714	0.251551451	0.638270682	19:35:24	0.85933104	0.238088793	0.638913693
19:35:28	0.859831365	0.223854384	0.639556704	19:35:32	0.86033169	0.209619992	0.640199716
19:35:36	0.860832015	0.198616715	0.640842727	19:35:40	0.86133234	0.188690512	0.641485738
19:35:44	0.861832665	0.178764309	0.642128749	19:35:48	0.86233299	0.173019988	0.64277176
19:35:52	0.862833316	0.167275668	0.643414772	19:35:56	0.863333641	0.164612243	0.644057783
19:36:00	0.863833966	0.165029752	0.644700794	19:36:04	0.864073193	0.165291624	0.645343805
19:36:08	0.86431242	0.156791447	0.645986816	19:36:12	0.864551647	0.14829127	0.646629828
19:36:16	0.864790875	0.145061738	0.647272839	19:36:20	0.865030102	0.147102852	0.64791585
19:36:24	0.865269329	0.149143965	0.648558861	19:36:28	0.865508556	0.144919823	0.649201872
19:36:32	0.865747783	0.140695681	0.649844884	19:36:36	0.865987011	0.138550898	0.650487895
19:36:40	0.866226238	0.138485473	0.651130906	19:36:44	0.866465465	0.135548703	0.651773917
19:36:48	0.866704692	0.123997865	0.652416928	19:36:52	0.866943919	0.112447027	0.65305994
19:36:56	0.867183147	0.100896189	0.653702951	19:37:00	0.867422374	0.089345351	0.654345962
19:37:04	0.867786278	0.077868831	0.654988973	19:37:08	0.868150181	0.064793665	0.655631984
19:37:12	0.868514085	0.051718499	0.656274996	19:37:16	0.868877989	0.044808431	0.656918007
19:37:20	0.869241892	0.04406339	0.657561018	19:37:24	0.869605796	0.043318348	0.658204029
19:37:28	0.8699697	0.034248839	0.65884704	19:37:32	0.870333604	0.025179329	0.659490052
19:37:36	0.870697507	0.01911383	0.660133063	19:37:40	0.871061411	0.016052343	0.660776074
19:37:44	0.871425315	0.012990856	0.661419085	19:37:48	0.871789219	0.027910693	0.662062096
19:37:52	0.872153122	0.042830567	0.662705108	19:37:56	0.872517026	0.055428487	0.663348119
19:38:00	0.87288093	0.065704525	0.66399113	19:38:04	0.873860062	0.076347256	0.664634141
19:38:08	0.874839195	0.086990022	0.665277152	19:38:12	0.875818328	0.097632788	0.665920164
19:38:16	0.87679746	0.107776438	0.666563175	19:38:20	0.877776593	0.117421006	0.667206186
19:38:24	0.878755726	0.127065609	0.667849197	19:38:28	0.879734858	0.136710177	0.668492208
19:38:32	0.880713991	0.146354744	0.66913522	19:38:36	0.881693124	0.150807329	0.669778231
19:38:40	0.882672256	0.153529241	0.670421242	19:38:44	0.883651389	0.156251153	0.671064253
19:38:48	0.884630522	0.164268403	0.671707264	19:38:52	0.885609654	0.172285689	0.672350276
19:38:56	0.886588787	0.174101352	0.672993287	19:39:00	0.88756792	0.169715465	0.673636298
19:39:04	0.887816633	0.16489415	0.674279309	19:39:08	0.888065347	0.155339217	0.67492232
19:39:12	0.88831406	0.145784284	0.675565332	19:39:16	0.888562774	0.143999064	0.676208343
19:39:20	0.888811487	0.149983556	0.676851354	19:39:24	0.8890602	0.157437011	0.677494365
19:39:28	0.889308914	0.169297427	0.678137376	19:39:32	0.889557627	0.181157843	0.678780388
19:39:36	0.889806341	0.194158682	0.679423399	19:39:40	0.890055054	0.208299872	0.68006641
19:39:44	0.890303768	0.222441063	0.680709421	19:39:48	0.890552481	0.23158284	0.681352432
19:39:52	0.890801195	0.240724652	0.681995444	19:39:56	0.891049908	0.252345937	0.682638455
19:40:00	0.891298622	0.266446749	0.683281466	19:40:04	0.892127777	0.280893534	0.683924477
19:40:08	0.892956931	0.302440428	0.684567488	19:40:12	0.893786086	0.323987321	0.6852105
19:40:16	0.894615241	0.347091468	0.685853511	19:40:20	0.895444396	0.371752869	0.686496522
19:40:24	0.896273551	0.396414287	0.687139533	19:40:28	0.897102706	0.415145777	0.687782544
19:40:32	0.897931861	0.433877276	0.688425556	19:40:36	0.898761016	0.451824969	0.689068567
19:40:40	0.899590171	0.468988871	0.689711578	19:40:44	0.900419326	0.486152768	0.690354589
19:40:48	0.901248481	0.514209654	0.6909976	19:40:52	0.902077636	0.54226654	0.691640612
19:40:56	0.902906791	0.566665005	0.692283623	19:41:00	0.903735946	0.587405053	0.692926634
19:41:04	0.904339265	0.608010478	0.693569645	19:41:08	0.904942583	0.620764153	0.694212656
19:41:12	0.905545902	0.633517833	0.694855668	19:41:16	0.906149221	0.649371702	0.695498679
19:41:20	0.90675254	0.668325778	0.69614169	19:41:24	0.907355858	0.687279846	0.696784701
19:41:28	0.907959177	0.704843639	0.697427712	19:41:32	0.908562496	0.722407423	0.698070724
19:41:36	0.909165815	0.745650706	0.698713735	19:41:40	0.909769134	0.774573472	0.699356746
19:41:44	0.910372452	0.79681758	0.699999757	19:41:48	0.910975771	0.799025715	0.700642768
19:41:52	0.91157909	0.80123385	0.70128578	19:41:56	0.912182409	0.811502346	0.701928791
19:42:00	0.912785727	0.829831184	0.702571802	19:42:04	0.913411339	0.848173311	0.703214813
19:42:08	0.91403695	0.861890789	0.703857824	19:42:12	0.914662562	0.875608231	0.704500836
19:42:16	0.915288173	0.890789484	0.705143847	19:42:20	0.915913785	0.907434513	0.705786858

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
19:42:24	0.916539396	0.924079543	0.706429869	19:42:28	0.917165008	0.933729472	0.70707288
19:42:32	0.917790619	0.943379401	0.707715892	19:42:36	0.918416231	0.95302933	0.708358903
19:42:40	0.919041842	0.962679259	0.709001914	19:42:44	0.919667454	0.972329189	0.709644925
19:42:48	0.920293065	0.980246633	0.710287936	19:42:52	0.920918677	0.988164042	0.710930948
19:42:56	0.921544288	0.987569884	0.711573959	19:43:00	0.9221699	0.978464089	0.71221697
19:43:04	0.922904219	0.969423129	0.712859981	19:43:08	0.923638539	0.950383803	0.713502992
19:43:12	0.924372858	0.931344478	0.714146004	19:43:16	0.925107178	0.915015371	0.714789015
19:43:20	0.925841497	0.901396553	0.715432026	19:43:24	0.926575817	0.8877777	0.716075037
19:43:28	0.927310136	0.871819733	0.716718048	19:43:32	0.928044456	0.855861766	0.71736106
19:43:36	0.928778775	0.844302162	0.718004071	19:43:40	0.929513095	0.845937664	0.718647082
19:43:44	0.930247414	0.847573165	0.719290093	19:43:48	0.930981733	0.847031904	0.719933104
19:43:52	0.931716053	0.846490661	0.720576116	19:43:56	0.932450372	0.847299553	0.721219127
19:44:00	0.933184692	0.849458616	0.721862138	19:44:04	0.933621699	0.850697198	0.722505149
19:44:08	0.934058705	0.849706061	0.72314816	19:44:12	0.934495712	0.848714924	0.723791172
19:44:16	0.934932718	0.850421002	0.724434183	19:44:20	0.935369725	0.854824294	0.725077194
19:44:24	0.935806732	0.859227587	0.725720205	19:44:28	0.93604253	0.857719259	0.726090596
19:44:32	0.935517254	0.855757265	0.725429796	19:44:36	0.934991978	0.848375919	0.724768996
19:44:40	0.934466702	0.835575201	0.724108196	19:44:44	0.933941426	0.822774466	0.723447395
19:44:48	0.93341615	0.802579404	0.722786595	19:44:52	0.932890874	0.782384342	0.722125795
19:44:56	0.932365598	0.764556179	0.721464995	19:45:00	0.431840322	0.249094912	0.220804195
19:45:04	0.431451544	0.233714993	0.220143395	19:45:08	0.431062766	0.219762006	0.219482594
19:45:12	0.930673988	0.705809001	0.718821794	19:45:16	0.93028521	0.695203123	0.718160994
19:45:20	0.929896433	0.687944346	0.717500194	19:45:24	0.929507655	0.68068557	0.716839394
19:45:28	0.929118877	0.667061771	0.716178594	19:45:32	0.928730099	0.653437972	0.715517794
19:45:36	0.928341321	0.638506523	0.714856993	19:45:40	0.927952544	0.622267405	0.714196193
19:45:44	0.927563766	0.606028287	0.713535393	19:45:48	0.927174988	0.583377648	0.712874593
19:45:52	0.92678621	0.560727009	0.712213793	19:45:56	0.926397432	0.537543327	0.711552993
19:46:00	0.926008654	0.513826601	0.710892192	19:46:04	0.926149354	0.490425489	0.710231392
19:46:08	0.926290054	0.475421206	0.709570592	19:46:12	0.926430754	0.460416927	0.708909792
19:46:16	0.926571454	0.451977336	0.708248992	19:46:20	0.926712154	0.450102434	0.707588192
19:46:24	0.926852854	0.448227531	0.706927391	19:46:28	0.926993554	0.437970327	0.706266591
19:46:32	0.927134254	0.427713132	0.705605791	19:46:36	0.927274953	0.414891442	0.704944991
19:46:40	0.927415653	0.401214924	0.704284191	19:46:44	0.927556353	0.385297557	0.703623391
19:46:48	0.927697053	0.362657636	0.702962591	19:46:52	0.927837753	0.340017714	0.70230179
19:46:56	0.927978453	0.329736448	0.70164099	19:47:00	0.928119153	0.331813854	0.70098019
19:47:04	0.927711402	0.33356432	0.70031939	19:47:08	0.927303652	0.333305847	0.699685859
19:47:12	0.926895902	0.333047373	0.69899779	19:47:16	0.926488151	0.334735893	0.698336989
19:47:20	0.926080401	0.338371425	0.697676189	19:47:24	0.925672651	0.342006939	0.697015389
19:47:28	0.9252649	0.338465566	0.696354589	19:47:32	0.92485715	0.334924193	0.695693789
19:47:36	0.9244494	0.321923223	0.695032989	19:47:40	0.924041649	0.299462656	0.694372188
19:47:44	0.923633899	0.277002088	0.693711388	19:47:48	0.923226149	0.247309688	0.693050588
19:47:52	0.922818398	0.217617235	0.692389788	19:47:56	0.922410648	0.193886402	0.691728988
19:48:00	0.922002898	0.176117119	0.691068188	19:48:04	0.922312046	0.158775169	0.690407388
19:48:08	0.922621195	0.141433219	0.689746587	19:48:12	0.922930344	0.124091269	0.689085787
19:48:16	0.923239492	0.108926063	0.688424987	19:48:20	0.923548641	0.095937602	0.687764187
19:48:24	0.92385779	0.08294914	0.687103387	19:48:28	0.924166939	0.0799977	0.686442587
19:48:32	0.924476087	0.07704626	0.685781786	19:48:36	0.924785236	0.074094856	0.685120986
19:48:40	0.925094385	0.071143416	0.684460186	19:48:44	0.925403533	0.068191976	0.683799386
19:48:48	0.925712682	0.073134104	0.683138586	19:48:52	0.926021831	0.078076232	0.682477786
19:48:56	0.926330979	0.085230527	0.681816985	19:49:00	0.926640128	0.094597025	0.681156185
19:49:04	0.926309623	0.103582165	0.680495385	19:49:08	0.925979118	0.112567375	0.679834585
19:49:12	0.925648613	0.121552515	0.679173785	19:49:16	0.925318108	0.132178757	0.678512985
19:49:20	0.924987603	0.144446067	0.677852185	19:49:24	0.924657098	0.156713378	0.677191384
19:49:28	0.924326592	0.179960837	0.676530584	19:49:32	0.923996087	0.203208297	0.675869784
19:49:36	0.923665582	0.227676476	0.675208984	19:49:40	0.923335077	0.253365374	0.674548184
19:49:44	0.923004572	0.27905429	0.673887384	19:49:48	0.922674067	0.294124977	0.673226583
19:49:52	0.922343562	0.309195646	0.672565783	19:49:56	0.922013057	0.326788192	0.671904983

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
19:50:00	0.921682552	0.34690258	0.671244183	19:50:04	0.922696243	0.367818222	0.670583383
19:50:08	0.923709935	0.387407481	0.669922583	19:50:12	0.924723627	0.406996732	0.669261782
19:50:16	0.925737318	0.418085421	0.668600982	19:50:20	0.92675101	0.420673548	0.667940182
19:50:24	0.927764702	0.423261667	0.667279382	19:50:28	0.928778393	0.431040846	0.666618582
19:50:32	0.929792085	0.438820015	0.665957782	19:50:36	0.930805777	0.444763647	0.665296982
19:50:40	0.931819468	0.448871722	0.664636181	19:50:44	0.93283316	0.452979807	0.663975381
19:50:48	0.933846852	0.455807519	0.663314581	19:50:52	0.934860543	0.45863523	0.662653781
19:50:56	0.935874235	0.464022196	0.661992981	19:51:00	0.936887927	0.471968424	0.661332181
19:51:04	0.936607111	0.479143009	0.66067138	19:51:08	0.936326296	0.486933495	0.66001058
19:51:12	0.936045481	0.494723977	0.65934978	19:51:16	0.935764666	0.501921425	0.65868898
19:51:20	0.935483851	0.508525838	0.65802818	19:51:24	0.935203035	0.51513025	0.65736738
19:51:28	0.93492222	0.517710998	0.656706579	19:51:32	0.934641405	0.520291746	0.656045779
19:51:36	0.93436059	0.522531125	0.655384979	19:51:40	0.934079775	0.524429133	0.654724179
19:51:44	0.93379896	0.526327141	0.654063379	19:51:48	0.933518144	0.537216653	0.653402579
19:51:52	0.933237329	0.548106164	0.652741779	19:51:56	0.932956514	0.565359963	0.652080978
19:52:00	0.932675699	0.58897805	0.651420178	19:52:04	0.933187735	0.613068742	0.650759378
19:52:08	0.93369977	0.644543532	0.650098578	19:52:12	0.934211806	0.676018314	0.649437778
19:52:16	0.934723842	0.708099218	0.648776978	19:52:20	0.935235878	0.740786254	0.648116177
19:52:24	0.935747914	0.773473272	0.64745377	19:52:28	0.936259949	0.800183942	0.646794577
19:52:32	0.936771985	0.826894595	0.646133777	19:52:36	0.937284021	0.845489247	0.645472977
19:52:40	0.937796057	0.855967865	0.644812177	19:52:44	0.938308093	0.866446482	0.644151376
19:52:48	0.938820128	0.882372273	0.643490576	19:52:52	0.939332164	0.898298099	0.642829776
19:52:56	0.9398442	0.909921989	0.642168976	19:53:00	0.940356236	0.917244014	0.641508176
19:53:04	0.939980106	0.924036583	0.640847376	19:53:08	0.939603977	0.922175041	0.640186575
19:53:12	0.939227847	0.920313534	0.639525775	19:53:16	0.938851718	0.919356606	0.638864975
19:53:20	0.938475588	0.919304293	0.638204175	19:53:24	0.938099459	0.919251979	0.637543375
19:53:28	0.937723329	0.918613217	0.636882575	19:53:32	0.9373472	0.91797449	0.636221775
19:53:36	0.936971071	0.917897981	0.635560974	19:53:40	0.936594941	0.919508301	0.634900174
19:53:44	0.936218812	0.921118622	0.634239374	19:53:48	0.935842682	0.921911979	0.633578574
19:53:52	0.935466553	0.922705372	0.632917774	19:53:56	0.935090423	0.91772783	0.632256974
19:54:00	0.934714294	0.906979353	0.631596173	19:54:04	0.934300948	0.896208693	0.630935373
19:54:08	0.933887602	0.888311437	0.630274573	19:54:12	0.933474256	0.880414182	0.629613773
19:54:16	0.93306091	0.875472155	0.628952973	19:54:20	0.932647564	0.873485429	0.628292173
19:54:24	0.932234218	0.871498703	0.627631372	19:54:28	0.931820873	0.870770251	0.626970572
19:54:32	0.931407527	0.870041764	0.626309772	19:54:36	0.930994181	0.871782499	0.625648972
19:54:40	0.930580835	0.875992456	0.624988172	19:54:44	0.930167489	0.880202379	0.624327372
19:54:48	0.929754143	0.879883794	0.623666572	19:54:52	0.929340797	0.879565209	0.623005771
19:54:56	0.928927451	0.877106226	0.622344971	19:55:00	0.928514106	0.872506845	0.621684171
19:55:04	0.92800291	0.867849138	0.621023371	19:55:08	0.927491714	0.86076193	0.620362571
19:55:12	0.926980518	0.853674722	0.619701771	19:55:16	0.926469323	0.836430527	0.61904097
19:55:20	0.925958127	0.8090294	0.61838017	19:55:24	0.925446931	0.781628254	0.61771937
19:55:28	0.924935736	0.754809685	0.61705857	19:55:32	0.92442454	0.727991097	0.61639777
19:55:36	0.923913344	0.703540669	0.61573697	19:55:40	0.923402149	0.681458373	0.615076169
19:55:44	0.922890953	0.659376086	0.614415369	19:55:48	0.922379757	0.649346368	0.613754569
19:55:52	0.921868561	0.639316651	0.613093769	19:55:56	0.921357366	0.627047505	0.612432969
19:56:00	0.92084617	0.612538933	0.611772169	19:56:04	0.920581715	0.598177439	0.611111369
19:56:08	0.920317261	0.587327414	0.610450568	19:56:12	0.920052806	0.576477391	0.609789768
19:56:16	0.919788352	0.568345945	0.609128968	19:56:20	0.919523897	0.56293308	0.608468168
19:56:24	0.919259443	0.557520215	0.607807368	19:56:28	0.918994988	0.557084136	0.607146568
19:56:32	0.918730534	0.556648057	0.606485767	19:56:36	0.918466079	0.566705131	0.605824967
19:56:40	0.918201625	0.587255356	0.605164167	19:56:44	0.91793717	0.607805584	0.604503367
19:56:48	0.917672715	0.615096402	0.603842567	19:56:52	0.917408261	0.62238722	0.603181767
19:56:56	0.917143806	0.630567739	0.602520966	19:57:00	0.916879352	0.639637968	0.601860166
19:57:04	0.916402487	0.648581573	0.601199366	19:57:08	0.915925623	0.657525179	0.600538566
19:57:12	0.915448758	0.666468793	0.599877766	19:57:16	0.914971894	0.679299999	0.599216966
19:57:20	0.914495029	0.696018806	0.598556166	19:57:24	0.914018165	0.712737613	0.597895365
19:57:28	0.9135413	0.722044489	0.597234565	19:57:32	0.913064436	0.731351382	0.596573765

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
19:57:36	0.912587571	0.731113426	0.595912965	19:57:40	0.912110707	0.721330654	0.595252165
19:57:44	0.911633842	0.711547883	0.594591365	19:57:48	0.911156978	0.698686222	0.593930564
19:57:52	0.910680113	0.68582457	0.593269764	19:57:56	0.910203249	0.673759221	0.592608964
19:58:00	0.909726384	0.662490183	0.591948164	19:58:04	0.909527348	0.651386755	0.591287364
19:58:08	0.909328313	0.641493228	0.590626564	19:58:12	0.909129277	0.6315997	0.589965763
19:58:16	0.908930241	0.622251371	0.589304963	19:58:20	0.908731205	0.613448241	0.588644163
19:58:24	0.908532169	0.604645111	0.587983363	19:58:28	0.908333133	0.592620618	0.587322563
19:58:32	0.908134097	0.580596126	0.586661763	19:58:36	0.907935061	0.575470764	0.586000963
19:58:40	0.907736025	0.577244531	0.585340162	19:58:44	0.907536989	0.579018298	0.584679362
19:58:48	0.907337953	0.566245188	0.584018562	19:58:52	0.907138917	0.553472076	0.583557762
19:58:56	0.906939881	0.541876753	0.582696962	19:59:00	0.906740845	0.531459217	0.582036162
19:59:04	0.906242298	0.520863147	0.581375361	19:59:08	0.90574375	0.525259389	0.580714561
19:59:12	0.905245203	0.529655631	0.580053761	19:59:16	0.904746656	0.531920804	0.579392961
19:59:20	0.904248108	0.53205491	0.578732161	19:59:24	0.903749561	0.532189016	0.578071361
19:59:28	0.903251013	0.536914767	0.57741056	19:59:32	0.902752466	0.541640519	0.57674976
19:59:36	0.902253919	0.553469947	0.57608896	19:59:40	0.901755371	0.572403054	0.57542816
19:59:44	0.901256824	0.591336159	0.57476736	19:59:48	0.900758277	0.609590026	0.57410656
19:59:52	0.900259729	0.627843893	0.57344576	19:59:56	0.899761182	0.645351026	0.572784959
20:00:00	1.399262635	1.12202233	1.072124159	20:00:04	1.398040592	1.112589381	1.071463359
20:00:08	1.39681855	1.115655188	1.070802559	20:00:12	0.895596508	0.618720995	0.570141759
20:00:16	0.894374466	0.621786811	0.569480959	20:00:20	0.893152424	0.624852618	0.568820158
20:00:24	0.891930382	0.627918425	0.568159358	20:00:28	0.89070834	0.620358009	0.567498558
20:00:32	0.889486298	0.612797601	0.566837758	20:00:36	0.888264256	0.597151465	0.566176958
20:00:40	0.887042214	0.578810091	0.565516158	20:00:44	0.885820172	0.560468714	0.564855357
20:00:48	0.88459813	0.54644218	0.564194557	20:00:52	0.883376088	0.532415643	0.563533757
20:00:56	0.882154046	0.522849876	0.562872957	20:01:00	0.880932004	0.517744878	0.562212157
20:01:04	0.880412677	0.513058758	0.561551357	20:01:08	0.87989335	0.521127239	0.560890557
20:01:12	0.879374023	0.52919572	0.560229756	20:01:16	0.878854697	0.533489671	0.559568956
20:01:20	0.87833537	0.534009088	0.558908156	20:01:24	0.877816043	0.534528506	0.558247356
20:01:28	0.877296716	0.527403563	0.557586556	20:01:32	0.876777389	0.520278621	0.556925756
20:01:36	0.876258063	0.512227914	0.556264955	20:01:40	0.875738736	0.503868618	0.555604155
20:01:44	0.875219409	0.495509323	0.554943355	20:01:48	0.874700082	0.482137557	0.554282555
20:01:52	0.874180756	0.46876579	0.553621755	20:01:56	0.873661429	0.459569284	0.552960955
20:02:00	0.873142102	0.451764527	0.552300154	20:02:04	0.871524431	0.443305069	0.551639354
20:02:08	0.86990676	0.437299924	0.550978554	20:02:12	0.868289089	0.431294779	0.550317754
20:02:16	0.866671418	0.416409796	0.549656954	20:02:20	0.865053747	0.392644968	0.548996154
20:02:24	0.863436076	0.368880148	0.548335354	20:02:28	0.861818405	0.343152035	0.547674553
20:02:32	0.860200735	0.317423913	0.547013753	20:02:36	0.858583064	0.290181777	0.546352953
20:02:40	0.856965393	0.261425627	0.545692153	20:02:44	0.855347722	0.232918502	0.545031353
20:02:48	0.853730051	0.205158489	0.544370553	20:02:52	0.85211238	0.177398476	0.543709752
20:02:56	0.850494709	0.147572855	0.543048952	20:03:00	0.848877038	0.115681625	0.542388152
20:03:04	0.848243424	0.084376977	0.541727352	20:03:08	0.847609811	0.07552343	0.541066552
20:03:12	0.846976197	0.066669884	0.540405752	20:03:16	0.846342584	0.064764219	0.539744951
20:03:20	0.84570897	0.069806507	0.539084151	20:03:24	0.845075357	0.074848795	0.538423351
20:03:28	0.844441743	0.087688828	0.537762551	20:03:32	0.843808129	0.108326641	0.537101751
20:03:36	0.84340814	0.135493998	0.536757491	20:03:40	0.843071249	0.169089214	0.536498725
20:03:44	0.842734358	0.202684466	0.536239959	20:03:48	0.842397467	0.242941517	0.535981193
20:03:52	0.842060576	0.28319855	0.535722427	20:03:56	0.841723686	0.323089754	0.535463661
20:04:00	0.841386795	0.362615112	0.535204896	20:04:04	0.840087259	0.401566653	0.53494613
20:04:08	0.838787723	0.424343449	0.534687364	20:04:12	0.837488187	0.447120237	0.534428598
20:04:16	0.836188651	0.461033571	0.534169832	20:04:20	0.834889116	0.466083442	0.533911066
20:04:24	0.83358958	0.471133313	0.5336523	20:04:28	0.832290044	0.47741392	0.533393534
20:04:32	0.830990508	0.483694525	0.533134768	20:04:36	0.829690972	0.493694245	0.532876002
20:04:40	0.828391436	0.507413079	0.532617236	20:04:44	0.827091901	0.521131911	0.53235847
20:04:48	0.825792365	0.526477982	0.532099704	20:04:52	0.824492829	0.531824055	0.531840938
20:04:56	0.823193293	0.53881372	0.531582172	20:05:00	0.821893757	0.547446976	0.531323406
20:05:04	0.821756981	0.556773339	0.53106464	20:05:08	0.821620205	0.57428661	0.530805874

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
20:05:12	0.821483429	0.591799872	0.530547109	20:05:16	0.821346653	0.604119934	0.530288343
20:05:20	0.821209877	0.614708923	0.530029577	20:05:24	0.821073101	0.625297913	0.529770811
20:05:28	0.820936326	0.639659432	0.529512045	20:05:32	0.82079955	0.654020925	0.529253279
20:05:36	0.820662774	0.665710944	0.528994513	20:05:40	0.820525998	0.674729472	0.528735747
20:05:44	0.820389222	0.683747981	0.528476981	20:05:48	0.820252446	0.689426017	0.528218215
20:05:52	0.82011567	0.695104052	0.527959449	20:05:56	0.819978894	0.699890512	0.527700683
20:06:00	0.819842118	0.704379769	0.527441917	20:06:04	0.818636571	0.708231948	0.527183151
20:06:08	0.817431023	0.715097269	0.526924385	20:06:12	0.816225476	0.721962607	0.526665619
20:06:16	0.815019928	0.732398278	0.526406853	20:06:20	0.813814381	0.746404317	0.526148087
20:06:24	0.812608834	0.760410338	0.525889321	20:06:28	0.811403286	0.776589905	0.525630556
20:06:32	0.810197739	0.792769473	0.52537179	20:06:36	0.808992192	0.801475324	0.525113024
20:06:40	0.807786644	0.802707386	0.524854258	20:06:44	0.806581097	0.803939485	0.524595492
20:06:48	0.80537555	0.79354018	0.524336726	20:06:52	0.804170002	0.783140839	0.52407796
20:06:56	0.802964455	0.767805949	0.523819194	20:07:00	0.801758907	0.747535492	0.523560428
20:07:04	0.801186215	0.72764227	0.523301662	20:07:08	0.800613523	0.715046876	0.523042896
20:07:12	0.800040831	0.702451501	0.52278413	20:07:16	0.799468139	0.691550025	0.522525364
20:07:20	0.798895447	0.682342449	0.522266598	20:07:24	0.798322755	0.673134873	0.522007832
20:07:28	0.797750063	0.6612123	0.521749066	20:07:32	0.797177371	0.649289709	0.5214903
20:07:36	0.796604679	0.632217308	0.521231534	20:07:40	0.796031987	0.609995072	0.520972768
20:07:44	0.795459295	0.587772844	0.520714003	20:07:48	0.794886603	0.564214266	0.520455237
20:07:52	0.794313911	0.540655693	0.520196471	20:07:56	0.793741219	0.515285387	0.519937705
20:08:00	0.793168527	0.488103348	0.519678939	20:08:04	0.792026975	0.460582223	0.519420173
20:08:08	0.790885424	0.431611266	0.519161407	20:08:12	0.789743873	0.402640312	0.518902641
20:08:16	0.788602322	0.381223354	0.518643875	20:08:20	0.78746077	0.3623244	0.518385109
20:08:24	0.786319219	0.343425446	0.518126343	20:08:28	0.785177668	0.332963402	0.517867577
20:08:32	0.784036117	0.32250135	0.517608811	20:08:36	0.782894565	0.311598999	0.517350045
20:08:40	0.781753014	0.300256359	0.517091279	20:08:44	0.780611463	0.288913719	0.516832513
20:08:48	0.779469912	0.258508843	0.516573747	20:08:52	0.77832836	0.228103949	0.516314981
20:08:56	0.777186809	0.21501328	0.516056216	20:09:00	0.776045258	0.20769399	0.51579745
20:09:04	0.775687136	0.200841707	0.515538684	20:09:08	0.775329014	0.173132403	0.515279918
20:09:12	0.774970892	0.145423099	0.515021152	20:09:16	0.77461277	0.12535736	0.514762386
20:09:20	0.774254648	0.112935204	0.51450362	20:09:24	0.773896526	0.100513048	0.514244854
20:09:28	0.773538404	0.088090892	0.513986088	20:09:32	0.773180282	0.075668736	0.513727322
20:09:36	0.77282216	0.070913221	0.513468556	20:09:40	0.772464038	0.073824313	0.51320979
20:09:44	0.772105916	0.076735404	0.512951024	20:09:48	0.771747794	0.091299074	0.512692258
20:09:52	0.771389672	0.10586278	0.512433492	20:09:56	0.77103155	0.114196689	0.512174726
20:10:00	0.770673428	0.120454047	0.51191596	20:10:04	0.770371456	0.126744874	0.511657194
20:10:08	0.770069484	0.14068433	0.511398428	20:10:12	0.769767511	0.154623785	0.511139663
20:10:16	0.769465539	0.16966181	0.510880897	20:10:20	0.769163567	0.185798421	0.510622131
20:10:24	0.768861594	0.201935051	0.510363365	20:10:28	0.768559622	0.215752214	0.510104599
20:10:32	0.76825765	0.229569395	0.509845833	20:10:36	0.767955677	0.245694478	0.509587067
20:10:40	0.767653705	0.264127479	0.509328301	20:10:44	0.767351733	0.28256048	0.509069535
20:10:48	0.76704976	0.308320675	0.508810769	20:10:52	0.766747788	0.334080879	0.508552003
20:10:56	0.766445816	0.359378428	0.508293237	20:11:00	0.766143843	0.384521757	0.508034471
20:11:04	0.765721125	0.409593116	0.507775705	20:11:08	0.765298406	0.437327105	0.507516939
20:11:12	0.764875687	0.465061096	0.507258173	20:11:16	0.764452968	0.477045242	0.506999407
20:11:20	0.764030249	0.483779439	0.506740641	20:11:24	0.76360753	0.490513636	0.506481875
20:11:28	0.763184811	0.503562124	0.50622311	20:11:32	0.762762093	0.516610612	0.505964344
20:11:36	0.762339374	0.533835465	0.505705578	20:11:40	0.761916655	0.555236681	0.505446812
20:11:44	0.761493936	0.576637896	0.505188046	20:11:48	0.761071217	0.602666559	0.50492928
20:11:52	0.760648498	0.628695221	0.504670514	20:11:56	0.76022578	0.651259074	0.504411748
20:12:00	0.759803061	0.670358117	0.504152982	20:12:04	0.759910511	0.689773186	0.503894216
20:12:08	0.760017961	0.705517623	0.50363545	20:12:12	0.760125411	0.72126206	0.503376684
20:12:16	0.760232861	0.732409311	0.503117918	20:12:20	0.760340311	0.738959342	0.502859152
20:12:24	0.760447761	0.745509391	0.502600386	20:12:28	0.760555211	0.756644794	0.50234162
20:12:32	0.760662661	0.767780161	0.502082854	20:12:36	0.760770111	0.778915563	0.501824088
20:12:40	0.760877561	0.79005093	0.501565322	20:12:44	0.760985011	0.799674237	0.501306557

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
20:12:48	0.761092461	0.804761291	0.501047791	20:12:52	0.761199911	0.80984831	0.500789025
20:12:56	0.761307361	0.814222076	0.500530259	20:13:00	0.761414811	0.81788259	0.500271493
20:13:04	0.761350311	0.821440606	0.500012727	20:13:08	0.761285811	0.824998623	0.499753961
20:13:12	0.761221311	0.82855664	0.499495195	20:13:16	0.761156812	0.838521923	0.499236429
20:13:20	0.761092312	0.854894472	0.498977663	20:13:24	0.761027812	0.871267057	0.498718897
20:13:28	0.760963313	0.886297554	0.498460131	20:13:32	0.760898813	0.901328015	0.498201365
20:13:36	0.760834313	0.908769254	0.497942599	20:13:40	0.760769814	0.908621234	0.497683833
20:13:44	0.760705314	0.908473214	0.497425067	20:13:48	0.760640814	0.895495064	0.497166301
20:13:52	0.760576314	0.882516914	0.496907535	20:13:56	0.760511815	0.866583677	0.49664877
20:14:00	0.760447315	0.847695317	0.496390004	20:14:04	0.760429063	0.828834525	0.496131238
20:14:08	0.760410811	0.811653279	0.495872472	20:14:12	0.760392559	0.794471997	0.495613706
20:14:16	0.760374307	0.786404114	0.49535494	20:14:20	0.760356055	0.78744963	0.495096174
20:14:24	0.760337803	0.788495111	0.494837408	20:14:28	0.760319551	0.777554321	0.494578642
20:14:32	0.760301299	0.76661353	0.494319876	20:14:36	0.760283047	0.760925513	0.49406111
20:14:40	0.760264796	0.760490235	0.493802344	20:14:44	0.760246544	0.760054956	0.493543578
20:14:48	0.760228292	0.761083028	0.493284812	20:14:52	0.76021004	0.762111134	0.493026046
20:14:56	0.760191788	0.761562162	0.49276728	20:15:00	0.260173536	0.259436181	-0.007491486
20:15:04	0.259476619	0.256905623	-0.007750252	20:15:08	0.258779702	0.245955343	-0.008009018
20:15:12	0.758082785	0.73500508	0.491732217	20:15:16	0.757385868	0.724054799	0.491473451
20:15:20	0.756688952	0.713104536	0.491214685	20:15:24	0.755992035	0.702154255	0.490955919
20:15:28	0.755295118	0.688848624	0.490697153	20:15:32	0.754598201	0.675542992	0.490438387
20:15:36	0.753901284	0.662519482	0.490179621	20:15:40	0.753204367	0.649778111	0.489920855
20:15:44	0.752507451	0.63703674	0.489662089	20:15:48	0.751810534	0.609240227	0.489403323
20:15:52	0.751113617	0.581443733	0.489144557	20:15:56	0.7504167	0.555078789	0.488885791
20:16:00	0.749719783	0.529191031	0.488627025	20:16:04	0.748600064	0.503051244	0.488368259
20:16:08	0.747480344	0.478976078	0.488109493	20:16:12	0.746360625	0.454900912	0.487850727
20:16:16	0.745240906	0.434892414	0.487591961	20:16:20	0.744121187	0.418950581	0.487333195
20:16:24	0.743001467	0.40300875	0.487074429	20:16:28	0.741881748	0.401756471	0.486815664
20:16:32	0.740762029	0.400504196	0.486556898	20:16:36	0.739642309	0.394631029	0.486298132
20:16:40	0.73852259	0.38413697	0.486039366	20:16:44	0.737402871	0.373642911	0.4857806
20:16:48	0.736283151	0.357239708	0.485521834	20:16:52	0.735163432	0.340836518	0.485263068
20:16:56	0.734043713	0.326949823	0.485004302	20:17:00	0.732923993	0.31557964	0.484745536
20:17:04	0.732513923	0.304632467	0.48448677	20:17:08	0.732103852	0.284495348	0.484228004
20:17:12	0.731693782	0.264358228	0.483969238	20:17:16	0.731283711	0.252093199	0.483710472
20:17:20	0.730873641	0.247700278	0.483451706	20:17:24	0.73046357	0.243307357	0.48319294
20:17:28	0.7300535	0.230293457	0.482934174	20:17:32	0.729643429	0.217279557	0.482675408
20:17:36	0.729233359	0.199261411	0.482416642	20:17:40	0.728823288	0.176239055	0.482157877
20:17:44	0.728413218	0.153216682	0.481899111	20:17:48	0.728003147	0.133397497	0.481640345
20:17:52	0.727593077	0.113578312	0.481381579	20:17:56	0.727183006	0.095619803	0.481122813
20:18:00	0.726772936	0.079521932	0.480864047	20:18:04	0.7266938	0.063621327	0.480605281
20:18:08	0.726614665	0.054411691	0.480346515	20:18:12	0.726535529	0.04520209	0.480087749
20:18:16	0.726456393	0.030804627	0.479828983	20:18:20	0.726377258	0.011219339	0.479570217
20:18:24	0.726298122	-0.00836595	0.479311451	20:18:28	0.726218986	0.004424896	0.479052685
20:18:32	0.726139851	0.017215742	0.478793919	20:18:36	0.726060715	0.015988959	0.478535153
20:18:40	0.725981579	0.000744546	0.478276387	20:18:44	0.725902444	-0.014499902	0.478017621
20:18:48	0.725823308	-0.019632539	0.477758855	20:18:52	0.725744172	-0.024765177	0.477500089
20:18:56	0.725665037	-0.02820903	0.477241324	20:19:00	0.725585901	-0.031089956	0.476982558
20:19:04	0.725492943	-0.033979157	0.476723792	20:19:08	0.725399984	-0.025039944	0.476465026
20:19:12	0.725307026	-0.016100696	0.47620626	20:19:16	0.725214067	-0.002613861	0.475947494
20:19:20	0.725121109	0.015420631	0.475688728	20:19:24	0.72502815	0.033455123	0.475429962
20:19:28	0.724935192	0.059119377	0.475171196	20:19:32	0.724842233	0.084783595	0.47491243
20:19:36	0.724749275	0.104469672	0.474653664	20:19:40	0.724656316	0.11817757	0.474394898
20:19:44	0.724563358	0.131885469	0.474136132	20:19:48	0.724470399	0.14781312	0.473877366
20:19:52	0.724377441	0.163740772	0.4736186	20:19:56	0.724284482	0.183344793	0.473359834
20:20:00	0.724191524	0.206625184	0.473101068	20:20:04	0.7228999	0.229191051	0.472842302
20:20:08	0.721608276	0.25497224	0.472583536	20:20:12	0.720316652	0.280753412	0.472324771
20:20:16	0.719025028	0.30024571	0.472066005	20:20:20	0.717733405	0.313449126	0.471807239

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
20:20:24	0.716441781	0.326652534	0.471548473	20:20:28	0.715150157	0.32794223	0.471289707
20:20:32	0.713858533	0.329231926	0.471030941	20:20:36	0.712566909	0.32946233	0.470772175
20:20:40	0.711275285	0.328633425	0.470513409	20:20:44	0.709983662	0.327804521	0.470254643
20:20:48	0.708692038	0.334241113	0.469995877	20:20:52	0.707400414	0.340677696	0.469737111
20:20:56	0.70610879	0.347114284	0.469478345	20:21:00	0.704817166	0.353550872	0.469219579
20:21:04	0.704932905	0.360826367	0.468960813	20:21:08	0.705048644	0.37296991	0.468702047
20:21:12	0.705164384	0.385113455	0.468443281	20:21:16	0.705280123	0.395260794	0.468184515
20:21:20	0.705395862	0.403411928	0.467925749	20:21:24	0.705511601	0.411563063	0.467666984
20:21:28	0.70562734	0.409974514	0.467408218	20:21:32	0.70574308	0.408385967	0.467149452
20:21:36	0.705858819	0.406797418	0.466890686	20:21:40	0.705974558	0.405208871	0.46663192
20:21:44	0.706090297	0.403620322	0.466373154	20:21:48	0.706206036	0.397015127	0.466114388
20:21:52	0.706321775	0.39040993	0.465855622	20:21:56	0.706437515	0.384835398	0.465596856
20:22:00	0.706553254	0.380291531	0.46533809	20:22:04	0.705885925	0.375280888	0.465079324
20:22:08	0.705218596	0.374210999	0.464820558	20:22:12	0.704551268	0.373141109	0.464561792
20:22:16	0.703883939	0.371695429	0.464303026	20:22:20	0.70321661	0.369873968	0.46404426
20:22:24	0.702549281	0.368052507	0.463785494	20:22:28	0.701881952	0.369200399	0.463526728
20:22:32	0.701214624	0.37034829	0.463267962	20:22:36	0.700547295	0.371496181	0.463009196
20:22:40	0.699879966	0.372644073	0.462750431	20:22:44	0.699212637	0.373791964	0.462491665
20:22:48	0.698545309	0.382111051	0.462232899	20:22:52	0.69787798	0.390430137	0.461974133
20:22:56	0.697210651	0.391047248	0.461715367	20:23:00	0.696543322	0.383962383	0.461456601
20:23:04	0.696382153	0.37717923	0.461197835	20:23:08	0.696220984	0.379469348	0.460939069
20:23:12	0.696059815	0.381759466	0.460680303	20:23:16	0.695898646	0.382756022	0.460421537
20:23:20	0.695737476	0.382459017	0.460162771	20:23:24	0.695576307	0.382162013	0.459904005
20:23:28	0.695415138	0.383095886	0.459645239	20:23:32	0.695253969	0.384029758	0.459386473
20:23:36	0.6950928	0.38260306	0.459127707	20:23:40	0.694931631	0.378815793	0.458868941
20:23:44	0.694770461	0.375028526	0.458610175	20:23:48	0.694609292	0.360414048	0.458351409
20:23:52	0.694448123	0.345799571	0.458092643	20:23:56	0.694286954	0.33574551	0.457833878
20:24:00	0.694125785	0.330251874	0.457575112	20:24:04	0.693609703	0.324546672	0.457316346
20:24:08	0.693093621	0.327937086	0.45705758	20:24:12	0.69257754	0.3313275	0.456798814
20:24:16	0.692061458	0.329655809	0.456540048	20:24:20	0.691545376	0.322922022	0.456281282
20:24:24	0.691029295	0.316188226	0.456022516	20:24:28	0.690513213	0.306667166	0.45576375
20:24:32	0.689997131	0.297146105	0.455504984	20:24:36	0.68948105	0.288112828	0.455246218
20:24:40	0.688964968	0.279567343	0.454987452	20:24:44	0.688448886	0.27102185	0.454728686
20:24:48	0.687932804	0.27506056	0.45446992	20:24:52	0.687416723	0.279099271	0.454211154
20:24:56	0.686900641	0.284094868	0.453952388	20:25:00	0.686384559	0.29004737	0.453693622
20:25:04	0.686319156	0.296268514	0.453434856	20:25:08	0.686253753	0.307914616	0.453176091
20:25:12	0.68618835	0.31956071	0.452917325	20:25:16	0.686122947	0.333907607	0.452658559
20:25:20	0.686057544	0.350955302	0.452399793	20:25:24	0.68599214	0.368002998	0.452141027
20:25:28	0.685926737	0.364992759	0.451882261	20:25:32	0.685861334	0.361982525	0.451623495
20:25:36	0.685795931	0.365282526	0.451364729	20:25:40	0.685730528	0.374892764	0.451105963
20:25:44	0.685665125	0.384503005	0.450847197	20:25:48	0.685599721	0.399953466	0.450588431
20:25:52	0.685534318	0.415403926	0.450329665	20:25:56	0.685468915	0.429789248	0.450070899
20:26:00	0.685403512	0.443109433	0.449812133	20:26:04	0.685335256	0.456725959	0.449553367
20:26:08	0.686267001	0.448142485	0.449294601	20:26:12	0.686698745	0.43955901	0.449035835
20:26:16	0.68713049	0.428565103	0.448777069	20:26:20	0.687562234	0.415160766	0.448518303
20:26:24	0.687993979	0.401756428	0.448259538	20:26:28	0.688425723	0.408675811	0.448000772
20:26:32	0.688857468	0.415595193	0.447742006	20:26:36	0.689289212	0.42454173	0.44748324
20:26:40	0.689720957	0.435515421	0.447224474	20:26:44	0.690152701	0.446489112	0.446965708
20:26:48	0.690584446	0.452625255	0.446706942	20:26:52	0.69101619	0.458761399	0.446448176
20:26:56	0.691447935	0.459442959	0.44618941	20:27:00	0.691879679	0.458306328	0.445930644
20:27:04	0.691652558	0.456776952	0.445671878	20:27:08	0.691425437	0.457125511	0.445413112
20:27:12	0.691198315	0.457474069	0.445154346	20:27:16	0.690971194	0.455965234	0.44489558
20:27:20	0.690744073	0.453837264	0.444636814	20:27:24	0.690516951	0.451709294	0.444378048
20:27:28	0.69028983	0.463807603	0.444119282	20:27:32	0.690062709	0.475905913	0.443860516
20:27:36	0.689835588	0.478212746	0.44360175	20:27:40	0.689608466	0.470728109	0.443342985
20:27:44	0.689381345	0.463243473	0.443084219	20:27:48	0.689154224	0.451709066	0.442825453
20:27:52	0.688927103	0.440174664	0.442566687	20:27:56	0.688699981	0.419909873	0.442307921

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
20:28:00	0.68847286	0.390914699	0.442049155	20:28:04	0.688221906	0.364749211	0.441790389
20:28:08	0.687970951	0.34711541	0.441531623	20:28:12	0.687719997	0.329481613	0.441272857
20:28:16	0.687469043	0.320400109	0.441014091	20:28:20	0.687218088	0.319870896	0.440755325
20:28:24	0.686967134	0.319341692	0.440496559	20:28:28	0.68671618	0.314286068	0.440237793
20:28:32	0.686465225	0.309230445	0.439979027	20:28:36	0.686214271	0.311519016	0.439720261
20:28:40	0.685963317	0.32115179	0.439461495	20:28:44	0.685712362	0.330784565	0.439202729
20:28:48	0.685461408	0.340417334	0.438943963	20:28:52	0.685210454	0.350050109	0.438685197
20:28:56	0.684959499	0.362062683	0.438426432	20:29:00	0.684708545	0.374868521	0.438167666
20:29:04	0.68449091	0.387694221	0.4379089	20:29:08	0.684273275	0.396818742	0.437650134
20:29:12	0.68405564	0.405943263	0.437391368	20:29:16	0.683838005	0.41717875	0.437132602
20:29:20	0.68362037	0.430525206	0.436873836	20:29:24	0.683402735	0.44387166	0.43661507
20:29:28	0.6831851	0.447974818	0.436356304	20:29:32	0.682967465	0.452077982	0.436097538
20:29:36	0.68274983	0.455118618	0.435838772	20:29:40	0.682532195	0.457096738	0.435580006
20:29:44	0.68231456	0.459074857	0.43532124	20:29:48	0.682096925	0.457349738	0.435062474
20:29:52	0.68187929	0.455624619	0.434803708	20:29:56	0.681661655	0.4538995	0.434544942
20:30:00	1.18144402	0.952174381	0.934286176	20:30:04	1.18097672	0.950300441	0.93402741
20:30:08	1.18050942	0.950958681	0.933768645	20:30:12	0.680042121	0.451616922	0.433509879
20:30:16	0.679574821	0.456012589	0.433251113	20:30:20	0.679107521	0.464145692	0.432992347
20:30:24	0.678640222	0.472278791	0.432733581	20:30:28	0.678172922	0.472445784	0.432474815
20:30:32	0.677705622	0.472612777	0.432216049	20:30:36	0.677238322	0.469085764	0.431957283
20:30:40	0.676771023	0.461864755	0.431698517	20:30:44	0.676303723	0.45350847	0.431439751
20:30:48	0.675836423	0.441746368	0.431180985	20:30:52	0.675369123	0.42998427	0.430922219
20:30:56	0.674901824	0.419918102	0.430663453	20:31:00	0.674434524	0.411547867	0.430404687
20:31:04	0.674008191	0.403202053	0.430145921	20:31:08	0.673581859	0.388256171	0.429887155
20:31:12	0.673155526	0.373310286	0.429628389	20:31:16	0.672729193	0.356705999	0.429369623
20:31:20	0.672302861	0.338443301	0.429110857	20:31:24	0.671876528	0.320180608	0.428852092
20:31:28	0.671450195	0.305805236	0.428593326	20:31:32	0.671023863	0.291429864	0.42833456
20:31:36	0.67059753	0.278337467	0.428075794	20:31:40	0.670171197	0.266528047	0.427817028
20:31:44	0.669744865	0.254718635	0.427558262	20:31:48	0.669318532	0.251917446	0.427299496
20:31:52	0.668892199	0.249116266	0.42704073	20:31:56	0.668465867	0.246315086	0.426781964
20:32:00	0.668039534	0.243513888	0.426523198	20:32:04	0.667127356	0.240423103	0.426264432
20:32:08	0.666215178	0.237332318	0.426005666	20:32:12	0.666303	0.234241533	0.4257469
20:32:16	0.664390822	0.234759825	0.425488134	20:32:20	0.663478644	0.238887212	0.425229368
20:32:24	0.662566466	0.243014599	0.424970602	20:32:28	0.661654287	0.254335695	0.424711836
20:32:32	0.660742109	0.265656782	0.42445307	20:32:36	0.659829931	0.272738084	0.424194304
20:32:40	0.658917753	0.275579581	0.423935539	20:32:44	0.658005575	0.278421088	0.423676773
20:32:48	0.657093397	0.288119334	0.423418007	20:32:52	0.656181219	0.297817581	0.423159241
20:32:56	0.655269041	0.302751769	0.422900475	20:33:00	0.654356863	0.302921882	0.422641709
20:33:04	0.653898006	0.305755828	0.422382943	20:33:08	0.653439149	0.315770622	0.422124177
20:33:12	0.652980292	0.325785421	0.421865411	20:33:16	0.652521435	0.334229847	0.421606645
20:33:20	0.652062578	0.341103904	0.421347879	20:33:24	0.651603721	0.347977961	0.421089113
20:33:28	0.651144864	0.34289692	0.420830347	20:33:32	0.650686007	0.337815879	0.420571581
20:33:36	0.65022715	0.33605085	0.420312815	20:33:40	0.649768293	0.337601825	0.420054049
20:33:44	0.649309436	0.339152801	0.419795283	20:33:48	0.648850579	0.335423822	0.419536517
20:33:52	0.648391722	0.331694843	0.419277752	20:33:56	0.647932865	0.334403735	0.419018986
20:34:00	0.647474008	0.343550497	0.41876022	20:34:04	0.646647984	0.352478396	0.418501454
20:34:08	0.645821959	0.350368111	0.418242688	20:34:12	0.644995934	0.348257826	0.417983922
20:34:16	0.644169909	0.352215201	0.417725156	20:34:20	0.643343884	0.362240237	0.41746639
20:34:24	0.642517859	0.372265274	0.417207624	20:34:28	0.641691835	0.390290353	0.416948858
20:34:32	0.64086581	0.408315431	0.416690092	20:34:36	0.640039785	0.423407522	0.416431326
20:34:40	0.63921376	0.435566621	0.41617256	20:34:44	0.638387735	0.447725719	0.415913794
20:34:48	0.637561711	0.448771251	0.415655028	20:34:52	0.636735686	0.449816783	0.415396262
20:34:56	0.635909661	0.449292626	0.415137496	20:35:00	0.635083636	0.447198775	0.41487873
20:35:04	0.634935115	0.445664726	0.414619964	20:35:08	0.634786595	0.444598532	0.414361199
20:35:12	0.634638074	0.443532334	0.414102433	20:35:16	0.634489553	0.442466141	0.413843667
20:35:20	0.634341032	0.449837599	0.413584901	20:35:24	0.634192511	0.457209053	0.413326135
20:35:28	0.63404399	0.458751144	0.413067369	20:35:32	0.63389547	0.460293244	0.412808603

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
20:35:36	0.633746949	0.458621096	0.412549837	20:35:40	0.633598428	0.455877524	0.412291071
20:35:44	0.633449907	0.452159753	0.412032305	20:35:48	0.633301386	0.445519333	0.411773539
20:35:52	0.633152865	0.438878922	0.411514773	20:35:56	0.633004344	0.429258869	0.411256007
20:36:00	0.632855824	0.4186456	0.410997241	20:36:04	0.632041697	0.410744442	0.410738475
20:36:08	0.631227571	0.412169876	0.410479709	20:36:12	0.630413445	0.413595311	0.410220943
20:36:16	0.629599318	0.410778945	0.409962177	20:36:20	0.628785192	0.406548647	0.409703411
20:36:24	0.627971066	0.403181671	0.409444646	20:36:28	0.627156939	0.402404659	0.40918588
20:36:32	0.626342813	0.401627651	0.408927114	20:36:36	0.625528687	0.403938023	0.408668348
20:36:40	0.62471456	0.407277524	0.408409582	20:36:44	0.623900434	0.41279945	0.408150816
20:36:48	0.623086308	0.424868663	0.40789205	20:36:52	0.622272181	0.436937877	0.407633284
20:36:56	0.621458055	0.446756383	0.407374518	20:37:00	0.620643929	0.45582465	0.407115752
20:37:04	0.620022902	0.462500213	0.406856986	20:37:08	0.619401875	0.461652344	0.40659822
20:37:12	0.618780848	0.460804476	0.406339454	20:37:16	0.618159822	0.469153207	0.406080688
20:37:20	0.617538795	0.480567469	0.405821922	20:37:24	0.616917768	0.486228836	0.405563156
20:37:28	0.616296741	0.474631547	0.40530439	20:37:32	0.615675714	0.463034257	0.405045624
20:37:36	0.615054688	0.450326753	0.404786859	20:37:40	0.614433661	0.437249175	0.404528093
20:37:44	0.613812634	0.417890207	0.404269327	20:37:48	0.613191607	0.379687075	0.404010561
20:37:52	0.61257058	0.341483942	0.403751795	20:37:56	0.611949554	0.314328496	0.403493029
20:38:00	0.611328527	0.287173058	0.403234263	20:38:04	0.610451859	0.260326461	0.402975497
20:38:08	0.609575191	0.234863565	0.402716731	20:38:12	0.608698523	0.209400669	0.402457965
20:38:16	0.607821855	0.205117758	0.402199199	20:38:20	0.606945188	0.207894823	0.401940433
20:38:24	0.60606852	0.210671889	0.401681667	20:38:28	0.605191852	0.213448963	0.401422901
20:38:32	0.604315184	0.216226028	0.401164135	20:38:36	0.603438516	0.214231664	0.400905369
20:38:40	0.602561848	0.210646816	0.400646603	20:38:44	0.60168518	0.205740772	0.400387837
20:38:48	0.600808513	0.196871174	0.400129071	20:38:52	0.599931845	0.188001577	0.399870306
20:38:56	0.599055177	0.186351145	0.39961154	20:39:00	0.598178509	0.187107138	0.399352774
20:39:04	0.597738173	0.185601966	0.399094008	20:39:08	0.597297837	0.176533064	0.398835242
20:39:12	0.5968575	0.167464162	0.398576476	20:39:16	0.596417164	0.163046662	0.39831771
20:39:20	0.595976828	0.160179648	0.398058944	20:39:24	0.595536492	0.161862797	0.397800178
20:39:28	0.595096156	0.168096071	0.397541412	20:39:32	0.59465582	0.174329364	0.397282646
20:39:36	0.594215483	0.183879557	0.39702388	20:39:40	0.593775147	0.19453539	0.396765114
20:39:44	0.593334811	0.204677619	0.396506348	20:39:48	0.592894475	0.21430627	0.396247582
20:39:52	0.592454139	0.223934921	0.395988816	20:39:56	0.592013802	0.241213897	0.39573005
20:40:00	0.591573466	0.261042987	0.395471284	20:40:04	0.590908649	0.269379836	0.395212518
20:40:08	0.590243832	0.266358272	0.394953753	20:40:12	0.589579015	0.263336699	0.394694987
20:40:16	0.588914198	0.255067567	0.394436221	20:40:20	0.58824938	0.245049233	0.394177455
20:40:24	0.587584563	0.243911358	0.393918689	20:40:28	0.586919746	0.251653934	0.393659923
20:40:32	0.586254929	0.25939651	0.393401157	20:40:36	0.585590112	0.275707055	0.393142391
20:40:40	0.584925295	0.294873586	0.392883625	20:40:44	0.584260478	0.314537774	0.392624859
20:40:48	0.58359566	0.33569492	0.392366093	20:40:52	0.582930843	0.356852066	0.392107327
20:40:56	0.582266026	0.372253643	0.391848561	20:41:00	0.581601209	0.385736698	0.391589795
20:41:04	0.580754319	0.398395134	0.391331029	20:41:08	0.579907429	0.408905306	0.391072263
20:41:12	0.579060539	0.419415478	0.390813497	20:41:16	0.578213649	0.427646937	0.390554731
20:41:20	0.577366759	0.435118834	0.390295966	20:41:24	0.576519869	0.441139773	0.3900372
20:41:28	0.575672979	0.44280788	0.389778434	20:41:32	0.574826089	0.444475987	0.389519668
20:41:36	0.573979198	0.458457209	0.389260902	20:41:40	0.573132308	0.476542806	0.389002136
20:41:44	0.572285418	0.48885594	0.38874337	20:41:48	0.571438528	0.483851678	0.388484604
20:41:52	0.570591638	0.478847416	0.388225838	20:41:56	0.569744748	0.471298681	0.387967072
20:42:00	0.568897858	0.462901778	0.387708306	20:42:04	0.568608295	0.453204726	0.38744954
20:42:08	0.568318731	0.438610577	0.387190774	20:42:12	0.568029168	0.424016419	0.386932008
20:42:16	0.567739604	0.413875986	0.386673242	20:42:20	0.567450041	0.405220142	0.386414476
20:42:24	0.567160478	0.39711208	0.38615571	20:42:28	0.566870914	0.390647378	0.385896944
20:42:32	0.566581351	0.384182676	0.385638178	20:42:36	0.566291787	0.375737024	0.385379413
20:42:40	0.566002224	0.36663105	0.385120647	20:42:44	0.565712661	0.356480779	0.384861881
20:42:48	0.565423097	0.343197607	0.384603115	20:42:52	0.565133534	0.329914436	0.384344349
20:42:56	0.56484397	0.321311423	0.384085583	20:43:00	0.564554407	0.314268463	0.383826817
20:43:04	0.564394141	0.307132706	0.383568051	20:43:08	0.564233875	0.299487349	0.383309285

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
20:43:12	0.56407361	0.291841987	0.383050519	20:43:16	0.563913344	0.283442803	0.382791753
20:43:20	0.563753078	0.274792341	0.382532987	20:43:24	0.563592813	0.266582724	0.382274221
20:43:28	0.563432547	0.259695648	0.382015455	20:43:32	0.563272281	0.252808564	0.381756689
20:43:36	0.563112015	0.244264992	0.381497923	20:43:40	0.56295175	0.235169267	0.381239157
20:43:44	0.562791484	0.226830664	0.380980391	20:43:48	0.562631218	0.220763448	0.380721625
20:43:52	0.562470952	0.21469624	0.38046286	20:43:56	0.562310687	0.223699816	0.380204094
20:44:00	0.562150421	0.2327034	0.379945328	20:44:04	0.560866382	0.242761611	0.379686562
20:44:08	0.559582342	0.257993347	0.379427796	20:44:12	0.558298303	0.273225079	0.37916903
20:44:16	0.557014263	0.284189471	0.378910264	20:44:20	0.555730224	0.293731413	0.378651498
20:44:24	0.554446185	0.301246125	0.378392732	20:44:28	0.553162145	0.302679147	0.378133966
20:44:32	0.551878106	0.304112168	0.3778752	20:44:36	0.550594067	0.309007788	0.377616434
20:44:40	0.549310027	0.315057608	0.377357668	20:44:44	0.548025988	0.320579104	0.377098902
20:44:48	0.546741949	0.324515627	0.376840136	20:44:52	0.545457909	0.32845215	0.37658137
20:44:56	0.54417387	0.338426721	0.376322604	20:45:00	0.042889831	-0.149586024	-0.123936162
20:45:04	0.042727306	-0.138794646	-0.124194927	20:45:08	0.042564782	-0.133596443	-0.124453693
20:45:12	0.542402257	0.371601759	0.375287541	20:45:16	0.542239733	0.377760725	0.375028775
20:45:20	0.542077209	0.38423994	0.374770009	20:45:24	0.541914684	0.389693234	0.374511243
20:45:28	0.54175216	0.392068776	0.374252477	20:45:32	0.541589636	0.394444318	0.373993711
20:45:36	0.541427111	0.397892058	0.373734945	20:45:40	0.541264587	0.402411986	0.373476179
20:45:44	0.541102062	0.406931914	0.373217413	20:45:48	0.540939538	0.405909974	0.372958647
20:45:52	0.540777014	0.404888043	0.372699881	20:45:56	0.540614489	0.408066177	0.372441115
20:46:00	0.540451965	0.415444383	0.372182349	20:46:04	0.53990878	0.422595684	0.371923583
20:46:08	0.539365594	0.431215574	0.371664817	20:46:12	0.538822409	0.439835465	0.371406051
20:46:16	0.538279224	0.443288936	0.371147285	20:46:20	0.537736039	0.441575996	0.37088852
20:46:24	0.537192853	0.439863057	0.370629754	20:46:28	0.536649668	0.422909273	0.370370988
20:46:32	0.536106483	0.405955489	0.370112222	20:46:36	0.535563298	0.388089554	0.369853456
20:46:40	0.535020112	0.369311472	0.36959469	20:46:44	0.534476927	0.350533389	0.369335924
20:46:48	0.533933742	0.329135994	0.369077158	20:46:52	0.533390556	0.3077386	0.368818392
20:46:56	0.532847371	0.292507592	0.368559626	20:47:00	0.532304186	0.28344297	0.36830086
20:47:04	0.53175408	0.274374223	0.368042094	20:47:08	0.531203974	0.275165574	0.367783328
20:47:12	0.530653869	0.275956925	0.367524562	20:47:16	0.530103763	0.275032086	0.367265796
20:47:20	0.529553657	0.272391048	0.36700703	20:47:24	0.529003552	0.269750014	0.366748264
20:47:28	0.528453446	0.263352444	0.366489498	20:47:32	0.527903334	0.256954873	0.366230732
20:47:36	0.527353234	0.256268827	0.365971967	20:47:40	0.526803129	0.261294306	0.365713201
20:47:44	0.526253023	0.266319785	0.365454435	20:47:48	0.525702917	0.271345264	0.365195669
20:47:52	0.525152812	0.276370745	0.364936903	20:47:56	0.524602706	0.286026299	0.364678137
20:48:00	0.5240526	0.30031193	0.364419371	20:48:04	0.522866996	0.314218749	0.364160605
20:48:08	0.521681393	0.315239298	0.363901839	20:48:12	0.520495789	0.316259847	0.363643073
20:48:16	0.519310186	0.318962041	0.363384307	20:48:20	0.518124582	0.323345882	0.363125541
20:48:24	0.516938978	0.327729723	0.362866775	20:48:28	0.515753375	0.332113563	0.362608009
20:48:32	0.514567771	0.336497403	0.362349243	20:48:36	0.513382167	0.342816381	0.362090477
20:48:40	0.512196564	0.351070499	0.361831711	20:48:44	0.51101096	0.359324615	0.361572945
20:48:48	0.509825356	0.352747567	0.361314179	20:48:52	0.508639753	0.346170514	0.361055414
20:48:56	0.507454149	0.344207141	0.360796648	20:49:00	0.506268546	0.346857444	0.360537882
20:49:04	0.506067173	0.350094431	0.360279116	20:49:08	0.5058658	0.36352214	0.36002035
20:49:12	0.505664427	0.376949844	0.359761584	20:49:16	0.505463054	0.381318194	0.359502818
20:49:20	0.505261681	0.382666749	0.359244052	20:49:24	0.505060308	0.384015304	0.358985286
20:49:28	0.504858936	0.384191326	0.35872652	20:49:32	0.504657563	0.384367349	0.358467754
20:49:36	0.50445619	0.383955706	0.358208988	20:49:40	0.504254817	0.38295638	0.357950222
20:49:44	0.504053444	0.381957063	0.357691456	20:49:48	0.503852071	0.3837079	0.35743269
20:49:52	0.503650699	0.385458745	0.357173924	20:49:56	0.503449326	0.394178959	0.356915158
20:50:00	0.503247953	0.409868558	0.356656392	20:50:04	0.502672745	0.425335312	0.356397627
20:50:08	0.502097537	0.436483697	0.356138861	20:50:12	0.501522328	0.447632082	0.355880095
20:50:16	0.50094712	0.459706709	0.355621329	20:50:20	0.500371912	0.47270758	0.355362563
20:50:24	0.499796704	0.48570845	0.355103797	20:50:28	0.499221496	0.489485745	0.354845031
20:50:32	0.498646288	0.493263039	0.354586265	20:50:36	0.498071079	0.500270632	0.354327499
20:50:40	0.497495871	0.510508541	0.354068733	20:50:44	0.496920663	0.520746449	0.353809967

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
20:50:48	0.496345455	0.538338038	0.353551201	20:50:52	0.495770247	0.555929645	0.353292435
20:50:56	0.495195039	0.576087754	0.353033669	20:51:00	0.49461983	0.598812401	0.352774903
20:51:04	0.495321911	0.622298402	0.352516137	20:51:08	0.496023991	0.635175962	0.352257371
20:51:12	0.496726071	0.648053522	0.351998605	20:51:16	0.497428151	0.654747437	0.351739839
20:51:20	0.498130231	0.655257709	0.351481074	20:51:24	0.498832312	0.65576798	0.351222308
20:51:28	0.499534392	0.659736436	0.350963542	20:51:32	0.500236472	0.663704855	0.350704776
20:51:36	0.500938552	0.665166107	0.35044601	20:51:40	0.501640632	0.66412019	0.350187244
20:51:44	0.502342713	0.663074274	0.349928478	20:51:48	0.503044793	0.658649831	0.349669712
20:51:52	0.503746873	0.654225353	0.349410946	20:51:56	0.504448953	0.642476345	0.34915218
20:52:00	0.505151033	0.623402773	0.348893414	20:52:04	0.504120431	0.603296376	0.348634648
20:52:08	0.503089828	0.567810099	0.348375882	20:52:12	0.502059225	0.532323822	0.348117116
20:52:16	0.501028623	0.504249156	0.34785835	20:52:20	0.49999802	0.478645045	0.347599584
20:52:24	0.498967417	0.453040917	0.347340818	20:52:28	0.497936814	0.424205024	0.347082052
20:52:32	0.496906212	0.395369132	0.346823286	20:52:36	0.495875609	0.373899321	0.346564521
20:52:40	0.494845006	0.35979559	0.346305755	20:52:44	0.493814404	0.345691859	0.346046989
20:52:48	0.492783801	0.32909411	0.345788223	20:52:52	0.491753198	0.312496362	0.345529457
20:52:56	0.490722596	0.29761613	0.345270691	20:53:00	0.489691993	0.283308404	0.345011925
20:53:04	0.489555669	0.269533744	0.344753159	20:53:08	0.489419344	0.252243396	0.344494393
20:53:12	0.48928302	0.234953046	0.344235627	20:53:16	0.489146696	0.226767901	0.343976861
20:53:20	0.489010372	0.227687961	0.343718095	20:53:24	0.488874047	0.228608021	0.343459329
20:53:28	0.488737723	0.231192341	0.343200563	20:53:32	0.488601399	0.238769434	0.342941797
20:53:36	0.488465075	0.243224866	0.342683031	20:53:40	0.488328751	0.244558639	0.342424265
20:53:44	0.488192426	0.245892412	0.342165499	20:53:48	0.488056102	0.254637024	0.341906734
20:53:52	0.487919778	0.263381636	0.341647968	20:53:56	0.487783454	0.271393821	0.341389202
20:54:00	0.487647129	0.278673577	0.341130436	20:54:04	0.487001285	0.285649618	0.34087167
20:54:08	0.48635544	0.284581006	0.340612904	20:54:12	0.485709595	0.283512394	0.340354138
20:54:16	0.485063751	0.278442992	0.340095372	20:54:20	0.484417906	0.269372799	0.339836606
20:54:24	0.483772062	0.260302607	0.33957784	20:54:28	0.483126217	0.242616365	0.339319074
20:54:32	0.482480372	0.224930121	0.339060308	20:54:36	0.481834528	0.204554577	0.338801542
20:54:40	0.481188683	0.18328259	0.338542776	20:54:44	0.480542838	0.162010613	0.33828401
20:54:48	0.479896994	0.146971274	0.338025244	20:54:52	0.479251149	0.131931927	0.337766478
20:54:56	0.478605304	0.120678273	0.337507712	20:55:00	0.47795946	0.113210313	0.337248946
20:55:04	0.477551196	0.105883971	0.336990181	20:55:08	0.477142933	0.094871577	0.336731415
20:55:12	0.476734669	0.083859184	0.336472649	20:55:16	0.476326405	0.067046722	0.336213883
20:55:20	0.475918142	0.044434209	0.335955117	20:55:24	0.475509878	0.021821679	0.335696351
20:55:28	0.475101615	-0.0019484	0.335437585	20:55:32	0.474693351	-0.025718461	0.335178819
20:55:36	0.474285087	-0.04277803	0.334920053	20:55:40	0.473876824	-0.05760081	0.334661287
20:55:44	0.47346856	-0.069716107	0.334402521	20:55:48	0.473060297	-0.073709133	0.334143755
20:55:52	0.472652033	-0.077702195	0.333884989	20:55:56	0.472243769	-0.084951172	0.333626223
20:56:00	0.471835506	-0.09328543	0.333367457	20:56:04	0.471793195	-0.099715785	0.333108691
20:56:08	0.471750884	-0.101088707	0.332849925	20:56:12	0.471708573	-0.10246163	0.332591159
20:56:16	0.471666262	-0.106098983	0.332332393	20:56:20	0.471623951	-0.110491158	0.332073628
20:56:24	0.47158164	-0.117442801	0.331814862	20:56:28	0.47153933	-0.132072952	0.331556096
20:56:32	0.471497019	-0.146703104	0.33129733	20:56:36	0.471454708	-0.150721048	0.331038564
20:56:40	0.471412397	-0.151201578	0.330779798	20:56:44	0.471370086	-0.150133986	0.330521032
20:56:48	0.471327775	-0.144421847	0.330262266	20:56:52	0.471285464	-0.138709744	0.3300035
20:56:56	0.471243153	-0.12677026	0.329744734	20:57:00	0.471200842	-0.112754971	0.329485968
20:57:04	0.471164801	-0.094932024	0.329227202	20:57:08	0.47112876	-0.065697388	0.328968436
20:57:12	0.47109272	-0.036462751	0.32870967	20:57:16	0.471056679	-0.00603756	0.328450904
20:57:20	0.471020638	0.024784513	0.328192138	20:57:24	0.470984597	0.048851148	0.327933372
20:57:28	0.470948556	0.066162365	0.327674606	20:57:32	0.470912515	0.083473582	0.327415841
20:57:36	0.470876474	0.112526255	0.327157075	20:57:40	0.470840433	0.145492731	0.326898309
20:57:44	0.470804392	0.175380771	0.326639543	20:57:48	0.470768351	0.196033484	0.326380777
20:57:52	0.47073231	0.216686193	0.326122011	20:57:56	0.470696269	0.231754794	0.325863245
20:58:00	0.470660228	0.246823397	0.325604479	20:58:04	0.469227336	0.261731685	0.325345713
20:58:08	0.467794444	0.278656958	0.325086947	20:58:12	0.466361551	0.295582231	0.324828181
20:58:16	0.464928659	0.312125818	0.324569415	20:58:20	0.463495767	0.328542177	0.324310649

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
20:58:24	0.462062875	0.342823543	0.324051883	20:58:28	0.460629982	0.350699934	0.323793117
20:58:32	0.45919709	0.358576326	0.323534351	20:58:36	0.457764198	0.371957377	0.323275585
20:58:40	0.456331305	0.387173317	0.323016819	20:58:44	0.454898413	0.405725904	0.322758053
20:58:48	0.453465521	0.434288456	0.322499288	20:58:52	0.452032629	0.462851008	0.322240522
20:58:56	0.450599736	0.479901945	0.321981756	20:59:00	0.449166844	0.493115706	0.32172299
20:59:04	0.449062592	0.504461877	0.321464224	20:59:08	0.448958341	0.507829423	0.321205458
20:59:12	0.448854089	0.511196969	0.320946692	20:59:16	0.448749837	0.512606312	0.320687926
20:59:20	0.448645586	0.513362892	0.32042916	20:59:24	0.448541334	0.517186511	0.320170394
20:59:28	0.448437082	0.530211198	0.319911628	20:59:32	0.448332831	0.543235885	0.319652862
20:59:36	0.448228579	0.55294424	0.319394096	20:59:40	0.448124328	0.561547133	0.31913533
20:59:44	0.448020076	0.569889222	0.318876564	20:59:48	0.447915824	0.577448847	0.318617798
20:59:52	0.447811573	0.585008472	0.318359032	20:59:56	0.447707321	0.607637823	0.318100266
21:00:00	0.947603069	1.135290393	0.8178415	21:00:04	0.947158699	1.158086581	0.817582735
21:00:08	0.946714329	1.166921703	0.817323969	21:00:12	0.446269959	0.675756826	0.317065203
21:00:16	0.445825589	0.682185612	0.316806437	21:00:20	0.445381219	0.687812287	0.316547671
21:00:24	0.444936849	0.690584245	0.316288905	21:00:28	0.444492479	0.684791983	0.316030139
21:00:32	0.444048109	0.67899972	0.315771373	21:00:36	0.443603738	0.665033633	0.315512607
21:00:40	0.443159368	0.648342904	0.315253841	21:00:44	0.442714998	0.6324912	0.314995075
21:00:48	0.442270628	0.619156543	0.314736309	21:00:52	0.441826258	0.605821885	0.314477543
21:00:56	0.441381888	0.592886115	0.314218777	21:01:00	0.440937518	0.580083368	0.313960011
21:01:04	0.441230786	0.571162866	0.313701245	21:01:08	0.441524053	0.572570087	0.313442479
21:01:12	0.441817321	0.573977343	0.313183713	21:01:16	0.442110589	0.575897644	0.312924948
21:01:20	0.442403856	0.577988948	0.312666182	21:01:24	0.442697124	0.578505411	0.312407416
21:01:28	0.442990392	0.574297281	0.31214865	21:01:32	0.443283659	0.57008915	0.311889884
21:01:36	0.443576927	0.558248113	0.311631118	21:01:40	0.443870195	0.543862762	0.311372352
21:01:44	0.444163463	0.528684573	0.311113586	21:01:48	0.44445673	0.511127867	0.31085482
21:01:52	0.444749998	0.493571161	0.310596054	21:01:56	0.445043266	0.481176967	0.310337288
21:02:00	0.445336533	0.470503622	0.310078522	21:02:04	0.445092617	0.458034267	0.309819756
21:02:08	0.444848701	0.441137521	0.30956099	21:02:12	0.444604784	0.424240776	0.309302224
21:02:16	0.444360868	0.400892033	0.309043458	21:02:20	0.444116951	0.375392615	0.308784692
21:02:24	0.443873035	0.352099866	0.308525926	21:02:28	0.443629118	0.335427099	0.30826716
21:02:32	0.443385202	0.318754331	0.308008395	21:02:36	0.443141285	0.302081567	0.307749629
21:02:40	0.442897369	0.285408799	0.307490863	21:02:44	0.442653452	0.270057255	0.307232097
21:02:48	0.442409536	0.258669376	0.306973331	21:02:52	0.44216562	0.247281496	0.306714565
21:02:56	0.441921703	0.242918377	0.306455799	21:03:00	0.441677787	0.240896848	0.306197033
21:03:04	0.441181436	0.237021007	0.305938267	21:03:08	0.440685086	0.228033644	0.305679501
21:03:12	0.440188736	0.219046282	0.305420735	21:03:16	0.439692386	0.227504798	0.305161969
21:03:20	0.439196035	0.24177861	0.304903203	21:03:24	0.438699685	0.256052422	0.304644437
21:03:28	0.438203335	0.265373758	0.304385671	21:03:32	0.437706985	0.269742617	0.304126905
21:03:36	0.437210634	0.268368349	0.303868139	21:03:40	0.436714284	0.265079704	0.303609373
21:03:44	0.436217934	0.261938859	0.303350607	21:03:48	0.435721583	0.259241416	0.303091842
21:03:52	0.435225233	0.256543974	0.302833076	21:03:56	0.434728883	0.26610899	0.30257431
21:04:00	0.434232533	0.279761493	0.302315544	21:04:04	0.433530071	0.296521878	0.302056778
21:04:08	0.436368888	0.319808147	0.301798012	21:04:12	0.437437065	0.343094418	0.301539246
21:04:16	0.438505242	0.356294855	0.30128048	21:04:20	0.43957342	0.366133357	0.301021714
21:04:24	0.440641597	0.373833247	0.300762948	21:04:28	0.441709775	0.375117308	0.300504182
21:04:32	0.442777952	0.376401369	0.300245416	21:04:36	0.44384613	0.362516523	0.29998665
21:04:40	0.444914307	0.343575373	0.299727884	21:04:44	0.445982485	0.323814839	0.299469118
21:04:48	0.447050662	0.301596141	0.299210352	21:04:52	0.44811884	0.27937744	0.298951586
21:04:56	0.449187017	0.257563028	0.29869282	21:05:00	0.450255194	0.235883379	0.298434054
21:05:04	0.449853707	0.217138279	0.298175289	21:05:08	0.449452219	0.20982497	0.297916523
21:05:12	0.449050731	0.20251166	0.297657757	21:05:16	0.448649244	0.201423951	0.297398991
21:05:20	0.448247756	0.202411438	0.297140225	21:05:24	0.447846268	0.204231682	0.296881459
21:05:28	0.447444781	0.20855018	0.296622693	21:05:32	0.447043293	0.212868682	0.296363927
21:05:36	0.446641805	0.222382747	0.296105161	21:05:40	0.446240317	0.237092382	0.295846395
21:05:44	0.44583883	0.251802015	0.295587629	21:05:48	0.445437342	0.25982843	0.295328863
21:05:52	0.445035854	0.267854845	0.295070097	21:05:56	0.444634367	0.266402097	0.294811331

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
21:06:00	0.444232879	0.255470186	0.294552565	21:06:04	0.444102152	0.24469967	0.294293799
21:06:08	0.443971424	0.204808507	0.294035033	21:06:12	0.443840697	0.164917344	0.293776267
21:06:16	0.44370997	0.126293977	0.293517502	21:06:20	0.443579242	0.088938423	0.293258736
21:06:24	0.443448515	0.051582852	0.29299997	21:06:28	0.443317788	0.036533351	0.292741204
21:06:32	0.44318706	0.021483851	0.292482438	21:06:36	0.443056333	0.003794142	0.292223672
21:06:40	0.442925606	-0.016535738	0.291964906	21:06:44	0.442794878	-0.036865619	0.29170614
21:06:48	0.442664151	-0.043187161	0.291447374	21:06:52	0.442533424	-0.049508704	0.291188608
21:06:56	0.442402696	-0.058254844	0.290929842	21:07:00	0.442271969	-0.069425581	0.290671076
21:07:04	0.442225538	-0.080546106	0.29041231	21:07:08	0.442179108	-0.078657398	0.290153544
21:07:12	0.442132677	-0.076768654	0.289894778	21:07:16	0.442086246	-0.076473297	0.289636012
21:07:20	0.442039816	-0.077771292	0.289377246	21:07:24	0.441993385	-0.079069287	0.28911848
21:07:28	0.441946954	-0.078988812	0.288859714	21:07:32	0.441900524	-0.078908302	0.288600949
21:07:36	0.441854093	-0.075156645	0.288342183	21:07:40	0.441807663	-0.067733769	0.288083417
21:07:44	0.441761232	-0.060310894	0.287824651	21:07:48	0.441714801	-0.054785183	0.287565885
21:07:52	0.441668371	-0.049259507	0.287307119	21:07:56	0.44162194	-0.042822679	0.287048353
21:08:00	0.441575509	-0.035474736	0.286789587	21:08:04	0.441539532	-0.028120543	0.286530821
21:08:08	0.441503554	-0.014198599	0.286272055	21:08:12	0.441467576	-0.000276654	0.286013289
21:08:16	0.441431599	0.014345966	0.285754523	21:08:20	0.441395621	0.029202139	0.285495757
21:08:24	0.441359643	0.04405833	0.285236991	21:08:28	0.441323665	0.066628291	0.284978225
21:08:32	0.441287688	0.089198253	0.284719459	21:08:36	0.44125171	0.112143334	0.284460693
21:08:40	0.441215732	0.135463544	0.284201927	21:08:44	0.441179755	0.158783745	0.283943161
21:08:48	0.441143777	0.194522698	0.283684396	21:08:52	0.441107799	0.230261654	0.28342563
21:08:56	0.441071822	0.266842365	0.283166864	21:09:00	0.441035844	0.303703664	0.282908098
21:09:04	0.441073434	0.340608813	0.282649332	21:09:08	0.441111025	0.367917101	0.282390566
21:09:12	0.441148615	0.39522539	0.2821318	21:09:16	0.441186206	0.422228454	0.281873034
21:09:20	0.441223796	0.448926302	0.281614268	21:09:24	0.441261387	0.475624151	0.281355502
21:09:28	0.441298977	0.498964453	0.281096736	21:09:32	0.441336568	0.522304755	0.28083797
21:09:36	0.441374158	0.535896606	0.280579204	21:09:40	0.441411749	0.53973997	0.280320438
21:09:44	0.441449339	0.543583333	0.280061672	21:09:48	0.44148693	0.532823223	0.279802906
21:09:52	0.44152452	0.522063113	0.27954414	21:09:56	0.441562111	0.518805251	0.279285374
21:10:00	0.441599701	0.523049635	0.279026609	21:10:04	0.441416894	0.527162625	0.278767843
21:10:08	0.441234087	0.529141827	0.278509077	21:10:12	0.441051281	0.531121046	0.278250311
21:10:16	0.440868474	0.529317876	0.277991545	21:10:20	0.440685667	0.523732351	0.277732779
21:10:24	0.44050286	0.518146827	0.277474013	21:10:28	0.440320053	0.515909719	0.277215247
21:10:32	0.440137246	0.513672592	0.276956481	21:10:36	0.439954439	0.51592036	0.276697715
21:10:40	0.439771632	0.522652988	0.276438949	21:10:44	0.439588825	0.529385615	0.276180183
21:10:48	0.439406019	0.525175025	0.275921417	21:10:52	0.439223212	0.520964436	0.275662651
21:10:56	0.439040405	0.517575144	0.275403885	21:11:00	0.438857598	0.51500715	0.275145119
21:11:04	0.438555038	0.512367773	0.274886353	21:11:08	0.438252479	0.500182179	0.274627587
21:11:12	0.437949919	0.487996584	0.274368821	21:11:16	0.43764736	0.478191033	0.274110056
21:11:20	0.4373448	0.470765525	0.27385129	21:11:24	0.43704224	0.464299419	0.273592524
21:11:28	0.436739681	0.460711478	0.273333758	21:11:32	0.436437121	0.457123555	0.273074992
21:11:36	0.436134562	0.448529148	0.272816226	21:11:40	0.435832002	0.434928257	0.27255746
21:11:44	0.435529442	0.421327384	0.272298694	21:11:48	0.435226883	0.410013023	0.272039928
21:11:52	0.434924323	0.398698663	0.271781162	21:11:56	0.434621764	0.384642178	0.271522396
21:12:00	0.434319204	0.367843561	0.27126363	21:12:04	0.43403784	0.351412811	0.271004864
21:12:08	0.434948364	0.354521084	0.270746098	21:12:12	0.4335262945	0.357629358	0.270487332
21:12:16	0.435577525	0.360154034	0.270228566	21:12:20	0.435892105	0.362095113	0.2699698
21:12:24	0.436206685	0.364036201	0.269711034	21:12:28	0.436521265	0.360668627	0.269452268
21:12:32	0.436835845	0.357301053	0.269193503	21:12:36	0.437150426	0.356693262	0.268934737
21:12:40	0.437465006	0.358845243	0.268675971	21:12:44	0.437779586	0.360997225	0.268417205
21:12:48	0.438094166	0.355578805	0.268158439	21:12:52	0.438408746	0.350160377	0.267899673
21:12:56	0.438723326	0.338796733	0.267640907	21:13:00	0.439037906	0.321487874	0.267382141
21:13:04	0.438258775	0.303527066	0.267123375	21:13:08	0.437479644	0.300596125	0.266864609
21:13:12	0.436700513	0.297665188	0.266605843	21:13:16	0.435921382	0.292327988	0.266347077
21:13:20	0.435142251	0.284584529	0.266088311	21:13:24	0.43436312	0.27684107	0.265829545
21:13:28	0.433583989	0.269097611	0.265570779	21:13:32	0.432804858	0.253529929	0.265312013

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
21:13:36	0.432025727	0.239373438	0.265053247	21:13:40	0.431246596	0.229450516	0.264794481
21:13:44	0.430467465	0.219527594	0.264535716	21:13:48	0.429688334	0.206850862	0.26427695
21:13:52	0.428909203	0.194174129	0.264018184	21:13:56	0.428130071	0.181775645	0.263759418
21:14:00	0.42735094	0.169655405	0.263500652	21:14:04	0.42807633	0.158431995	0.263241886
21:14:08	0.428801719	0.150708125	0.26298312	21:14:12	0.429527108	0.142984255	0.262724354
21:14:16	0.430252498	0.130658607	0.262465588	21:14:20	0.430977887	0.113731183	0.262206822
21:14:24	0.431703276	0.096803758	0.261948056	21:14:28	0.432428665	0.084988632	0.26168929
21:14:32	0.433154055	0.073173507	0.261430524	21:14:36	0.433879444	0.065433498	0.261171758
21:14:40	0.434604833	0.061768587	0.260912992	21:14:44	0.435330223	0.058103693	0.260654226
21:14:48	0.436055612	0.056899673	0.26039546	21:14:52	0.436781001	0.055695636	0.260136694
21:14:56	0.437506391	0.055540604	0.259877928	21:15:00	-0.06176822	-0.443565458	-0.240380837
21:15:04	-0.061690878	-0.443057811	-0.240639603	21:15:08	-0.061613535	-0.452916845	-0.240898369
21:15:12	0.438463807	0.03722414	0.258842865	21:15:16	0.438541149	0.027365106	0.258584099
21:15:20	0.438618492	0.01750609	0.258325333	21:15:24	0.438695834	0.007647057	0.258066567
21:15:28	0.438773177	0.012264337	0.257807801	21:15:32	0.438850519	0.0168816	0.257549035
21:15:36	0.438927862	0.024145732	0.257290269	21:15:40	0.439005204	0.034056733	0.257031503
21:15:44	0.439082546	0.043967735	0.256772737	21:15:48	0.439159889	0.064550367	0.256513971
21:15:52	0.439237231	0.085133016	0.256255205	21:15:56	0.439314574	0.094468814	0.255996439
21:16:00	0.439391916	0.092557798	0.255737673	21:16:04	0.441674944	0.091961538	0.255478907
21:16:08	0.443957973	0.102262147	0.255220141	21:16:12	0.446241001	0.112562756	0.254961375
21:16:16	0.448524029	0.12662107	0.25470261	21:16:20	0.450807057	0.144437116	0.254443844
21:16:24	0.453090085	0.162253162	0.254185078	21:16:28	0.455373113	0.182451002	0.253926312
21:16:32	0.457656142	0.202648842	0.253667546	21:16:36	0.45993917	0.21202931	0.25340878
21:16:40	0.462222198	0.217803993	0.253150014	21:16:44	0.464505226	0.22357867	0.252891248
21:16:48	0.466788254	0.234819325	0.252632482	21:16:52	0.469071283	0.24605998	0.252373716
21:16:56	0.471354311	0.256352131	0.25211495	21:17:00	0.473637339	0.265695779	0.251856184
21:17:04	0.474665114	0.27429119	0.251597418	21:17:08	0.475692889	0.289018552	0.251338652
21:17:12	0.476720664	0.303745913	0.251079886	21:17:16	0.477748439	0.324696014	0.25082112
21:17:20	0.478776214	0.351868856	0.250562354	21:17:24	0.479803989	0.379041694	0.250303588
21:17:28	0.480831764	0.392612229	0.250044823	21:17:32	0.481859539	0.406182755	0.249786057
21:17:36	0.482887314	0.416029834	0.249527291	21:17:40	0.483915089	0.422153458	0.249268525
21:17:44	0.484942864	0.429057131	0.249009759	21:17:48	0.485970639	0.438300983	0.248750993
21:17:52	0.486998414	0.447544836	0.248492227	21:17:56	0.488026189	0.461296304	0.248233461
21:18:00	0.489053964	0.476550292	0.247974695	21:18:04	0.489820099	0.491648322	0.247715929
21:18:08	0.490586234	0.503643017	0.247457163	21:18:12	0.49135237	0.515637713	0.247198397
21:18:16	0.492118505	0.521849074	0.246939631	21:18:20	0.49288464	0.522277101	0.246680865
21:18:24	0.493650775	0.522705145	0.246422099	21:18:28	0.49441691	0.516317637	0.246163333
21:18:32	0.495183045	0.509930129	0.245904567	21:18:36	0.49594918	0.503988036	0.245645801
21:18:40	0.496715315	0.498491392	0.245387035	21:18:44	0.49748145	0.492994748	0.24512827
21:18:48	0.498247585	0.489428524	0.244869504	21:18:52	0.49901372	0.4858623	0.244610738
21:18:56	0.499779855	0.482296075	0.244351972	21:19:00	0.50054599	0.478729851	0.244093206
21:19:04	0.500745298	0.475940254	0.24383444	21:19:08	0.500944607	0.476494169	0.243575674
21:19:12	0.501143916	0.477048085	0.243316908	21:19:16	0.501343224	0.481185656	0.243058142
21:19:20	0.501542533	0.488906901	0.242799376	21:19:24	0.501741841	0.496628146	0.24254061
21:19:28	0.50194115	0.507399057	0.242281844	21:19:32	0.502140459	0.51816995	0.242023078
21:19:36	0.502339767	0.518458959	0.241764312	21:19:40	0.502539076	0.508266046	0.241505546
21:19:44	0.502738384	0.498073134	0.24124678	21:19:48	0.502937693	0.494202662	0.240988014
21:19:52	0.503137001	0.49033219	0.240729248	21:19:56	0.50333631	0.492844095	0.240470482
21:20:00	0.503535619	0.497483484	0.240211717	21:20:04	0.503572342	0.50202594	0.239952951
21:20:08	0.503690065	0.507287493	0.239694185	21:20:12	0.503645788	0.512549065	0.239435419
21:20:16	0.503682511	0.51199664	0.239176653	21:20:20	0.503719234	0.505630219	0.238917887
21:20:24	0.503755958	0.499263797	0.238659121	21:20:28	0.503792681	0.493484642	0.238400355
21:20:32	0.503829404	0.487705486	0.238141589	21:20:36	0.503866127	0.476961824	0.237882823
21:20:40	0.50390285	0.461253639	0.237624057	21:20:44	0.503939573	0.445545462	0.237365291
21:20:48	0.503976297	0.437400715	0.237106525	21:20:52	0.50401302	0.429255967	0.236847759
21:20:56	0.504049743	0.419602303	0.236588993	21:21:00	0.504086466	0.408439723	0.236330227
21:21:04	0.503799265	0.397084048	0.236071461	21:21:08	0.503512064	0.396355964	0.235812695

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
21:21:12	0.503224864	0.395627889	0.23555393	21:21:16	0.502937663	0.39152715	0.235295164
21:21:20	0.502650462	0.384053755	0.235036398	21:21:24	0.502363261	0.37658036	0.234777632
21:21:28	0.50207606	0.373945813	0.234518866	21:21:32	0.501788859	0.371311275	0.2342601
21:21:36	0.501501658	0.372330309	0.234001334	21:21:40	0.501214457	0.37700293	0.233742568
21:21:44	0.500927256	0.381675547	0.233483802	21:21:48	0.500640056	0.377086864	0.233225036
21:21:52	0.500352855	0.372498182	0.23296627	21:21:56	0.500065654	0.365284276	0.232707504
21:22:00	0.499778453	0.355445152	0.232448738	21:22:04	0.498707958	0.345139118	0.232189972
21:22:08	0.497637464	0.32891514	0.231931206	21:22:12	0.496566969	0.312691162	0.23167244
21:22:16	0.495496474	0.298044691	0.231413674	21:22:20	0.494425979	0.284975728	0.231154908
21:22:24	0.493355485	0.271906765	0.230896142	21:22:28	0.49228499	0.270457954	0.230637377
21:22:32	0.491214495	0.269009143	0.230378611	21:22:36	0.490144001	0.265570168	0.230119845
21:22:40	0.489073506	0.260141029	0.229861079	21:22:44	0.488003011	0.25471189	0.229602313
21:22:48	0.486932517	0.253286351	0.229343547	21:22:52	0.485862022	0.251860812	0.229084781
21:22:56	0.484791527	0.25371716	0.228826015	21:23:00	0.483721033	0.258855401	0.228567249
21:23:04	0.483338969	0.264404005	0.228308483	21:23:08	0.482956906	0.269952608	0.228049717
21:23:12	0.482574842	0.275501211	0.227790951	21:23:16	0.482192779	0.279956799	0.227532185
21:23:20	0.481810715	0.283319372	0.227273419	21:23:24	0.481428652	0.286681944	0.227014653
21:23:28	0.481046588	0.290044517	0.226755887	21:23:32	0.480664525	0.303604415	0.226497121
21:23:36	0.480282462	0.319523206	0.226238355	21:23:40	0.479900398	0.342518678	0.225979589
21:23:44	0.479518335	0.365514149	0.225720824	21:23:48	0.479136271	0.378832464	0.225462058
21:23:52	0.478754208	0.392150778	0.225203292	21:23:56	0.478372144	0.407135954	0.224944526
21:24:00	0.477990081	0.423788001	0.22468576	21:24:04	0.476863125	0.43999603	0.224426994
21:24:08	0.475736169	0.454734437	0.224168228	21:24:12	0.474609213	0.469472827	0.223909462
21:24:16	0.473482257	0.47709402	0.223650696	21:24:20	0.472355301	0.477597981	0.22339193
21:24:24	0.471228345	0.478101941	0.223133164	21:24:28	0.470101389	0.485373453	0.222874398
21:24:32	0.468974433	0.492644948	0.222615632	21:24:36	0.467847477	0.498410422	0.222356866
21:24:40	0.466720521	0.502669841	0.2220981	21:24:44	0.465593565	0.506929277	0.221839334
21:24:48	0.464466609	0.513884684	0.221580568	21:24:52	0.463339653	0.52084011	0.221321802
21:24:56	0.462212697	0.530547305	0.221063036	21:25:00	0.461085741	0.543006306	0.220804271
21:25:04	0.461148628	0.556174536	0.220545505	21:25:08	0.461211515	0.567447308	0.220286739
21:25:12	0.461274403	0.57872008	0.220027973	21:25:16	0.46133729	0.589248867	0.219769207
21:25:20	0.461400177	0.599033738	0.219510441	21:25:24	0.461463064	0.608818575	0.219251675
21:25:28	0.461525951	0.622407828	0.218992909	21:25:32	0.461588838	0.635997082	0.218734143
21:25:36	0.461651726	0.646929802	0.218475377	21:25:40	0.461714613	0.655205989	0.218216611
21:25:44	0.4617775	0.663482175	0.217957845	21:25:48	0.461840387	0.667989438	0.217699079
21:25:52	0.461903274	0.672496701	0.217440313	21:25:56	0.461966162	0.680622421	0.217181547
21:26:00	0.462029049	0.692366597	0.216922781	21:26:04	0.463662015	0.705046673	0.216664015
21:26:08	0.465294982	0.713499248	0.216405249	21:26:12	0.466927949	0.721951822	0.216146484
21:26:16	0.468560915	0.726662155	0.215887718	21:26:20	0.470193882	0.727630283	0.215628952
21:26:24	0.471826848	0.728598411	0.215370186	21:26:28	0.473459815	0.722822027	0.21511142
21:26:32	0.475092782	0.717045644	0.214852654	21:26:36	0.476725748	0.707310893	0.214593888
21:26:40	0.478358715	0.693617812	0.214335122	21:26:44	0.479991681	0.679924731	0.214076356
21:26:48	0.481624648	0.674244739	0.21381759	21:26:52	0.483257615	0.668564782	0.213558824
21:26:56	0.484890581	0.656608698	0.213300058	21:27:00	0.486523548	0.638376522	0.213041292
21:27:04	0.486562945	0.619194444	0.212782526	21:27:08	0.486602343	0.597284277	0.21252376
21:27:12	0.48664174	0.575374109	0.212264994	21:27:16	0.486681137	0.555495105	0.212006228
21:27:20	0.486720535	0.537647245	0.211747462	21:27:24	0.486759932	0.519799385	0.211488696
21:27:28	0.48679933	0.516082458	0.211229931	21:27:32	0.486838727	0.512365531	0.210971165
21:27:36	0.486878124	0.511721275	0.210712399	21:27:40	0.486917522	0.514149692	0.210453633
21:27:44	0.486956919	0.516578126	0.210194867	21:27:48	0.486996317	0.507130092	0.209936101
21:27:52	0.487035714	0.497682059	0.209677335	21:27:56	0.487075111	0.485699642	0.209418569
21:28:00	0.487114509	0.471182877	0.209159803	21:28:04	0.487579058	0.456919538	0.208901037
21:28:08	0.488043606	0.440375194	0.208642271	21:28:12	0.488508155	0.42383085	0.208383505
21:28:16	0.488972704	0.407756471	0.208124739	21:28:20	0.489437253	0.391838759	0.207865973
21:28:24	0.489901802	0.377097088	0.207607207	21:28:28	0.490366351	0.365883589	0.207348441
21:28:32	0.4908309	0.35467009	0.207089675	21:28:36	0.491295448	0.344949594	0.206830909
21:28:40	0.491759997	0.336722102	0.206572143	21:28:44	0.492224546	0.32849461	0.206313378

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
21:28:48	0.492689095	0.330206037	0.206054612	21:28:52	0.493153644	0.331917465	0.205795846
21:28:56	0.493618193	0.333294908	0.20553708	21:29:00	0.494082741	0.334338361	0.205278314
21:29:04	0.494062511	0.335092844	0.205019548	21:29:08	0.49404228	0.339490548	0.204760782
21:29:12	0.49402205	0.343888252	0.204502016	21:29:16	0.494001819	0.348549798	0.20424325
21:29:20	0.493981589	0.353475184	0.203984484	21:29:24	0.493961358	0.358400571	0.203725718
21:29:28	0.493941128	0.347696089	0.203466952	21:29:32	0.493920897	0.336991606	0.203208186
21:29:36	0.493900667	0.323799051	0.20294942	21:29:40	0.493880436	0.30811842	0.202690654
21:29:44	0.493860206	0.292437789	0.202431888	21:29:48	0.493839975	0.284516091	0.202173122
21:29:52	0.493819745	0.276594393	0.201914356	21:29:56	0.493799514	0.272590979	0.201655591
21:30:00	0.993779284	0.772505847	0.701396825	21:30:04	0.99467454	0.772966425	0.701138059
21:30:08	0.995569797	0.776366229	0.700879293	21:30:12	0.496465053	0.279766031	0.200620527
21:30:16	0.49736031	0.27352701	0.200361761	21:30:20	0.498255567	0.257649162	0.200102995
21:30:24	0.499150823	0.241771317	0.199844229	21:30:28	0.50004608	0.221034053	0.199585463
21:30:32	0.500941336	0.200296788	0.199326697	21:30:36	0.501836593	0.185075589	0.199067931
21:30:40	0.502731849	0.175370436	0.198809165	21:30:44	0.503627106	0.165665291	0.198550399
21:30:48	0.504522362	0.166561029	0.198291633	21:30:52	0.505417619	0.167456766	0.198032867
21:30:56	0.506312875	0.171248035	0.197774101	21:31:00	0.507208132	0.177934852	0.197515335
21:31:04	0.507445837	0.184229714	0.197256569	21:31:08	0.507683543	0.200665529	0.196997803
21:31:12	0.507921248	0.217101335	0.196739038	21:31:16	0.508158953	0.231129158	0.196480272
21:31:20	0.508396659	0.242748984	0.196221506	21:31:24	0.508634364	0.254368815	0.19596274
21:31:28	0.508872069	0.243832669	0.195703974	21:31:32	0.509109775	0.233296519	0.195445208
21:31:36	0.50934748	0.224084149	0.195186442	21:31:40	0.509585185	0.216195548	0.194927676
21:31:44	0.509822891	0.208306955	0.19466891	21:31:48	0.510060596	0.200418363	0.194410144
21:31:52	0.510298301	0.192529761	0.194151378	21:31:56	0.510536007	0.182268435	0.193892612
21:32:00	0.510773712	0.169634384	0.193633846	21:32:04	0.510450766	0.156666138	0.19337508
21:32:08	0.51012782	0.145264694	0.193116314	21:32:12	0.509804874	0.13386325	0.192857548
21:32:16	0.509481928	0.124964088	0.192598782	21:32:20	0.509158982	0.11856721	0.192340016
21:32:24	0.508836036	0.112170331	0.19208125	21:32:28	0.50851309	0.103822337	0.191822485
21:32:32	0.508190144	0.095474326	0.191563719	21:32:36	0.507867198	0.085149618	0.191304953
21:32:40	0.507544252	0.072848196	0.191046187	21:32:44	0.507221306	0.060546775	0.190787421
21:32:48	0.50689836	0.050851648	0.190528655	21:32:52	0.506575414	0.041156539	0.190269889
21:32:56	0.506252468	0.033183452	0.190011123	21:33:00	0.505929522	0.026932403	0.189752357
21:33:04	0.505866377	0.020836219	0.189493591	21:33:08	0.505803233	0.021108982	0.189234825
21:33:12	0.505740088	0.021381745	0.188976059	21:33:16	0.505676944	0.025337167	0.188717293
21:33:20	0.505613799	0.030520165	0.188458527	21:33:24	0.505550655	0.035703145	0.188199761
21:33:28	0.50548751	0.049004097	0.187940995	21:33:32	0.505424366	0.062305066	0.187682229
21:33:36	0.505361221	0.071318614	0.187423463	21:33:40	0.505298077	0.06746993	0.187164698
21:33:44	0.505234932	0.063621247	0.186905932	21:33:48	0.505171788	0.048564422	0.186647166
21:33:52	0.505108643	0.033507597	0.1863884	21:33:56	0.505045499	0.026327961	0.186129634
21:34:00	0.504982354	0.027025514	0.185870868	21:34:04	0.504105668	0.027238127	0.185612102
21:34:08	0.503228982	0.033218087	0.185353336	21:34:12	0.502352296	0.039198046	0.18509457
21:34:16	0.50147561	0.046626308	0.184835804	21:34:20	0.500598924	0.055502891	0.184577038
21:34:24	0.499722238	0.064379475	0.184318272	21:34:28	0.498845552	0.055755516	0.184059506
21:34:32	0.497968867	0.047131576	0.18380074	21:34:36	0.497092181	0.03909213	0.183541974
21:34:40	0.496215495	0.031637195	0.183283208	21:34:44	0.495338809	0.024182261	0.183024442
21:34:48	0.494462123	0.025252465	0.182765676	21:34:52	0.493585437	0.026322687	0.18250691
21:34:56	0.492708751	0.031474705	0.182248145	21:35:00	0.491832065	0.040708519	0.181989379
21:35:04	0.491791959	0.050441004	0.181730613	21:35:08	0.491751852	0.051603371	0.181471847
21:35:12	0.491711746	0.052765737	0.181213081	21:35:16	0.491671639	0.046454512	0.180954315
21:35:20	0.491631533	0.032669711	0.180695549	21:35:24	0.491591426	0.01888491	0.180436783
21:35:28	0.49155132	0.004328358	0.180178017	21:35:32	0.491511213	-0.010228177	0.179919251
21:35:36	0.491471107	-0.021553597	0.179660485	21:35:40	0.491431	-0.031801942	0.179401719
21:35:44	0.491390894	-0.042050288	0.179142953	21:35:48	0.491350787	-0.048116752	0.178884187
21:35:52	0.491310681	-0.054183216	0.178625421	21:35:56	0.491270574	-0.057168783	0.178366655
21:36:00	0.491230468	-0.057073417	0.178107889	21:36:04	0.490475464	-0.057404192	0.177849123
21:36:08	0.489720459	-0.066497014	0.177590357	21:36:12	0.488965455	-0.075589837	0.177331592
21:36:16	0.48821045	-0.079412015	0.177072826	21:36:20	0.487455446	-0.077963548	0.17681406

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
21:36:24	0.486700442	-0.07651508	0.176555294	21:36:28	0.485945437	-0.081331868	0.176296528
21:36:32	0.485190433	-0.086148656	0.176037762	21:36:36	0.484435429	-0.088886085	0.175778996
21:36:40	0.483680424	-0.089544156	0.17552023	21:36:44	0.48292542	-0.093073572	0.175261464
21:36:48	0.482170416	-0.105217056	0.175002698	21:36:52	0.481415411	-0.11736054	0.174743932
21:36:56	0.480660407	-0.129504024	0.174485166	21:37:00	0.479905403	-0.141647508	0.1742264
21:37:04	0.479614588	-0.153514296	0.173967634	21:37:08	0.479323773	-0.16697973	0.173708868
21:37:12	0.479032958	-0.180445163	0.173450102	21:37:16	0.478742144	-0.187745498	0.173191336
21:37:20	0.478451329	-0.188880807	0.17293257	21:37:24	0.478160514	-0.190016116	0.172673805
21:37:28	0.4778697	-0.199475893	0.172415039	21:37:32	0.477578885	-0.208935671	0.172156273
21:37:36	0.47728807	-0.215391437	0.171897507	21:37:40	0.476997256	-0.218843191	0.171638741
21:37:44	0.476706441	-0.222294946	0.171379975	21:37:48	0.476415626	-0.207765376	0.171121209
21:37:52	0.476124811	-0.19323577	0.170862443	21:37:56	0.475833997	-0.181028118	0.170603677
21:38:00	0.475543182	-0.171142347	0.170344911	21:38:04	0.474974659	-0.16142215	0.170086145
21:38:08	0.474406137	-0.151701917	0.169827379	21:38:12	0.473837614	-0.141981683	0.169568613
21:38:16	0.473269092	-0.132760567	0.169309847	21:38:20	0.472700569	-0.124038533	0.169051081
21:38:24	0.472132046	-0.115316463	0.168792315	21:38:28	0.471563524	-0.106594429	0.168533549
21:38:32	0.470995001	-0.097872394	0.168274783	21:38:36	0.470426479	-0.094342343	0.168016017
21:38:40	0.469857956	-0.092542964	0.167757252	21:38:44	0.469289433	-0.090743585	0.167498486
21:38:48	0.468720911	-0.083648869	0.16723972	21:38:52	0.468152388	-0.076554116	0.166980954
21:38:56	0.467583865	-0.075660986	0.166722188	21:39:00	0.467015343	-0.080969407	0.166463422
21:39:04	0.466921481	-0.085994926	0.166204656	21:39:08	0.466827619	-0.095754062	0.16594589
21:39:12	0.466733757	-0.105513199	0.165687124	21:39:16	0.466639895	-0.107502623	0.165428358
21:39:20	0.466546033	-0.101722335	0.165169592	21:39:24	0.466452171	-0.094473084	0.164910826
21:39:28	0.466358309	-0.082816872	0.16465206	21:39:32	0.466264447	-0.07116066	0.164393294
21:39:36	0.466170585	-0.058364025	0.164134528	21:39:40	0.466076724	-0.044427038	0.163875762
21:39:44	0.465982862	-0.030490052	0.163616996	21:39:48	0.465889	-0.021552479	0.16335823
21:39:52	0.465795138	-0.01261487	0.163099464	21:39:56	0.465701276	-0.001197789	0.162840699
21:40:00	0.465607414	0.012698819	0.162581933	21:40:04	0.464573545	0.026035085	0.162323167
21:40:08	0.463539676	0.046471459	0.162064401	21:40:12	0.462505808	0.066907832	0.161805635
21:40:16	0.461471939	0.08890146	0.161546869	21:40:20	0.46043807	0.112452341	0.161288103
21:40:24	0.459404202	0.13600324	0.161029337	21:40:28	0.458370333	0.153624211	0.160770571
21:40:32	0.457336464	0.17124519	0.160511805	21:40:36	0.456302596	0.188082364	0.160253039
21:40:40	0.455268727	0.204135746	0.159994273	21:40:44	0.454234858	0.220189123	0.159735507
21:40:48	0.45320099	0.24713549	0.159476741	21:40:52	0.452167121	0.274081856	0.159217975
21:40:56	0.451133252	0.297369802	0.158959209	21:41:00	0.450099383	0.31699933	0.158700443
21:41:04	0.449927825	0.337142863	0.158441677	21:41:08	0.449756266	0.349434645	0.158182911
21:41:12	0.449584707	0.361726433	0.157924146	21:41:16	0.449413148	0.377118409	0.15766538
21:41:20	0.449241589	0.395610593	0.157406614	21:41:24	0.44907003	0.414102768	0.157147848
21:41:28	0.448898471	0.431204668	0.156889082	21:41:32	0.448726912	0.448306559	0.156630316
21:41:36	0.448555353	0.47108795	0.15637155	21:41:40	0.448383794	0.499548823	0.156112784
21:41:44	0.448212236	0.521331039	0.155854018	21:41:48	0.448040677	0.523077281	0.155595252
21:41:52	0.447869118	0.524823524	0.155336486	21:41:56	0.447697559	0.534630127	0.15507772
21:42:00	0.447526	0.552497073	0.154818954	21:42:04	0.44681124	0.570040225	0.154560188
21:42:08	0.44609648	0.582958728	0.154301422	21:42:12	0.44538172	0.595877195	0.154042656
21:42:16	0.44466696	0.610259474	0.15378389	21:42:20	0.4439522	0.626105529	0.153525124
21:42:24	0.44323744	0.641951584	0.153266359	21:42:28	0.44252268	0.650802538	0.153007593
21:42:32	0.44180792	0.659653492	0.152748827	21:42:36	0.44109316	0.668504447	0.152490061
21:42:40	0.4403784	0.677355401	0.152231295	21:42:44	0.43966364	0.686206356	0.151972529
21:42:48	0.438948879	0.693324825	0.151713763	21:42:52	0.438234119	0.700443259	0.151454997
21:42:56	0.437519359	0.699050127	0.151196231	21:43:00	0.436804599	0.689145358	0.150937465
21:43:04	0.436569799	0.67952672	0.150678699	21:43:08	0.436334998	0.659909717	0.150419933
21:43:12	0.436100198	0.640292714	0.150161167	21:43:16	0.435865397	0.623385929	0.149902401
21:43:20	0.435630596	0.609189434	0.149643635	21:43:24	0.435395796	0.594992904	0.149384869
21:43:28	0.435160995	0.578457259	0.149126103	21:43:32	0.434926194	0.561921615	0.148867337
21:43:36	0.434691394	0.549784333	0.148608571	21:43:40	0.434456593	0.550842157	0.148349806
21:43:44	0.434221793	0.551899981	0.14809104	21:43:48	0.433986992	0.550781043	0.147832274
21:43:52	0.433752191	0.549662123	0.147573508	21:43:56	0.433517391	0.549893337	0.147314742

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
21:44:00	0.43328259	0.551474723	0.147055976	21:44:04	0.43282807	0.552181879	0.14679721
21:44:08	0.432373549	0.550659317	0.146538444	21:44:12	0.431919029	0.549136754	0.146279678
21:44:16	0.431464509	0.550311407	0.146020912	21:44:20	0.431009988	0.554183274	0.145762146
21:44:24	0.430555468	0.558055141	0.14550338	21:44:28	0.430100948	0.556135324	0.145244614
21:44:32	0.429646427	0.554215508	0.144985848	21:44:36	0.429191907	0.546876337	0.144727082
21:44:40	0.428737386	0.534117796	0.144468316	21:44:44	0.428282866	0.521359237	0.14420955
21:44:48	0.427828346	0.501206352	0.143950784	21:44:52	0.427373825	0.481053466	0.143692018
21:44:56	0.426919305	0.463267479	0.143433253	21:45:00	-0.073535216	-0.052151611	-0.356825513
21:45:04	-0.073952965	-0.0675488	-0.357084279	21:45:08	-0.074370715	-0.081519057	-0.357343045
21:45:12	0.425211535	0.404510668	0.142398189	21:45:16	0.424793785	0.39388752	0.142139423
21:45:20	0.424376035	0.386611474	0.141880657	21:45:24	0.423958285	0.379335427	0.141621891
21:45:28	0.423540535	0.365694359	0.141363125	21:45:32	0.423122786	0.352053291	0.141104359
21:45:36	0.422705036	0.337104571	0.140845593	21:45:40	0.422287286	0.320848184	0.140586827
21:45:44	0.421869536	0.304591796	0.140328061	21:45:48	0.421451786	0.281923887	0.140069295
21:45:52	0.421034036	0.259255978	0.139810529	21:45:56	0.420616286	0.236055026	0.139551763
21:46:00	0.420198537	0.212321031	0.139292997	21:46:04	0.419394506	0.18835678	0.139034231
21:46:08	0.418590476	0.172789358	0.138775466	21:46:12	0.417786446	0.15722194	0.1385167
21:46:16	0.416982416	0.14821921	0.138257934	21:46:20	0.416178385	0.145781169	0.137999168
21:46:24	0.415374355	0.143343127	0.137740402	21:46:28	0.414570325	0.132522784	0.137481636
21:46:32	0.413766295	0.12170245	0.13722287	21:46:36	0.412962264	0.108317621	0.136964104
21:46:40	0.412158234	0.094077963	0.136705338	21:46:44	0.411354204	0.077597458	0.136446572
21:46:48	0.410550174	0.054394398	0.136187806	21:46:52	0.409746144	0.031191337	0.13592904
21:46:56	0.408942113	0.020346932	0.135670274	21:47:00	0.408138083	0.021861199	0.135411508
21:47:04	0.408041962	0.023797423	0.135152742	21:47:08	0.407945842	0.023724707	0.134893976
21:47:12	0.407849721	0.023651991	0.13463521	21:47:16	0.407753601	0.025526269	0.134376444
21:47:20	0.40765748	0.029347558	0.134117678	21:47:24	0.40756136	0.03316883	0.133858913
21:47:28	0.407465239	0.029813215	0.133600147	21:47:32	0.407369119	0.0264576	0.133341381
21:47:36	0.407272998	0.013642387	0.133082615	21:47:40	0.407176877	-0.008632422	0.132823849
21:47:44	0.407080757	-0.030907232	0.132565083	21:47:48	0.406984636	-0.060413875	0.132306317
21:47:52	0.406888516	-0.089920571	0.132047551	21:47:56	0.406792395	-0.113465645	0.131788785
21:48:00	0.406696275	-0.13104917	0.131530019	21:48:04	0.406001847	-0.148989337	0.131271253
21:48:08	0.405307419	-0.166929504	0.131012487	21:48:12	0.404612991	-0.184869671	0.130753721
21:48:16	0.403918563	-0.200633093	0.130494955	21:48:20	0.403224135	-0.21421977	0.130236189
21:48:24	0.402529708	-0.227806448	0.129977423	21:48:28	0.40183528	-0.231356104	0.129718657
21:48:32	0.401140852	-0.234905761	0.129459891	21:48:36	0.400446424	-0.238455382	0.129201125
21:48:40	0.399751996	-0.242005038	0.12894236	21:48:44	0.399057568	-0.245554694	0.128683594
21:48:48	0.398363141	-0.241210783	0.128424828	21:48:52	0.397668713	-0.236866871	0.128166062
21:48:56	0.396974285	-0.230310792	0.127907296	21:49:00	0.396279857	-0.221542511	0.12764853
21:49:04	0.395894632	-0.212589989	0.127389764	21:49:08	0.395509406	-0.203637397	0.127130998
21:49:12	0.39512418	-0.194684876	0.126872232	21:49:16	0.394738955	-0.184091251	0.126613466
21:49:20	0.394353729	-0.171856559	0.1263547	21:49:24	0.393968504	-0.159621867	0.126095934
21:49:28	0.393583278	-0.136407025	0.125837168	21:49:32	0.393198053	-0.113192183	0.125578402
21:49:36	0.392812827	-0.088756623	0.125319636	21:49:40	0.392427602	-0.063100342	0.12506087
21:49:44	0.392042376	-0.037444044	0.124802104	21:49:48	0.391657151	-0.022405976	0.124543338
21:49:52	0.391271925	-0.007367924	0.124284573	21:49:56	0.390886699	0.010192004	0.124025807
21:50:00	0.390501474	0.030273774	0.123767041	21:50:04	0.389790915	0.050161617	0.123508275
21:50:08	0.3898080356	0.068723077	0.123249509	21:50:12	0.388369797	0.087284528	0.122990743
21:50:16	0.387659238	0.097345418	0.122731977	21:50:20	0.386948679	0.098905747	0.122473211
21:50:24	0.38623812	0.100466067	0.122214445	21:50:28	0.385527561	0.107217446	0.121955679
21:50:32	0.384817002	0.113968816	0.121696913	21:50:36	0.384106443	0.118884649	0.121438147
21:50:40	0.383395884	0.121964925	0.121179381	21:50:44	0.382685325	0.125045211	0.120920615
21:50:48	0.381974766	0.126845124	0.120661849	21:50:52	0.381264207	0.128645036	0.120403083
21:50:56	0.380553648	0.133004203	0.120144317	21:51:00	0.379843089	0.139922632	0.119885551
21:51:04	0.379589316	0.147113336	0.119626785	21:51:08	0.379335543	0.154919942	0.11936802
21:51:12	0.37908177	0.162726543	0.119109254	21:51:16	0.378827997	0.16994011	0.118850488
21:51:20	0.378574224	0.176560642	0.118591722	21:51:24	0.37832045	0.183181174	0.118332956
21:51:28	0.378066677	0.185778041	0.11807419	21:51:32	0.377812904	0.188374908	0.117815424

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
21:51:36	0.377559131	0.190630407	0.117556658	21:51:40	0.377305358	0.192544534	0.117297892
21:51:44	0.377051585	0.194458661	0.117039126	21:51:48	0.376797812	0.205364293	0.11678036
21:51:52	0.376544039	0.216269923	0.116521594	21:51:56	0.376290265	0.233539842	0.116262828
21:52:00	0.376036492	0.257174048	0.116004062	21:52:04	0.375333595	0.280540537	0.115745296
21:52:08	0.374630697	0.311291124	0.11548653	21:52:12	0.373927799	0.342041703	0.115227764
21:52:16	0.373224902	0.373398404	0.114968998	21:52:20	0.372522004	0.405361237	0.114710232
21:52:24	0.371819106	0.437324052	0.114451467	21:52:28	0.371116208	0.463310519	0.114192701
21:52:32	0.370413311	0.489296968	0.113933935	21:52:36	0.369710413	0.507167418	0.113675169
21:52:40	0.369007515	0.516921833	0.113416403	21:52:44	0.368304618	0.526676247	0.113157637
21:52:48	0.36760172	0.541877835	0.112898871	21:52:52	0.366898822	0.557079457	0.112640105
21:52:56	0.366195924	0.567979145	0.112381339	21:53:00	0.365493027	0.574576967	0.112122573
21:53:04	0.365295719	0.581476128	0.111863807	21:53:08	0.365098412	0.579721179	0.111605041
21:53:12	0.364901105	0.577966266	0.111346275	21:53:16	0.364703798	0.577115931	0.111087509
21:53:20	0.36450649	0.577170211	0.110828743	21:53:24	0.364309183	0.57722449	0.110569977
21:53:28	0.364111876	0.576692321	0.110311211	21:53:32	0.363914568	0.576160188	0.110052445
21:53:36	0.363717261	0.576190272	0.10979368	21:53:40	0.363519954	0.577907185	0.109534914
21:53:44	0.363322646	0.579624099	0.109276148	21:53:48	0.363125339	0.580524049	0.109017382
21:53:52	0.362928032	0.581424035	0.108758616	21:53:56	0.362730724	0.576553086	0.10849985
21:54:00	0.362533417	0.565911203	0.108241084	21:54:04	0.362221014	0.555200713	0.107982318
21:54:08	0.361908612	0.547363628	0.107723552	21:54:12	0.361596209	0.539526543	0.107464786
21:54:16	0.361283806	0.534644687	0.10720602	21:54:20	0.360971404	0.532718132	0.106947254
21:54:24	0.360659001	0.530791577	0.106688488	21:54:28	0.360346598	0.530123295	0.106429722
21:54:32	0.360034196	0.529454978	0.106170956	21:54:36	0.359721793	0.531255884	0.10591219
21:54:40	0.35940939	0.535526012	0.105653424	21:54:44	0.359096987	0.539796105	0.105394658
21:54:48	0.358784585	0.539537691	0.105135892	21:54:52	0.358472182	0.539279277	0.104877127
21:54:56	0.358159779	0.536880465	0.104618361	21:55:00	0.357847377	0.532341255	0.104359595
21:55:04	0.357606252	0.527844532	0.104100829	21:55:08	0.357365127	0.520918309	0.103842063
21:55:12	0.357124002	0.513992086	0.103583297	21:55:16	0.356882877	0.496908877	0.103324531
21:55:20	0.356641753	0.469668734	0.103065765	21:55:24	0.356400628	0.442428574	0.102806999
21:55:28	0.356159503	0.415770989	0.102548233	21:55:32	0.355918378	0.389113387	0.102289467
21:55:36	0.355677254	0.364823944	0.102030701	21:55:40	0.355436129	0.342902633	0.101771935
21:55:44	0.355195004	0.320981332	0.101513169	21:55:48	0.354953879	0.311112599	0.101254403
21:55:52	0.354712754	0.301243866	0.100995637	21:55:56	0.35447163	0.289135706	0.100736871
21:56:00	0.354230505	0.274788118	0.100478105	21:56:04	0.354255542	0.260599186	0.100219339
21:56:08	0.354280579	0.249921722	0.099960574	21:56:12	0.354305616	0.239244261	0.099701808
21:56:16	0.354330653	0.231285376	0.099443042	21:56:20	0.354355669	0.226045073	0.099184276
21:56:24	0.354380727	0.22080477	0.09892551	21:56:28	0.354405764	0.220541252	0.098666744
21:56:32	0.354430801	0.220277734	0.098407978	21:56:36	0.354455838	0.230507369	0.098149212
21:56:40	0.354480875	0.251230156	0.097890446	21:56:44	0.354505912	0.271952945	0.09763168
21:56:48	0.354530949	0.279416325	0.097372914	21:56:52	0.354555986	0.286879705	0.097114148
21:56:56	0.354581023	0.295232785	0.096855382	21:57:00	0.35460606	0.304475575	0.096596616
21:57:04	0.354416432	0.313590397	0.09633785	21:57:08	0.354226804	0.32270522	0.096079084
21:57:12	0.354037176	0.331820052	0.095820318	21:57:16	0.353847548	0.344822475	0.095561552
21:57:20	0.35365792	0.361712499	0.095302787	21:57:24	0.353468292	0.378602523	0.095044021
21:57:28	0.353278664	0.388080616	0.094785255	21:57:32	0.353089036	0.397558727	0.094526489
21:57:36	0.352899408	0.397491988	0.094267723	21:57:40	0.35270978	0.387880434	0.094008957
21:57:44	0.352520152	0.378268879	0.093750191	21:57:48	0.352330524	0.365578436	0.093491425
21:57:52	0.352140897	0.352888001	0.093232659	21:57:56	0.351951269	0.340993869	0.092973893
21:58:00	0.351761641	0.329896049	0.092715127	21:58:04	0.352173441	0.319156731	0.092456361
21:58:08	0.352585242	0.309627314	0.092197595	21:58:12	0.352997043	0.300097896	0.091938829
21:58:16	0.353408844	0.291113678	0.091680063	21:58:20	0.353820644	0.282674658	0.091421297
21:58:24	0.354232445	0.274235638	0.091162531	21:58:28	0.354644246	0.262575256	0.090903765
21:58:32	0.355056047	0.250914874	0.090604999	21:58:36	0.355467847	0.246153622	0.090386234
21:58:40	0.355879648	0.2482915	0.090127468	21:58:44	0.356291449	0.250429377	0.089868702
21:58:48	0.35670325	0.238020377	0.089609936	21:58:52	0.35711505	0.225611376	0.08935117
21:58:56	0.357526851	0.214380163	0.089092404	21:59:00	0.357938652	0.204326737	0.088833638
21:59:04	0.357258901	0.193622654	0.088574872	21:59:08	0.356579149	0.197910884	0.088316106

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
21:59:12	0.355899398	0.202199112	0.08805734	21:59:16	0.355219647	0.204356273	0.087798574
21:59:20	0.354539896	0.204382366	0.087539808	21:59:24	0.353860144	0.204408459	0.087281042
21:59:28	0.353180393	0.209026198	0.087022276	21:59:32	0.352500642	0.213643937	0.08676351
21:59:36	0.351820891	0.225365352	0.086504744	21:59:40	0.351141139	0.244190445	0.086245978
21:59:44	0.350461388	0.263015538	0.085987212	21:59:48	0.349781637	0.281161392	0.085728446
21:59:52	0.349101886	0.299307247	0.085469681	21:59:56	0.348422134	0.316706366	0.085210915
22:00:00	0.847742383	0.793269658	0.584952149	22:00:04	0.847431801	0.784380016	0.584693383
22:00:08	0.847121219	0.78798913	0.584434617	22:00:12	0.346810636	0.291598244	0.084175851
22:00:16	0.346500054	0.295207367	0.083917085	22:00:20	0.346189472	0.298816481	0.083658319
22:00:24	0.34587889	0.302425595	0.083399553	22:00:28	0.345568307	0.295408486	0.083140787
22:00:32	0.345257725	0.288391386	0.082882021	22:00:36	0.344947143	0.273288557	0.082623255
22:00:40	0.344636561	0.255490489	0.082364489	22:00:44	0.344325978	0.23769242	0.082105723
22:00:48	0.344015396	0.224209192	0.081846957	22:00:52	0.343704814	0.210725963	0.081588191
22:00:56	0.343394232	0.201703503	0.081329425	22:01:00	0.343083649	0.197141811	0.081070659
22:01:04	0.343328131	0.192910985	0.080811893	22:01:08	0.343572612	0.201434761	0.080553128
22:01:12	0.343817093	0.209958536	0.080294362	22:01:16	0.344061574	0.214707781	0.080035596
22:01:20	0.344306056	0.215682492	0.07977683	22:01:24	0.344550537	0.216657204	0.079518064
22:01:28	0.344795018	0.209987556	0.079259298	22:01:32	0.345039499	0.203317908	0.079000532
22:01:36	0.345283981	0.195722495	0.078741766	22:01:40	0.345528462	0.187818493	0.078483
22:01:44	0.345772943	0.179914492	0.078224234	22:01:48	0.346017424	0.16699802	0.077965468
22:01:52	0.346261906	0.154081548	0.077706702	22:01:56	0.346506387	0.145340336	0.077447936
22:02:00	0.346750868	0.137990873	0.07718917	22:02:04	0.345749804	0.129898964	0.076930404
22:02:08	0.344748739	0.124261369	0.076671638	22:02:12	0.343747675	0.118623773	0.076412872
22:02:16	0.342746611	0.10410634	0.076154106	22:02:20	0.341745546	0.080709061	0.075895341
22:02:24	0.340744482	0.057311791	0.075636575	22:02:28	0.339743418	0.031951228	0.075377809
22:02:32	0.338742353	0.006590656	0.075119043	22:02:36	0.337741289	-0.02028393	0.074860277
22:02:40	0.336740225	-0.048672531	0.074601511	22:02:44	0.335739161	-0.076812107	0.074342745
22:02:48	0.334738096	-0.10420457	0.0740083979	22:02:52	0.333737032	-0.131597033	0.073825213
22:02:56	0.332735968	-0.161055105	0.073566447	22:03:00	0.331734903	-0.192578785	0.073307681
22:03:04	0.331602645	-0.223584583	0.073048915	22:03:08	0.331470386	-0.23213928	0.072790149
22:03:12	0.331338127	-0.240693976	0.072531383	22:03:16	0.331205869	-0.242300791	0.072272617
22:03:20	0.33107361	-0.236959654	0.072013851	22:03:24	0.330941351	-0.231618516	0.071755085
22:03:28	0.330809092	-0.218479633	0.071496319	22:03:32	0.330676834	-0.197542969	0.071237553
22:03:36	0.330544575	-0.170216023	0.070978788	22:03:40	0.330412316	-0.136498828	0.070720022
22:03:44	0.330280058	-0.102781599	0.070441256	22:03:48	0.330147799	-0.06240257	0.07020249
22:03:52	0.33001554	-0.022023559	0.069943724	22:03:56	0.329883282	0.017989624	0.069684958
22:04:00	0.329751023	0.05763696	0.069426192	22:04:04	0.329715271	0.097341823	0.069167426
22:04:08	0.329679519	0.120871941	0.06890866	22:04:12	0.329643767	0.144402051	0.068649894
22:04:16	0.329608016	0.159068707	0.068391128	22:04:20	0.329572264	0.1648719	0.068132362
22:04:24	0.329536512	0.170675093	0.067873596	22:04:28	0.32950076	0.177709022	0.06761483
22:04:32	0.329465008	0.184742949	0.067356064	22:04:36	0.329429256	0.195495991	0.067097298
22:04:40	0.329393505	0.209968147	0.066838532	22:04:44	0.329357753	0.224440302	0.066579766
22:04:48	0.329322001	0.230539694	0.066321	22:04:52	0.329286249	0.236639089	0.066062235
22:04:56	0.329250497	0.244382077	0.065803469	22:05:00	0.329214745	0.253768654	0.065544703
22:05:04	0.328542674	0.262775936	0.065285937	22:05:08	0.327870602	0.279970125	0.065027171
22:05:12	0.32719853	0.297164305	0.064768405	22:05:16	0.326526458	0.309165286	0.064509639
22:05:20	0.325854386	0.319435194	0.064250873	22:05:24	0.325182314	0.329705102	0.063992107
22:05:28	0.324510242	0.343747539	0.063733341	22:05:32	0.32383817	0.357789951	0.063474575
22:05:36	0.323166099	0.369160888	0.063215809	22:05:40	0.322494027	0.377860334	0.062957043
22:05:44	0.321821955	0.386559762	0.062698277	22:05:48	0.321149883	0.391918716	0.062439511
22:05:52	0.320477811	0.397277669	0.062180745	22:05:56	0.319805739	0.401745048	0.061921979
22:06:00	0.319133667	0.405915223	0.061663213	22:06:04	0.319141173	0.410490484	0.061404448
22:06:08	0.319148678	0.418078887	0.061145682	22:06:12	0.319156184	0.425667308	0.060886916
22:06:16	0.319163689	0.436826061	0.06062815	22:06:20	0.319171195	0.451555181	0.060369384
22:06:24	0.3191787	0.466284284	0.060110618	22:06:28	0.319186206	0.483186934	0.059851852
22:06:32	0.319193711	0.500089583	0.059593086	22:06:36	0.319201217	0.509518516	0.05933432
22:06:40	0.319208722	0.511473661	0.059075554	22:06:44	0.319216228	0.513428841	0.058816788

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
22:06:48	0.319223733	0.503752618	0.058558022	22:06:52	0.319231239	0.49407636	0.058299256
22:06:56	0.319238744	0.479464552	0.05804049	22:07:00	0.31924625	0.459917176	0.057781724
22:07:04	0.319354761	0.440430009	0.057522958	22:07:08	0.319463273	0.428240671	0.057264192
22:07:12	0.319571784	0.41605135	0.057005426	22:07:16	0.319680296	0.40555929	0.05674666
22:07:20	0.319788807	0.396754408	0.056487895	22:07:24	0.319897319	0.387952887	0.056229129
22:07:28	0.320005831	0.376436369	0.055970363	22:07:32	0.320114342	0.364919833	0.055711597
22:07:36	0.320222854	0.348253487	0.055452831	22:07:40	0.320331365	0.326437305	0.055194065
22:07:44	0.320439877	0.304621132	0.054935299	22:07:48	0.320548388	0.28146861	0.054676533
22:07:52	0.3206569	0.258316091	0.054417767	22:07:56	0.320765411	0.23335184	0.054159001
22:08:00	0.320873923	0.206575856	0.053900235	22:08:04	0.321549785	0.180138063	0.053641469
22:08:08	0.322225647	0.152250438	0.053382703	22:08:12	0.322901509	0.124362816	0.053123937
22:08:16	0.323577371	0.104029189	0.052865171	22:08:20	0.324253233	0.086213567	0.052606405
22:08:24	0.324929095	0.068397945	0.052347639	22:08:28	0.325604957	0.059019233	0.052088873
22:08:32	0.326280819	0.049640513	0.051830107	22:08:36	0.326956681	0.039821494	0.051571342
22:08:40	0.327632543	0.029562186	0.051312576	22:08:44	0.328308405	0.019302878	0.05105381
22:08:48	0.328984267	-0.010018667	0.050795044	22:08:52	0.329660129	-0.039340229	0.050536278
22:08:56	0.330335991	-0.051347566	0.050277512	22:09:00	0.331011853	-0.057583524	0.050018746
22:09:04	0.330996591	-0.064231433	0.04975998	22:09:08	0.33098133	-0.091736363	0.049501214
22:09:12	0.330966068	-0.119241293	0.049242448	22:09:16	0.330950807	-0.139102659	0.048983682
22:09:20	0.330935545	-0.151320441	0.048724916	22:09:24	0.330920284	-0.163538223	0.04846615
22:09:28	0.330905022	-0.175756006	0.048207384	22:09:32	0.330889761	-0.187973788	0.047948618
22:09:36	0.330874499	-0.192524929	0.047689852	22:09:40	0.330859238	-0.189409463	0.047431086
22:09:44	0.330843976	-0.186293998	0.04717232	22:09:48	0.330828715	-0.171525954	0.046913555
22:09:52	0.330813453	-0.156757874	0.046654789	22:09:56	0.330798192	-0.148219591	0.046396023
22:10:00	0.33078293	-0.14175786	0.046137257	22:10:04	0.330892756	-0.135221566	0.045878491
22:10:08	0.331002582	-0.121036644	0.045619725	22:10:12	0.331112408	-0.106851722	0.045360959
22:10:16	0.331222235	-0.09156823	0.045102193	22:10:20	0.331332061	-0.075186152	0.044843427
22:10:24	0.331441887	-0.058804056	0.044584661	22:10:28	0.331551713	-0.044741426	0.044325895
22:10:32	0.331661539	-0.030678779	0.044067129	22:10:36	0.331771365	-0.01430823	0.043808363
22:10:40	0.331881191	0.004370239	0.043549597	22:10:44	0.331991017	0.023048707	0.043290831
22:10:48	0.332100843	0.049054368	0.043032065	22:10:52	0.332210669	0.075060039	0.042773299
22:10:56	0.332320495	0.100603054	0.042514533	22:11:00	0.332430321	0.12599185	0.042255767
22:11:04	0.332313421	0.151245502	0.041997002	22:11:08	0.332196521	0.179161786	0.041738236
22:11:12	0.332079621	0.207078071	0.04147947	22:11:16	0.331962721	0.21924451	0.041220704
22:11:20	0.331845821	0.226161001	0.040961938	22:11:24	0.331728921	0.233077493	0.040703172
22:11:28	0.331612021	0.246308274	0.040444406	22:11:32	0.331495121	0.259539056	0.04018564
22:11:36	0.331378221	0.276946203	0.039926874	22:11:40	0.331261321	0.298529712	0.039668108
22:11:44	0.331144422	0.320113221	0.039409342	22:11:48	0.331027522	0.346324178	0.039150576
22:11:52	0.330910622	0.372535135	0.03889181	22:11:56	0.330793722	0.395281281	0.038633044
22:12:00	0.330676822	0.414562618	0.038374278	22:12:04	0.330618569	0.433878914	0.038115512
22:12:08	0.330560317	0.449524579	0.037856746	22:12:12	0.330502065	0.465170243	0.03759798
22:12:16	0.330443812	0.476218722	0.037339214	22:12:20	0.33038556	0.48266998	0.037080449
22:12:24	0.330327308	0.489121256	0.036821683	22:12:28	0.330269055	0.500157887	0.036562917
22:12:32	0.330210803	0.511194481	0.036304151	22:12:36	0.330152551	0.522231111	0.036045385
22:12:40	0.330094298	0.533267706	0.035786619	22:12:44	0.330036046	0.54279224	0.035527853
22:12:48	0.329977794	0.547780521	0.035269087	22:12:52	0.329919541	0.552768768	0.035010321
22:12:56	0.329861289	0.557043761	0.034751555	22:13:00	0.329803037	0.560605502	0.034492789
22:13:04	0.330306357	0.564501988	0.034234023	22:13:08	0.330809678	0.568398473	0.033975257
22:13:12	0.331312998	0.572294959	0.033716491	22:13:16	0.331816319	0.58259871	0.033457725
22:13:20	0.332319639	0.599309729	0.033198959	22:13:24	0.33282296	0.616020782	0.032940193
22:13:28	0.33332628	0.631389748	0.032681427	22:13:32	0.333829601	0.646758678	0.032422662
22:13:36	0.334332921	0.654538386	0.032163896	22:13:40	0.334836242	0.654728835	0.03190513
22:13:44	0.335339563	0.654919284	0.031646364	22:13:48	0.335842883	0.642279603	0.031387598
22:13:52	0.336346204	0.629639922	0.031128832	22:13:56	0.336849524	0.614045153	0.030870066
22:14:00	0.337352845	0.595495262	0.0306113	22:14:04	0.336793451	0.576311904	0.030352534
22:14:08	0.336234058	0.558808092	0.030093768	22:14:12	0.335674665	0.541304244	0.029835002
22:14:16	0.335115272	0.532913796	0.029576236	22:14:20	0.334555879	0.533636746	0.02931747

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
22:14:24	0.333996485	0.53435966	0.029058704	22:14:28	0.333437092	0.523096304	0.028799938
22:14:32	0.332877699	0.511832948	0.028541172	22:14:36	0.332318306	0.505822365	0.028282406
22:14:40	0.331758912	0.505064521	0.02802364	22:14:44	0.331199519	0.504306676	0.027764874
22:14:48	0.330640126	0.505012181	0.027506109	22:14:52	0.330080733	0.505717722	0.027247343
22:14:56	0.32952134	0.504846184	0.026988577	22:15:00	-0.171038054	0.002397637	-0.473270189
22:15:04	-0.171590418	-4.67552E-05	-0.473528955	22:15:08	-0.172142782	-0.01091087	-0.473787721
22:15:12	0.327304853	0.478225032	0.025953513	22:15:16	0.326752489	0.467360917	0.025694747
22:15:20	0.326200125	0.45649682	0.025435981	22:15:24	0.32564776	0.445632704	0.025177215
22:15:28	0.325095396	0.432413238	0.024918449	22:15:32	0.324543031	0.419193772	0.024659683
22:15:36	0.323990667	0.406256428	0.024400917	22:15:40	0.323438303	0.393601222	0.024142151
22:15:44	0.322885938	0.380946016	0.023883385	22:15:48	0.322333574	0.353235669	0.023624619
22:15:52	0.32178121	0.32552534	0.023365853	22:15:56	0.321228845	0.299246562	0.023107087
22:16:00	0.320676481	0.27344497	0.022848321	22:16:04	0.32000169	0.247570397	0.022589556
22:16:08	0.319326898	0.223760446	0.02233079	22:16:12	0.318652107	0.199950495	0.022072024
22:16:16	0.317977316	0.180207211	0.021813258	22:16:20	0.317302525	0.164530593	0.021554492
22:16:24	0.316627733	0.148853976	0.021295726	22:16:28	0.315952942	0.147866912	0.02103696
22:16:32	0.315278151	0.146879852	0.020778194	22:16:36	0.314603359	0.1412719	0.020519428
22:16:40	0.313928568	0.131043056	0.020260662	22:16:44	0.313253777	0.120814211	0.020001896
22:16:48	0.312578986	0.104676223	0.01974313	22:16:52	0.311904194	0.088538248	0.019484364
22:16:56	0.311229403	0.074916767	0.019225598	22:17:00	0.310554612	0.063811799	0.018966832
22:17:04	0.310327942	0.052973949	0.018708066	22:17:08	0.310101273	0.032946152	0.0184493
22:17:12	0.309874603	0.012918355	0.018190534	22:17:16	0.309647934	0.000762648	0.017931768
22:17:20	0.309421264	-0.00352095	0.017673003	22:17:24	0.309194595	-0.007804549	0.017414237
22:17:28	0.308967925	-0.020709127	0.017155471	22:17:32	0.308741256	-0.033613704	0.016896705
22:17:36	0.308514586	-0.051522528	0.016637939	22:17:40	0.308287916	-0.074435561	0.016379173
22:17:44	0.308061247	-0.097348612	0.016120407	22:17:48	0.307834577	-0.117058474	0.015861641
22:17:52	0.307607908	-0.136768336	0.015602875	22:17:56	0.307381238	-0.154617523	0.015344109
22:18:00	0.307154569	-0.170660071	0.015085343	22:18:04	0.306927687	-0.186970279	0.014826577
22:18:08	0.305440804	-0.196643518	0.014567811	22:18:12	0.304583922	-0.206316722	0.014309045
22:18:16	0.30372704	-0.221177787	0.014050279	22:18:20	0.302870158	-0.241226679	0.013791513
22:18:24	0.302013275	-0.26127557	0.013532747	22:18:28	0.301156393	-0.248948327	0.013273981
22:18:32	0.300299511	-0.236621083	0.013015216	22:18:36	0.299442629	-0.238311469	0.01275645
22:18:40	0.298585746	-0.254019485	0.012497684	22:18:44	0.297728864	-0.269727535	0.012238918
22:18:48	0.296871982	-0.275323775	0.011980152	22:18:52	0.2960151	-0.280920015	0.011721386
22:18:56	0.295158217	-0.284827472	0.01146262	22:19:00	0.294301335	-0.288172	0.011203854
22:19:04	0.294203859	-0.291063894	0.010945088	22:19:08	0.294106384	-0.282127374	0.010686322
22:19:12	0.294008908	-0.273190818	0.010427556	22:19:16	0.293911432	-0.259706676	0.01016879
22:19:20	0.293813956	-0.241674876	0.009910024	22:19:24	0.293716481	-0.223643077	0.009651258
22:19:28	0.293619005	-0.197981516	0.009392492	22:19:32	0.293521529	-0.17231999	0.009133726
22:19:36	0.293424054	-0.152636607	0.00887496	22:19:40	0.293326578	-0.138931401	0.008616194
22:19:44	0.293229102	-0.125226195	0.008357428	22:19:48	0.293131626	-0.109301236	0.008098663
22:19:52	0.293034151	-0.093376277	0.007839897	22:19:56	0.292936675	-0.073774948	0.007581131
22:20:00	0.292839199	-0.05049725	0.007322365	22:20:04	0.292258778	-0.027507446	0.007063599
22:20:08	0.291678357	-0.00130232	0.006804833	22:20:12	0.291097936	0.024902789	0.006546067
22:20:16	0.290517515	0.044819024	0.006287301	22:20:20	0.289937094	0.058446377	0.006028535
22:20:24	0.289356672	0.072073721	0.005769769	22:20:28	0.288776251	0.073787354	0.005511003
22:20:32	0.28819583	0.075500987	0.005252237	22:20:36	0.287615409	0.076155328	0.004993471
22:20:40	0.287034988	0.075750361	0.004734705	22:20:44	0.286454567	0.075345393	0.004475939
22:20:48	0.285874146	0.082205922	0.004217173	22:20:52	0.285293725	0.089066442	0.003958407
22:20:56	0.284713304	0.095926967	0.003699641	22:21:00	0.284132883	0.102787492	0.003440875
22:21:04	0.284141111	0.109998901	0.00318211	22:21:08	0.284149339	0.122078358	0.002923344
22:21:12	0.284157567	0.134157818	0.002664578	22:21:16	0.284165796	0.144241072	0.002405812
22:21:20	0.284174024	0.15232812	0.002147046	22:21:24	0.284182252	0.160415169	0.00188828
22:21:28	0.284190481	0.158762535	0.001629514	22:21:32	0.284198709	0.157109902	0.001370748
22:21:36	0.284206937	0.155457268	0.001111982	22:21:40	0.284215165	0.153804635	0.000853216
22:21:44	0.284223394	0.152152001	0.00059445	22:21:48	0.284231622	0.14548272	0.000335684
22:21:52	0.28423985	0.138813437	7.69182E-05	22:21:56	0.284248078	0.13317482	-0.000181848

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
22:22:00	0.284256307	0.128566867	-0.000440614	22:22:04	0.283744056	0.123648664	-0.00069938
22:22:08	0.283231805	0.122671214	-0.000958146	22:22:12	0.282719553	0.121693763	-0.001216912
22:22:16	0.282207302	0.120340523	-0.001475677	22:22:20	0.281695051	0.118611502	-0.001734443
22:22:24	0.2811828	0.11688248	-0.001993209	22:22:28	0.280670549	0.118122811	-0.002251975
22:22:32	0.280158298	0.119363142	-0.002510741	22:22:36	0.279646047	0.120603472	-0.002769507
22:22:40	0.279133796	0.121843803	-0.003028273	22:22:44	0.278621545	0.123084134	-0.003287039
22:22:48	0.278109294	0.13149566	-0.003545805	22:22:52	0.277597043	0.139907186	-0.003804571
22:22:56	0.277084792	0.140616736	-0.004063337	22:23:00	0.276572541	0.133624311	-0.004322103
22:23:04	0.276653497	0.126985485	-0.004580869	22:23:08	0.276734453	0.12941993	-0.004839635
22:23:12	0.27681541	0.131854375	-0.005098401	22:23:16	0.276896366	0.132995258	-0.005357167
22:23:20	0.276977322	0.132842581	-0.005615933	22:23:24	0.277058278	0.132689903	-0.005874699
22:23:28	0.277139235	0.133768104	-0.006133465	22:23:32	0.277220191	0.134846303	-0.00639223
22:23:36	0.277301147	0.133563932	-0.006650996	22:23:40	0.277382103	0.129920993	-0.006909762
22:23:44	0.27746306	0.126278053	-0.007168528	22:23:48	0.277544016	0.111807902	-0.007427294
22:23:52	0.277624972	0.097337752	-0.00768606	22:23:56	0.277705928	0.087428018	-0.007944826
22:24:00	0.277786885	0.08207871	-0.008203592	22:24:04	0.277663864	0.076607805	-0.008462358
22:24:08	0.277540843	0.080232517	-0.008721124	22:24:12	0.277417822	0.083857228	-0.00897989
22:24:16	0.277294801	0.082419835	-0.009238656	22:24:20	0.27717178	0.075920345	-0.00947422
22:24:24	0.277048759	0.069420846	-0.009756188	22:24:28	0.276925738	0.060134084	-0.010014954
22:24:32	0.276802717	0.050847321	-0.01027372	22:24:36	0.276679697	0.042048341	-0.010532486
22:24:40	0.276556676	0.033737154	-0.010791252	22:24:44	0.276433655	0.025425957	-0.011050018
22:24:48	0.276310634	0.029698965	-0.011308783	22:24:52	0.276187613	0.033971973	-0.011567549
22:24:56	0.276064592	0.039201868	-0.011826315	22:25:00	0.275941571	0.045388667	-0.012085081
22:25:04	0.275339517	0.051289922	-0.012343847	22:25:08	0.274737463	0.062616135	-0.012602613
22:25:12	0.274135408	0.073942339	-0.012861379	22:25:16	0.273533354	0.087969347	-0.013120145
22:25:20	0.2729313	0.104697153	-0.013378911	22:25:24	0.272329246	0.121424959	-0.013637677
22:25:28	0.271727191	0.118094831	-0.013896443	22:25:32	0.271125137	0.114764707	-0.014155209
22:25:36	0.270523083	0.117744818	-0.014413975	22:25:40	0.269921029	0.127035168	-0.014672741
22:25:44	0.269318974	0.136325519	-0.014931507	22:25:48	0.26871692	0.15145609	-0.015190273
22:25:52	0.268114866	0.166586661	-0.015449039	22:25:56	0.267512811	0.180652093	-0.015707805
22:26:00	0.266910757	0.19365239	-0.01596657	22:26:04	0.267304801	0.207246442	-0.016225336
22:26:08	0.267698844	0.198640495	-0.016484102	22:26:12	0.268092887	0.190034547	-0.016742868
22:26:16	0.268486931	0.179018167	-0.017001634	22:26:20	0.268880974	0.165591357	-0.0172604
22:26:24	0.269275017	0.152164546	-0.017519166	22:26:28	0.269669061	0.159061456	-0.017777932
22:26:32	0.270063104	0.165958365	-0.018036698	22:26:36	0.270457148	0.174882429	-0.018295464
22:26:40	0.270851191	0.185833647	-0.01855423	22:26:44	0.271245234	0.196784865	-0.018812996
22:26:48	0.271639278	0.202898534	-0.019071762	22:26:52	0.272033321	0.209012206	-0.019330528
22:26:56	0.272427364	0.209671293	-0.019589294	22:27:00	0.272821408	0.208512188	-0.01984806
22:27:04	0.272505748	0.206930037	-0.020106826	22:27:08	0.272190088	0.207225819	-0.020365592
22:27:12	0.271874429	0.2075216	-0.020624358	22:27:16	0.271558769	0.205959989	-0.020883123
22:27:20	0.27124311	0.203779243	-0.021141889	22:27:24	0.27092745	0.201598496	-0.021400655
22:27:28	0.27061179	0.21364403	-0.021659421	22:27:32	0.270296131	0.225689563	-0.021918187
22:27:36	0.269980471	0.227943619	-0.022176953	22:27:40	0.269664811	0.220406206	-0.022435719
22:27:44	0.269349152	0.212868794	-0.022694485	22:27:48	0.269033492	0.20128161	-0.022953251
22:27:52	0.268717832	0.189694432	-0.023212017	22:27:56	0.268402173	0.169376864	-0.023470783
22:28:00	0.268086513	0.140328914	-0.023729549	22:28:04	0.268080751	0.114309582	-0.023988315
22:28:08	0.26807499	0.096821936	-0.024247081	22:28:12	0.268069228	0.079334295	-0.024505847
22:28:16	0.268063466	0.070398946	-0.024764613	22:28:20	0.268057704	0.070015889	-0.025023379
22:28:24	0.268051943	0.06963284	-0.025282145	22:28:28	0.268046181	0.064723372	-0.025540911
22:28:32	0.268040419	0.059813904	-0.025799676	22:28:36	0.268034658	0.062248631	-0.026058442
22:28:40	0.268028896	0.072027561	-0.026317208	22:28:44	0.268023134	0.081806491	-0.026575974
22:28:48	0.268017372	0.091585416	-0.02683474	22:28:52	0.268011611	0.101364346	-0.027093506
22:28:56	0.268005849	0.113523075	-0.027352272	22:29:00	0.268000087	0.12647507	-0.027611038
22:29:04	0.267673586	0.139235876	-0.027869804	22:29:08	0.267347085	0.148295504	-0.02812857
22:29:12	0.267020584	0.157355131	-0.028387336	22:29:16	0.266694083	0.168525725	-0.028646102
22:29:20	0.266367582	0.181807287	-0.028904868	22:29:24	0.266041081	0.195088848	-0.029163634
22:29:28	0.26571458	0.199127112	-0.0294224	22:29:32	0.265388079	0.203165384	-0.029681166

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
22:29:36	0.265061577	0.206141126	-0.029939932	22:29:40	0.264735076	0.208054352	-0.030198698
22:29:44	0.264408575	0.209967578	-0.030457463	22:29:48	0.264082074	0.208177566	-0.030716229
22:29:52	0.263755573	0.206387553	-0.030974995	22:29:56	0.263429072	0.204597541	-0.031233761
22:30:00	0.763102571	0.702807528	0.468507473	22:30:04	0.763923433	0.701701441	0.468248707
22:30:08	0.764744294	0.703127535	0.467989941	22:30:12	0.265565156	0.204553628	-0.032268825
22:30:16	0.266386018	0.209717148	-0.032527591	22:30:20	0.267206879	0.218618105	-0.032786357
22:30:24	0.268027741	0.227519056	-0.033045123	22:30:28	0.268848603	0.228453902	-0.033303889
22:30:32	0.269669465	0.229388748	-0.033562655	22:30:36	0.270490326	0.226629589	-0.033821421
22:30:40	0.271311188	0.220176433	-0.034080187	22:30:44	0.27213205	0.212588001	-0.034338953
22:30:48	0.272952911	0.201593752	-0.034597719	22:30:52	0.273773773	0.190599507	-0.034856485
22:30:56	0.274594635	0.181301192	-0.035115251	22:31:00	0.275415496	0.173698811	-0.035374016
22:31:04	0.275726833	0.16579271	-0.035632782	22:31:08	0.27603817	0.15128654	-0.035891548
22:31:12	0.276349507	0.136780369	-0.036150314	22:31:16	0.276660843	0.120615795	-0.03640908
22:31:20	0.27697218	0.102792811	-0.036667846	22:31:24	0.277283517	0.084969831	-0.036926612
22:31:28	0.277594854	0.071034172	-0.037185378	22:31:32	0.27790619	0.057098514	-0.037444144
22:31:36	0.278217527	0.04444583	-0.03770291	22:31:40	0.278528864	0.033076123	-0.037961676
22:31:44	0.278840201	0.021706424	-0.038220442	22:31:48	0.279151538	0.019344949	-0.038479208
22:31:52	0.279462874	0.016983482	-0.038737974	22:31:56	0.279774211	0.014622015	-0.03899674
22:32:00	0.280085548	0.012260531	-0.039255506	22:32:04	0.280338223	0.009864097	-0.039514272
22:32:08	0.280590899	0.007467663	-0.039773038	22:32:12	0.280843574	0.00507123	-0.040031804
22:32:16	0.28109625	0.006283873	-0.040290569	22:32:20	0.281348926	0.011105611	-0.040549335
22:32:24	0.281601601	0.015927349	-0.040808101	22:32:28	0.281854277	0.027942796	-0.041066867
22:32:32	0.282106952	0.039958235	-0.041325633	22:32:36	0.282359628	0.047733887	-0.041584399
22:32:40	0.282612303	0.051269736	-0.041843165	22:32:44	0.282864979	0.054805594	-0.042101931
22:32:48	0.283117654	0.065198191	-0.042360697	22:32:52	0.28337033	0.075590789	-0.042619463
22:32:56	0.283623006	0.081219328	-0.042878229	22:33:00	0.283875681	0.082083792	-0.043136995
22:33:04	0.283486842	0.084959475	-0.043395761	22:33:08	0.283098002	0.095016006	-0.043654527
22:33:12	0.282709163	0.105072541	-0.043913293	22:33:16	0.282320324	0.113558703	-0.044172059
22:33:20	0.281931484	0.120474497	-0.044430825	22:33:24	0.281542645	0.127390291	-0.044689591
22:33:28	0.281153806	0.122350986	-0.044948356	22:33:32	0.280764966	0.117311681	-0.045207122
22:33:36	0.280376127	0.115588389	-0.045465888	22:33:40	0.279987288	0.1171811	-0.045724654
22:33:44	0.279598448	0.118773812	-0.04598342	22:33:48	0.279209609	0.11508657	-0.046242186
22:33:52	0.27882077	0.111399327	-0.046500952	22:33:56	0.27843193	0.114149956	-0.046759718
22:34:00	0.278043091	0.123338454	-0.047018484	22:34:04	0.279019297	0.133340635	-0.04727725
22:34:08	0.279995503	0.132304632	-0.047536016	22:34:12	0.280971709	0.131268628	-0.047794782
22:34:16	0.281947915	0.136300285	-0.048053548	22:34:20	0.28292412	0.147399603	-0.048312314
22:34:24	0.283900326	0.158498922	-0.04857108	22:34:28	0.284876532	0.177598282	-0.048829846
22:34:32	0.285852738	0.196697642	-0.049088612	22:34:36	0.286828944	0.212864015	-0.049347378
22:34:40	0.28780515	0.226097396	-0.049606144	22:34:44	0.288781356	0.239330776	-0.049864909
22:34:48	0.289757562	0.24145059	-0.050123675	22:34:52	0.290733768	0.243570403	-0.050382441
22:34:56	0.291709974	0.244120528	-0.050641207	22:35:00	0.29268618	0.243100959	-0.050899973
22:35:04	0.292942406	0.241808173	-0.051158739	22:35:08	0.293198632	0.240983243	-0.051417505
22:35:12	0.293454858	0.240158308	-0.051676271	22:35:16	0.293711084	0.239333378	-0.051935037
22:35:20	0.29396731	0.2469461	-0.052193803	22:35:24	0.294223537	0.254558817	-0.052452569
22:35:28	0.294479763	0.256342171	-0.052711335	22:35:32	0.294735989	0.258125535	-0.052970101
22:35:36	0.294992215	0.256694651	-0.053228867	22:35:40	0.295248441	0.254192342	-0.053487633
22:35:44	0.295504667	0.250715834	-0.053746399	22:35:48	0.295760893	0.244316678	-0.054005165
22:35:52	0.296017119	0.23791753	-0.054263931	22:35:56	0.296273346	0.228538741	-0.054522697
22:36:00	0.296529572	0.218166735	-0.054781462	22:36:04	0.297344041	0.211236357	-0.055040228
22:36:08	0.298158511	0.213632573	-0.055298994	22:36:12	0.298972981	0.216028788	-0.05555776
22:36:16	0.299787451	0.214183203	-0.055816526	22:36:20	0.300601921	0.210923686	-0.056075292
22:36:24	0.30141639	0.208527491	-0.056334058	22:36:28	0.30223086	0.208721261	-0.056592824
22:36:32	0.30304533	0.208915032	-0.05685159	22:36:36	0.3038598	0.212196185	-0.057110356
22:36:40	0.304674269	0.216506467	-0.057369122	22:36:44	0.305488739	0.222999174	-0.057627888
22:36:48	0.306303209	0.236039169	-0.057886654	22:36:52	0.307117679	0.249079163	-0.05814542
22:36:56	0.307932148	0.25986845	-0.058404186	22:37:00	0.308746618	0.269907498	-0.058662952
22:37:04	0.308553828	0.276838326	-0.058921718	22:37:08	0.308361038	0.276245723	-0.059180484

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
22:37:12	0.308168248	0.27565312	-0.05943925	22:37:16	0.307975458	0.284257117	-0.059698015
22:37:20	0.307782668	0.295926644	-0.059956781	22:37:24	0.307589878	0.301843276	-0.060215547
22:37:28	0.307397088	0.290501252	-0.060474313	22:37:32	0.307204298	0.279159227	-0.060733079
22:37:36	0.307011508	0.266706989	-0.060991845	22:37:40	0.306818718	0.253884676	-0.061250611
22:37:44	0.306625928	0.234780973	-0.061509377	22:37:48	0.306433138	0.196833107	-0.061768143
22:37:52	0.306240348	0.158885238	-0.062026909	22:37:56	0.306047558	0.131985059	-0.062285675
22:38:00	0.305854768	0.105084885	-0.062544441	22:38:04	0.306625989	0.079220569	-0.062803207
22:38:08	0.307397211	0.054739955	-0.063061973	22:38:12	0.308168432	0.030259341	-0.063320739
22:38:16	0.308939653	0.02695871	-0.063579505	22:38:20	0.309710875	0.030718057	-0.063838271
22:38:24	0.310482096	0.034477404	-0.064097037	22:38:28	0.311253318	0.038236759	-0.064355802
22:38:32	0.312024539	0.041996106	-0.064614568	22:38:36	0.312795761	0.040984023	-0.064873334
22:38:40	0.313566982	0.038381456	-0.0651321	22:38:44	0.314338204	0.034457694	-0.065390866
22:38:48	0.315109425	0.026570377	-0.065649632	22:38:52	0.315880647	0.018683061	-0.065908398
22:38:56	0.316651868	0.018014911	-0.066167164	22:39:00	0.31742309	0.019753185	-0.06642593
22:39:04	0.317068581	0.018299174	-0.066684696	22:39:08	0.316714073	0.009281432	-0.066943462
22:39:12	0.316359565	0.000263691	-0.067202228	22:39:16	0.316005057	-0.004102648	-0.067460994
22:39:20	0.315650549	-0.006918501	-0.06771976	22:39:24	0.315296041	-0.005184192	-0.067978526
22:39:28	0.314941533	0.001100243	-0.068237292	22:39:32	0.314587025	0.007384697	-0.068496058
22:39:36	0.314232516	0.016986051	-0.068754824	22:39:40	0.313878008	0.027693044	-0.06901359
22:39:44	0.3135235	0.037886434	-0.069272355	22:39:48	0.313168992	0.047566246	-0.069531121
22:39:52	0.312814484	0.057246058	-0.069789887	22:39:56	0.312459976	0.074576194	-0.070048653
22:40:00	0.312105468	0.094456445	-0.070307419	22:40:04	0.313216559	0.103851886	-0.070566185
22:40:08	0.314327651	0.101888914	-0.070824951	22:40:12	0.315438742	0.099925933	-0.071083717
22:40:16	0.316549833	0.092715392	-0.071342483	22:40:20	0.317660925	0.083755649	-0.071601249
22:40:24	0.318772016	0.083676366	-0.071860015	22:40:28	0.319883108	0.092477533	-0.072118781
22:40:32	0.320994199	0.101278701	-0.072377547	22:40:36	0.322105291	0.118647837	-0.072636313
22:40:40	0.323216382	0.138872961	-0.072895079	22:40:44	0.324327474	0.15959574	-0.073153845
22:40:48	0.325438565	0.181811478	-0.073412611	22:40:52	0.326549657	0.204027215	-0.073671377
22:40:56	0.327660748	0.220487384	-0.073930143	22:41:00	0.32877184	0.23502903	-0.074188908
22:41:04	0.328446694	0.24799847	-0.074447674	22:41:08	0.328121548	0.258819646	-0.07470644
22:41:12	0.327796402	0.269640822	-0.074965206	22:41:16	0.327471256	0.278183284	-0.075223972
22:41:20	0.32714611	0.285966185	-0.075482738	22:41:24	0.326820964	0.292298127	-0.075741504
22:41:28	0.326495818	0.294277238	-0.07600027	22:41:32	0.326170672	0.296256348	-0.076259036
22:41:36	0.325845526	0.310548574	-0.076517802	22:41:40	0.325520381	0.328945174	-0.076776568
22:41:44	0.325195235	0.341569312	-0.077035334	22:41:48	0.324870089	0.336876054	-0.0772941
22:41:52	0.324544943	0.332182795	-0.077552866	22:41:56	0.324219797	0.324945063	-0.077811632
22:42:00	0.323894651	0.316859164	-0.078070398	22:42:04	0.324303161	0.307578223	-0.078329164
22:42:08	0.324711671	0.293400185	-0.07858793	22:42:12	0.325120181	0.279222137	-0.078846695
22:42:16	0.325528691	0.269497815	-0.079105461	22:42:20	0.325937201	0.261258081	-0.079364227
22:42:24	0.32634571	0.253566131	-0.079622993	22:42:28	0.32675422	0.247517539	-0.079881759
22:42:32	0.32716273	0.241468948	-0.080140525	22:42:36	0.32757124	0.233439406	-0.080399291
22:42:40	0.32797975	0.224749543	-0.080658057	22:42:44	0.32838826	0.215015382	-0.080916823
22:42:48	0.32879677	0.202148321	-0.081175589	22:42:52	0.32920528	0.189281261	-0.081434355
22:42:56	0.32961379	0.181094359	-0.081693121	22:43:00	0.3300223	0.17446751	-0.081951887
22:43:04	0.329875586	0.167339831	-0.082210653	22:43:08	0.329728872	0.159702552	-0.082469419
22:43:12	0.329582158	0.152065268	-0.082728185	22:43:16	0.329435444	0.143674161	-0.082986951
22:43:20	0.32928873	0.135031778	-0.083245717	22:43:24	0.329142016	0.126830238	-0.083504483
22:43:28	0.328995302	0.119951241	-0.083763248	22:43:32	0.328848588	0.113072235	-0.084022014
22:43:36	0.328701874	0.104536741	-0.08428078	22:43:40	0.32855516	0.095449094	-0.084539546
22:43:44	0.328408446	0.087118569	-0.084798312	22:43:48	0.328261732	0.081059431	-0.085057078
22:43:52	0.328115018	0.075000301	-0.085315844	22:43:56	0.327968305	0.084011954	-0.08557461
22:44:00	0.327821591	0.093023616	-0.085833376	22:44:04	0.328465024	0.104230764	-0.086092142
22:44:08	0.329108457	0.120611436	-0.086350908	22:44:12	0.32975189	0.136992105	-0.086609674
22:44:16	0.330395323	0.149105434	-0.08686844	22:44:20	0.331038756	0.159796312	-0.087127206
22:44:24	0.331682189	0.16845996	-0.087385972	22:44:28	0.332325622	0.171041918	-0.087644738
22:44:32	0.332969055	0.173623876	-0.087903504	22:44:36	0.333612488	0.179668432	-0.08816227
22:44:40	0.334255921	0.186867189	-0.088421036	22:44:44	0.334899354	0.193537621	-0.088679801

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
22:44:48	0.335542787	0.19862308	-0.088938567	22:44:52	0.33618622	0.20370854	-0.089197333
22:44:56	0.336829653	0.214832048	-0.089456099	22:45:00	-0.162526914	-0.272031762	-0.589714865
22:45:04	-0.162696215	-0.261244422	-0.589973631	22:45:08	-0.162865515	-0.256050259	-0.590232397
22:45:12	0.336965185	0.249143904	-0.090491163	22:45:16	0.336795885	0.255298832	-0.090749929
22:45:20	0.336626584	0.261774007	-0.091008695	22:45:24	0.336457284	0.267223263	-0.091267461
22:45:28	0.336287984	0.269594766	-0.091526227	22:45:32	0.336118684	0.271966269	-0.091784993
22:45:36	0.335949383	0.275409969	-0.092043759	22:45:40	0.335780083	0.279925858	-0.092302525
22:45:44	0.335610783	0.284441747	-0.092561291	22:45:48	0.335441483	0.283415769	-0.092820057
22:45:52	0.335272182	0.282389799	-0.093078823	22:45:56	0.335102882	0.285563893	-0.093337588
22:46:00	0.334933582	0.292938061	-0.093596354	22:46:04	0.335633655	0.300830449	-0.09385512
22:46:08	0.336333729	0.310191427	-0.094113886	22:46:12	0.337033803	0.319552405	-0.094372652
22:46:16	0.337733876	0.323746963	-0.094631418	22:46:20	0.33843395	0.322775111	-0.094890184
22:46:24	0.339134024	0.321803259	-0.09514895	22:46:28	0.339834097	0.305590562	-0.095407716
22:46:32	0.340534171	0.289377865	-0.095666482	22:46:36	0.341234244	0.272253018	-0.095925248
22:46:40	0.341934318	0.254216024	-0.096184014	22:46:44	0.342634392	0.236179027	-0.09644278
22:46:48	0.343334465	0.21552272	-0.096701546	22:46:52	0.344034539	0.194866413	-0.096960312
22:46:56	0.344734613	0.180376493	-0.097219078	22:47:00	0.345434686	0.172052958	-0.097477844
22:47:04	0.345142968	0.163138232	-0.09773661	22:47:08	0.34485125	0.164083604	-0.097995376
22:47:12	0.344559532	0.165028976	-0.098254141	22:47:16	0.344267814	0.164258158	-0.098512907
22:47:20	0.343976096	0.16177114	-0.098771673	22:47:24	0.343684377	0.159284127	-0.099030439
22:47:28	0.343392659	0.153040577	-0.099289205	22:47:32	0.343100941	0.146797027	-0.099547971
22:47:36	0.342809223	0.146265002	-0.099806737	22:47:40	0.342517505	0.151444502	-0.100065503
22:47:44	0.342225787	0.156624002	-0.100324269	22:47:48	0.341934069	0.161803502	-0.100583035
22:47:52	0.34164235	0.166983004	-0.100841801	22:47:56	0.341350632	0.176792579	-0.101100567
22:48:00	0.341058914	0.191232231	-0.101359333	22:48:04	0.341237823	0.205952414	-0.101618099
22:48:08	0.341416731	0.207786328	-0.101876865	22:48:12	0.34159564	0.209620241	-0.102135631
22:48:16	0.341774549	0.2131358	-0.102394397	22:48:20	0.341953457	0.218333006	-0.102653163
22:48:24	0.342132366	0.223530211	-0.102911929	22:48:28	0.342311274	0.228727416	-0.103170694
22:48:32	0.342490183	0.23392462	-0.10342946	22:48:36	0.342669092	0.241056963	-0.103688226
22:48:40	0.342848	0.250124445	-0.103946992	22:48:44	0.343026909	0.259191926	-0.104205758
22:48:48	0.343205817	0.253428242	-0.104464524	22:48:52	0.343384726	0.247664554	-0.10472329
22:48:56	0.343563635	0.246514546	-0.104982056	22:49:00	0.343742543	0.249978213	-0.105240822
22:49:04	0.343957662	0.253463465	-0.105499588	22:49:08	0.344172781	0.267139438	-0.105758354
22:49:12	0.3443879	0.280815407	-0.10601712	22:49:16	0.344603019	0.285432021	-0.106275886
22:49:20	0.344818138	0.28702884	-0.106534652	22:49:24	0.345033257	0.288625659	-0.106793418
22:49:28	0.345248376	0.289049946	-0.107052184	22:49:32	0.345463495	0.289474233	-0.107310951
22:49:36	0.345678614	0.289310855	-0.107569716	22:49:40	0.345893733	0.288559793	-0.107828481
22:49:44	0.346108852	0.28780874	-0.108087247	22:49:48	0.346323971	0.289807841	-0.108346013
22:49:52	0.34653909	0.291806951	-0.108604779	22:49:56	0.346754209	0.300775429	-0.108863545
22:50:00	0.346969328	0.316713293	-0.109122311	22:50:04	0.346667886	0.332343233	-0.109381077
22:50:08	0.346366443	0.343654806	-0.109639843	22:50:12	0.346065	0.354966378	-0.109898609
22:50:16	0.345763557	0.367204193	-0.110157375	22:50:20	0.345462114	0.38036825	-0.110416141
22:50:24	0.345160671	0.393532308	-0.110674907	22:50:28	0.344859228	0.39747279	-0.110933673
22:50:32	0.344557785	0.401413272	-0.111192439	22:50:36	0.344256342	0.408584052	-0.111451205
22:50:40	0.343954899	0.418985147	-0.111709971	22:50:44	0.343653456	0.429386243	-0.111968737
22:50:48	0.343352013	0.447141019	-0.112227503	22:50:52	0.34305057	0.464895814	-0.112486269
22:50:56	0.342749128	0.48521711	-0.112745034	22:51:00	0.342447685	0.508104944	-0.1130038
22:51:04	0.342384992	0.531135075	-0.113262566	22:51:08	0.342322299	0.543556766	-0.113521332
22:51:12	0.342259606	0.555978456	-0.113780098	22:51:16	0.342196913	0.562216503	-0.114038864
22:51:20	0.342134221	0.562270905	-0.11429763	22:51:24	0.342071528	0.562325307	-0.114556396
22:51:28	0.342008835	0.565837893	-0.114815162	22:51:32	0.341946142	0.569350443	-0.115073928
22:51:36	0.341883449	0.570355826	-0.115332694	22:51:40	0.341820757	0.56885404	-0.11559146
22:51:44	0.341758064	0.567352254	-0.115850226	22:51:48	0.341695371	0.562471942	-0.116108992
22:51:52	0.341632678	0.557591594	-0.116367758	22:51:56	0.341569985	0.545386717	-0.116626524
22:52:00	0.341507293	0.525857276	-0.11688529	22:52:04	0.341240141	0.50620596	-0.117144056
22:52:08	0.340972989	0.471174764	-0.117402822	22:52:12	0.340705837	0.436143568	-0.117661587
22:52:16	0.340438685	0.408523984	-0.117920353	22:52:20	0.340171533	0.383374954	-0.118179119

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
22:52:24	0.339904381	0.358225907	-0.118437885	22:52:28	0.339637229	0.329845096	-0.118696651
22:52:32	0.339370077	0.301464285	-0.118955417	22:52:36	0.339102925	0.280449554	-0.119214183
22:52:40	0.338835774	0.266800905	-0.119472949	22:52:44	0.338568622	0.253152255	-0.119731715
22:52:48	0.33830147	0.237009587	-0.119990481	22:52:52	0.338034318	0.22086692	-0.120249247
22:52:56	0.337767166	0.206441769	-0.120508013	22:53:00	0.337500014	0.192589125	-0.120766779
22:53:04	0.337692547	0.179010491	-0.121025545	22:53:08	0.337885079	0.16191617	-0.121284311
22:53:12	0.338077612	0.144821846	-0.121543077	22:53:16	0.338270145	0.136832728	-0.121801843
22:53:20	0.338462677	0.137948814	-0.122060609	22:53:24	0.33865521	0.139064901	-0.122319375
22:53:28	0.338847743	0.141845247	-0.12257814	22:53:32	0.339040275	0.149618367	-0.122836906
22:53:36	0.339232808	0.154269825	-0.123095672	22:53:40	0.339425341	0.155799625	-0.123354438
22:53:44	0.339617874	0.157329424	-0.123613204	22:53:48	0.339810406	0.166270063	-0.12387197
22:53:52	0.340002939	0.175210701	-0.124130736	22:53:56	0.340195472	0.183418912	-0.124389502
22:54:00	0.340388004	0.190894696	-0.124648268	22:54:04	0.340064032	0.198062599	-0.124907034
22:54:08	0.339740061	0.197185851	-0.1251658	22:54:12	0.339416089	0.196309102	-0.125424566
22:54:16	0.339092117	0.191431564	-0.125683332	22:54:20	0.338768145	0.182553234	-0.125942098
22:54:24	0.338444173	0.173674905	-0.126200864	22:54:28	0.338120201	0.156180527	-0.12645963
22:54:32	0.337796229	0.138686147	-0.126718396	22:54:36	0.337472257	0.118502466	-0.126977162
22:54:40	0.337148286	0.097422342	-0.127235927	22:54:44	0.336824314	0.076342228	-0.127494693
22:54:48	0.336500342	0.061494753	-0.127753459	22:54:52	0.33617637	0.046647269	-0.128012225
22:54:56	0.335852398	0.035585478	-0.128270991	22:55:00	0.335528426	0.028309381	-0.128529757
22:55:04	0.335354609	0.021122789	-0.128788523	22:55:08	0.335180791	0.010250146	-0.129047289
22:55:12	0.335006974	-0.000622498	-0.129306055	22:55:16	0.334833156	-0.01729521	-0.129564821
22:55:20	0.334659339	-0.039767974	-0.129823587	22:55:24	0.334485521	-0.062240755	-0.130082353
22:55:28	0.334311703	-0.085871084	-0.130341119	22:55:32	0.334137886	-0.109501395	-0.130599885
22:55:36	0.333964068	-0.126421214	-0.130858651	22:55:40	0.333790251	-0.141104245	-0.131117417
22:55:44	0.333616433	-0.153079792	-0.131376183	22:55:48	0.333442616	-0.156933069	-0.131634949
22:55:52	0.333268798	-0.160786381	-0.131893715	22:55:56	0.333094981	-0.167895608	-0.13215248
22:56:00	0.332921163	-0.176090116	-0.132411246	22:56:04	0.332210593	-0.182918811	-0.132670012
22:56:08	0.331500022	-0.184690072	-0.132928778	22:56:12	0.330789451	-0.186461334	-0.133187544
22:56:16	0.33007888	-0.190497026	-0.13344631	22:56:20	0.32936831	-0.195287541	-0.133705076
22:56:24	0.328657739	-0.202637523	-0.133963842	22:56:28	0.327947168	-0.217666014	-0.134222608
22:56:32	0.327236597	-0.232694504	-0.134481374	22:56:36	0.326526027	-0.237110788	-0.13474014
22:56:40	0.325815456	-0.237989658	-0.134998906	22:56:44	0.325104885	-0.237320404	-0.135257672
22:56:48	0.324394314	-0.232006605	-0.135516438	22:56:52	0.323683744	-0.226692842	-0.135775204
22:56:56	0.322973173	-0.215151697	-0.13603397	22:57:00	0.322262602	-0.201534747	-0.136292736
22:57:04	0.322228368	-0.183710723	-0.136551502	22:57:08	0.322194134	-0.15447501	-0.136810268
22:57:12	0.3221599	-0.125239296	-0.137069033	22:57:16	0.322125666	-0.094813028	-0.137327799
22:57:20	0.322091432	-0.063989878	-0.137586565	22:57:24	0.322057198	-0.039922165	-0.137845331
22:57:28	0.322022964	-0.022609871	-0.138104097	22:57:32	0.32198873	-0.005297577	-0.138362863
22:57:36	0.321954496	0.023756172	-0.138621629	22:57:40	0.321920262	0.056723726	-0.138880395
22:57:44	0.321886028	0.086612843	-0.139139161	22:57:48	0.321851794	0.107266633	-0.139397927
22:57:52	0.32181756	0.127920419	-0.139656693	22:57:56	0.321783326	0.142990096	-0.139915459
22:58:00	0.321749092	0.158059777	-0.140174225	22:58:04	0.321701092	0.173793577	-0.140432991
22:58:08	0.321653092	0.191544364	-0.140691757	22:58:12	0.321605092	0.20929515	-0.140950523
22:58:16	0.321557092	0.226664249	-0.141209289	22:58:20	0.321509092	0.243906121	-0.141468055
22:58:24	0.321461092	0.259013	-0.14172682	22:58:28	0.321413092	0.267714904	-0.141985586
22:58:32	0.321365092	0.276416809	-0.142244352	22:58:36	0.321317092	0.290623372	-0.142503118
22:58:40	0.321269092	0.306664826	-0.142761884	22:58:44	0.321221092	0.326042925	-0.14302065
22:58:48	0.321173092	0.35543099	-0.143279416	22:58:52	0.321125093	0.384819056	-0.143538182
22:58:56	0.321077093	0.402695505	-0.143796948	22:59:00	0.321029093	0.416734778	-0.144055714
22:59:04	0.320912193	0.42807341	-0.14431448	22:59:08	0.320795293	0.431433417	-0.144573246
22:59:12	0.320678393	0.434793424	-0.144832012	22:59:16	0.320561493	0.436195227	-0.145090778
22:59:20	0.320444593	0.436944267	-0.145349544	22:59:24	0.320327693	0.440760347	-0.14560831
22:59:28	0.320210793	0.453777494	-0.145867076	22:59:32	0.320093893	0.466794642	-0.146125842
22:59:36	0.319976993	0.476495457	-0.146384608	22:59:40	0.319860093	0.485090811	-0.146643373
22:59:44	0.319743193	0.49342536	-0.146902139	22:59:48	0.319626293	0.500977446	-0.147160905
22:59:52	0.319509393	0.508529532	-0.147419671	22:59:56	0.319392493	0.531151343	-0.147678437

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
23:00:00	0.819275593	1.058796373	0.352062797	23:00:04	0.819569952	1.082032907	0.351804031
23:00:08	0.819864311	1.091308374	0.351545265	23:00:12	0.32015867	0.600583841	-0.148713501
23:00:16	0.320453029	0.607452973	-0.148972267	23:00:20	0.320747388	0.613519993	-0.149231033
23:00:24	0.321041747	0.616732296	-0.149489799	23:00:28	0.321336106	0.611380378	-0.149748565
23:00:32	0.321630465	0.606028461	-0.150007331	23:00:36	0.321924825	0.592502719	-0.150266097
23:00:40	0.322219184	0.576252334	-0.150524863	23:00:44	0.322513543	0.560840976	-0.150783629
23:00:48	0.322807902	0.547946663	-0.151042395	23:00:52	0.323102261	0.53505235	-0.151301161
23:00:56	0.32339662	0.522556926	-0.151559926	23:01:00	0.323690979	0.510194524	-0.151818692
23:01:04	0.323581307	0.501033835	-0.152077458	23:01:08	0.323471634	0.50220087	-0.152336224
23:01:12	0.323361962	0.50336794	-0.15259499	23:01:16	0.323252229	0.505048054	-0.152853756
23:01:20	0.323142617	0.506899172	-0.153112522	23:01:24	0.323032945	0.507175449	-0.153371288
23:01:28	0.322923272	0.502727132	-0.153630054	23:01:32	0.3228136	0.498278815	-0.15388882
23:01:36	0.322703928	0.486197592	-0.154147586	23:01:40	0.322594255	0.471572055	-0.154406352
23:01:44	0.322484583	0.456153679	-0.154665118	23:01:48	0.322374911	0.438356787	-0.154923884
23:01:52	0.322265238	0.420559895	-0.15518265	23:01:56	0.322155566	0.407925514	-0.155441416
23:02:00	0.322045894	0.397011983	-0.155700182	23:02:04	0.32184116	0.384565984	-0.155958948
23:02:08	0.321636426	0.367692595	-0.156217713	23:02:12	0.321431692	0.350819206	-0.156476479
23:02:16	0.321226959	0.327493819	-0.156735245	23:02:20	0.321022225	0.302017757	-0.156994011
23:02:24	0.320817491	0.278748365	-0.157252777	23:02:28	0.320612758	0.262098953	-0.157511543
23:02:32	0.320408024	0.245449541	-0.157770309	23:02:36	0.32020329	0.228800134	-0.158029075
23:02:40	0.319998557	0.212150722	-0.158287841	23:02:44	0.319793823	0.196822534	-0.158546607
23:02:48	0.319589089	0.185458011	-0.158805373	23:02:52	0.319384356	0.174093487	-0.159064139
23:02:56	0.319179622	0.169753725	-0.159322905	23:03:00	0.318974888	0.167755552	-0.159581671
23:03:04	0.318747315	0.164039926	-0.159840437	23:03:08	0.318519742	0.155212777	-0.160099203
23:03:12	0.318292169	0.146385628	-0.160357969	23:03:16	0.318064596	0.155004358	-0.160616735
23:03:20	0.317837023	0.169438384	-0.160875501	23:03:24	0.31760945	0.18387241	-0.161134266
23:03:28	0.317381877	0.19335396	-0.161393032	23:03:32	0.317154304	0.197883034	-0.161651798
23:03:36	0.316926731	0.196668979	-0.161910564	23:03:40	0.316699158	0.193540548	-0.16216933
23:03:44	0.316471585	0.190559917	-0.162428096	23:03:48	0.316244012	0.188022688	-0.162686862
23:03:52	0.316016439	0.18548546	-0.162945628	23:03:56	0.315788866	0.195210689	-0.163204394
23:04:00	0.315561293	0.209023407	-0.16346316	23:04:04	0.315447153	0.225079031	-0.163721926
23:04:08	0.315333012	0.247660538	-0.163980692	23:04:12	0.315218871	0.270242047	-0.164239458
23:04:16	0.31510473	0.282737722	-0.164498224	23:04:20	0.314990589	0.291871463	-0.16475699
23:04:24	0.314876448	0.298866591	-0.165015756	23:04:28	0.314762308	0.299445891	-0.165274522
23:04:32	0.314648167	0.30002519	-0.165533288	23:04:36	0.314534026	0.285435583	-0.165792054
23:04:40	0.314419885	0.265789671	-0.166050819	23:04:44	0.314305744	0.245324375	-0.166309585
23:04:48	0.314191603	0.222400915	-0.166568351	23:04:52	0.314077463	0.199477453	-0.166827117
23:04:56	0.313963322	0.17695828	-0.167085883	23:05:00	0.313849181	0.154573869	-0.167344649
23:05:04	0.31373893	0.135844386	-0.167603415	23:05:08	0.313098606	0.128546694	-0.167862181
23:05:12	0.312723318	0.121249002	-0.168120947	23:05:16	0.312348031	0.12017691	-0.168379713
23:05:20	0.311972743	0.121180015	-0.168638479	23:05:24	0.311597455	0.123015876	-0.168897245
23:05:28	0.311222168	0.127349992	-0.169156011	23:05:32	0.31084688	0.131684112	-0.169414777
23:05:36	0.310471593	0.141213795	-0.169673543	23:05:40	0.310096305	0.155939046	-0.169932309
23:05:44	0.309721018	0.170664297	-0.170191075	23:05:48	0.30934573	0.178706329	-0.170449841
23:05:52	0.308970443	0.186748362	-0.170708606	23:05:56	0.308595155	0.185311232	-0.170967372
23:06:00	0.308219867	0.174394938	-0.171226138	23:06:04	0.307799648	0.163451861	-0.171484904
23:06:08	0.307379429	0.123388136	-0.17174367	23:06:12	0.306959209	0.083324411	-0.172002436
23:06:16	0.30653899	0.044528482	-0.172261202	23:06:20	0.30611877	0.007000367	-0.172519968
23:06:24	0.305698551	-0.030527766	-0.172778734	23:06:28	0.305278331	-0.045749829	-0.1730375
23:06:32	0.304858112	-0.060971891	-0.173296266	23:06:36	0.304437893	-0.078834161	-0.173555032
23:06:40	0.304017673	-0.099336604	-0.173813798	23:06:44	0.303597454	-0.119839046	-0.174072564
23:06:48	0.303177234	-0.12633315	-0.17433133	23:06:52	0.302757015	-0.132827254	-0.174590096
23:06:56	0.302336795	-0.141745956	-0.174848862	23:07:00	0.301916576	-0.153089255	-0.175107628
23:07:04	0.301874662	-0.164207088	-0.175366394	23:07:08	0.301832749	-0.162315687	-0.175625159
23:07:12	0.301790836	-0.16042425	-0.175883925	23:07:16	0.301748922	-0.160126201	-0.176142691
23:07:20	0.301707009	-0.161421503	-0.176401457	23:07:24	0.301665096	-0.162716805	-0.176660223
23:07:28	0.301623182	-0.162633638	-0.176918989	23:07:32	0.301581269	-0.162550435	-0.177177755

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
23:07:36	0.301539355	-0.158796085	-0.177436521	23:07:40	0.301497442	-0.151370517	-0.177695287
23:07:44	0.301455529	-0.143944949	-0.177954053	23:07:48	0.301413615	-0.138416545	-0.178212819
23:07:52	0.301371702	-0.132888176	-0.178471585	23:07:56	0.301329789	-0.126448656	-0.178730351
23:08:00	0.301287875	-0.11909802	-0.178989117	23:08:04	0.301380324	-0.111667275	-0.179247883
23:08:08	0.301472772	-0.097668777	-0.179506649	23:08:12	0.301565221	-0.083670279	-0.179765415
23:08:16	0.30165767	-0.068971106	-0.180024181	23:08:20	0.301750118	-0.05403838	-0.180282947
23:08:24	0.301842567	-0.039105637	-0.180541712	23:08:28	0.301935015	-0.016459122	-0.180800478
23:08:32	0.302027464	0.006187393	-0.181059244	23:08:36	0.302119913	0.029209027	-0.18131801
23:08:40	0.302212361	0.052605789	-0.181576776	23:08:44	0.30230481	0.076002543	-0.181835542
23:08:48	0.302397258	0.111818049	-0.182094308	23:08:52	0.302489707	0.147633558	-0.182353074
23:08:56	0.302582156	0.184290822	-0.18261184	23:09:00	0.302674604	0.221228674	-0.182870606
23:09:04	0.302852682	0.258217565	-0.183129372	23:09:08	0.303030759	0.285609596	-0.183388138
23:09:12	0.303208837	0.313001626	-0.183646904	23:09:16	0.303386914	0.340088432	-0.18390567
23:09:20	0.303564991	0.366870023	-0.184164436	23:09:24	0.303743069	0.393651614	-0.184423202
23:09:28	0.303921146	0.417075658	-0.184681968	23:09:32	0.304099224	0.440499702	-0.184940734
23:09:36	0.304277301	0.454175295	-0.185199499	23:09:40	0.304455379	0.458102401	-0.185458265
23:09:44	0.304633456	0.462029506	-0.185717031	23:09:48	0.304811533	0.451353138	-0.185975797
23:09:52	0.304989611	0.440676771	-0.186234563	23:09:56	0.305167688	0.437502665	-0.186493329
23:10:00	0.305345766	0.441830776	-0.186752095	23:10:04	0.305167508	0.445946478	-0.187010861
23:10:08	0.304989251	0.447928392	-0.187269627	23:10:12	0.304810993	0.449910323	-0.187528393
23:10:16	0.304632736	0.448109864	-0.187787159	23:10:20	0.304454478	0.442527052	-0.188045925
23:10:24	0.304276221	0.436944239	-0.188304691	23:10:28	0.304097963	0.434709843	-0.188563457
23:10:32	0.303919705	0.432475428	-0.188822223	23:10:36	0.303741448	0.434725908	-0.189080989
23:10:40	0.30356319	0.441461247	-0.189339755	23:10:44	0.303384933	0.448196586	-0.189598521
23:10:48	0.303206675	0.443988708	-0.189857287	23:10:52	0.303028418	0.43978083	-0.190116052
23:10:56	0.30285016	0.436394251	-0.190374818	23:11:00	0.302671903	0.433828968	-0.190633584
23:11:04	0.302769573	0.431428162	-0.19089235	23:11:08	0.302867243	0.419481138	-0.191151116
23:11:12	0.302964913	0.407534114	-0.191409882	23:11:16	0.303062583	0.397967134	-0.191668648
23:11:20	0.303160253	0.390780197	-0.191927414	23:11:24	0.303257923	0.384552661	-0.19218618
23:11:28	0.303355593	0.381203291	-0.192444946	23:11:32	0.303453264	0.377853939	-0.192703712
23:11:36	0.303550934	0.369498103	-0.192962478	23:11:40	0.303648604	0.356135782	-0.193221244
23:11:44	0.303746274	0.34277348	-0.19348001	23:11:48	0.303843944	0.33169769	-0.193738776
23:11:52	0.303941614	0.3206219	-0.193997542	23:11:56	0.304039284	0.306803987	-0.194256308
23:12:00	0.304136954	0.29024394	-0.194515074	23:12:04	0.303971894	0.273527284	-0.19477384
23:12:08	0.303806833	0.27634965	-0.195032605	23:12:12	0.303641772	0.279172017	-0.195291371
23:12:16	0.303476711	0.281410787	-0.195550137	23:12:20	0.30331165	0.283065959	-0.195808903
23:12:24	0.303146589	0.28472114	-0.196067669	23:12:28	0.302981529	0.28106766	-0.196326435
23:12:32	0.302816468	0.27741418	-0.196585201	23:12:36	0.302651407	0.276520482	-0.196843967
23:12:40	0.302486346	0.278386557	-0.197102733	23:12:44	0.302321285	0.280252632	-0.197361499
23:12:48	0.302156225	0.274548306	-0.197620265	23:12:52	0.301991164	0.268843971	-0.197879031
23:12:56	0.301826103	0.25719442	-0.198137797	23:13:00	0.301661042	0.239599655	-0.198396563
23:13:04	0.301798916	0.222185459	-0.198655329	23:13:08	0.30193679	0.21980113	-0.198914095
23:13:12	0.302074664	0.217416805	-0.199172861	23:13:16	0.302212537	0.212626219	-0.199431627
23:13:20	0.302350411	0.205429372	-0.199690393	23:13:24	0.302488285	0.198232525	-0.199949158
23:13:28	0.302626159	0.191035678	-0.200207924	23:13:32	0.302764032	0.176014609	-0.200466669
23:13:36	0.302901906	0.16240473	-0.200725456	23:13:40	0.30303978	0.153028421	-0.200984222
23:13:44	0.303177654	0.143652111	-0.201242988	23:13:48	0.303315528	0.131521991	-0.201501754
23:13:52	0.303453401	0.119391871	-0.20176052	23:13:56	0.303591275	0.107539999	-0.202019286
23:14:00	0.303729149	0.095966371	-0.202278052	23:14:04	0.303873924	0.084396866	-0.202536818
23:14:08	0.304018699	0.076326901	-0.202795584	23:14:12	0.304163475	0.068256936	-0.20305435
23:14:16	0.30430825	0.055585194	-0.203313116	23:14:20	0.304453025	0.038311674	-0.203571882
23:14:24	0.3045978	0.021038154	-0.203830648	23:14:28	0.304742576	0.008876934	-0.204089414
23:14:32	0.304887351	-0.003284287	-0.20434818	23:14:36	0.305032126	-0.011370391	-0.204606945
23:14:40	0.305176901	-0.015381397	-0.204865711	23:14:44	0.305321677	-0.019392385	-0.205124477
23:14:48	0.305466452	-0.020942501	-0.205383243	23:14:52	0.305611227	-0.022492633	-0.205642009
23:14:56	0.305756002	-0.02299376	-0.205900775	23:15:00	-0.194099222	-0.522445917	-0.706159541
23:15:04	-0.194160108	-0.522020666	-0.706418307	23:15:08	-0.194220994	-0.531962095	-0.706677073

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
23:15:12	0.30571812	-0.041903507	-0.206935839	23:15:16	0.305657234	-0.051844936	-0.207194605
23:15:20	0.305596348	-0.061786348	-0.207453371	23:15:24	0.305535462	-0.071727777	-0.207712137
23:15:28	0.305474576	-0.067192892	-0.207970903	23:15:32	0.30541369	-0.062658026	-0.208229669
23:15:36	0.305352805	-0.055476289	-0.208488435	23:15:40	0.305291919	-0.045647683	-0.208747201
23:15:44	0.305231033	-0.035819077	-0.209005967	23:15:48	0.305170147	-0.015318841	-0.209264733
23:15:52	0.305109261	0.005181412	-0.209523498	23:15:56	0.305048375	0.014434815	-0.209782264
23:16:00	0.304987489	0.012441402	-0.21004103	23:16:04	0.304526146	0.010209265	-0.210299796
23:16:08	0.304064803	0.018873997	-0.210558562	23:16:12	0.303603459	0.027538729	-0.210817328
23:16:16	0.303142116	0.039961165	-0.211076094	23:16:20	0.302680773	0.056141334	-0.21133486
23:16:24	0.30221943	0.072321503	-0.211593626	23:16:28	0.301758086	0.090883466	-0.211852392
23:16:32	0.301296743	0.109445428	-0.212111158	23:16:36	0.3008354	0.117190019	-0.212369924
23:16:40	0.300374057	0.121328824	-0.21262869	23:16:44	0.299912713	0.125467625	-0.212887456
23:16:48	0.29945137	0.135072402	-0.213146222	23:16:52	0.298990027	0.14467718	-0.213404988
23:16:56	0.298528683	0.153333453	-0.213663754	23:17:00	0.29806734	0.161041225	-0.21392252
23:17:04	0.297800919	0.168865185	-0.214181286	23:17:08	0.297534497	0.182821096	-0.214440051
23:17:12	0.297268076	0.196777007	-0.214698817	23:17:16	0.297001654	0.216955657	-0.214957583
23:17:20	0.296735233	0.243357049	-0.215216349	23:17:24	0.296468811	0.269758437	-0.215475115
23:17:28	0.29620239	0.282557521	-0.215733881	23:17:32	0.295935968	0.295356596	-0.215992647
23:17:36	0.295669547	0.304432225	-0.216251413	23:17:40	0.295403126	0.309784399	-0.216510179
23:17:44	0.295136704	0.315916621	-0.216768945	23:17:48	0.294870283	0.324389023	-0.217027711
23:17:52	0.294603861	0.332861425	-0.217286477	23:17:56	0.29433744	0.345841443	-0.217545243
23:18:00	0.294071018	0.360323981	-0.217804009	23:18:04	0.293148153	0.374415223	-0.218062775
23:18:08	0.292225288	0.385403132	-0.218321541	23:18:12	0.291302423	0.396391041	-0.218580307
23:18:16	0.290379558	0.401595615	-0.218839073	23:18:20	0.289456693	0.401016855	-0.219097838
23:18:24	0.288533828	0.400438113	-0.219356604	23:18:28	0.287610963	0.393043818	-0.21961537
23:18:32	0.286688098	0.385649524	-0.219874136	23:18:36	0.285765233	0.378700643	-0.220132902
23:18:40	0.284842368	0.372197213	-0.220391668	23:18:44	0.283919503	0.365693783	-0.220650434
23:18:48	0.282996638	0.361120771	-0.2209092	23:18:52	0.282073773	0.35654776	-0.221167966
23:18:56	0.281150908	0.351974749	-0.221426732	23:19:00	0.280228043	0.347401738	-0.221685498
23:19:04	0.27964722	0.344147116	-0.221944264	23:19:08	0.279066396	0.344236008	-0.22220303
23:19:12	0.278485573	0.344324899	-0.222461796	23:19:16	0.27790475	0.347997446	-0.222720562
23:19:20	0.277323927	0.355253666	-0.222979328	23:19:24	0.276743104	0.362509886	-0.223238094
23:19:28	0.276162281	0.372815773	-0.22349686	23:19:32	0.275581458	0.383121642	-0.223755626
23:19:36	0.275000635	0.382945626	-0.224014391	23:19:40	0.274419811	0.372287689	-0.224273157
23:19:44	0.273838988	0.361629753	-0.224531923	23:19:48	0.273258165	0.357294256	-0.224790689
23:19:52	0.272677342	0.352958759	-0.225049455	23:19:56	0.272096519	0.35500564	-0.225308221
23:20:00	0.271515696	0.359180004	-0.225566987	23:20:04	0.270476454	0.363081094	-0.225825753
23:20:08	0.269437212	0.367701282	-0.226084519	23:20:12	0.26839797	0.372321487	-0.226343285
23:20:16	0.267358728	0.371127696	-0.226602051	23:20:20	0.266319486	0.364119909	-0.226860817
23:20:24	0.265280244	0.357112121	-0.227119583	23:20:28	0.264241002	0.350691599	-0.227378349
23:20:32	0.26320176	0.344271078	-0.227637115	23:20:36	0.262162518	0.33288605	-0.227895881
23:20:40	0.261123276	0.316536498	-0.228154647	23:20:44	0.260084034	0.300186956	-0.228413413
23:20:48	0.259044792	0.291400842	-0.228672179	23:20:52	0.25800555	0.282614728	-0.228930944
23:20:56	0.256966308	0.272319697	-0.22918971	23:21:00	0.255927066	0.260515751	-0.229448476
23:21:04	0.256314293	0.249562092	-0.229707242	23:21:08	0.25670152	0.249236024	-0.229966008
23:21:12	0.257088747	0.248909965	-0.230224774	23:21:16	0.257475973	0.245211242	-0.23048354
23:21:20	0.2578632	0.238139863	-0.230742306	23:21:24	0.258250427	0.231068484	-0.231001072
23:21:28	0.258637654	0.228835953	-0.231259838	23:21:32	0.259024881	0.22660343	-0.231518604
23:21:36	0.259412107	0.228024481	-0.23177737	23:21:40	0.259799334	0.233099118	-0.232036136
23:21:44	0.260186561	0.23817375	-0.232294902	23:21:48	0.260573788	0.233987084	-0.232553668
23:21:52	0.260961015	0.229800417	-0.232812434	23:21:56	0.261348242	0.222988527	-0.2330712
23:22:00	0.261735468	0.213551419	-0.233329966	23:22:04	0.259150968	0.20234291	-0.233588731
23:22:08	0.256566468	0.185216457	-0.233847497	23:22:12	0.253981968	0.168090004	-0.234106263
23:22:16	0.251397469	0.152541058	-0.234365029	23:22:20	0.248812969	0.13856962	-0.234623795
23:22:24	0.246228469	0.124598181	-0.234882561	23:22:28	0.243643969	0.122246895	-0.235141327
23:22:32	0.241059469	0.119895609	-0.235400093	23:22:36	0.238474969	0.11555416	-0.235658859
23:22:40	0.235890469	0.109222546	-0.235917625	23:22:44	0.233305969	0.102890932	-0.236176391

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
23:22:48	0.230721469	0.100562917	-0.236435157	23:22:52	0.228136969	0.098234903	-0.236693923
23:22:56	0.225552469	0.099188776	-0.236952689	23:23:00	0.222967969	0.103424542	-0.237211455
23:23:04	0.22301098	0.109226526	-0.237470221	23:23:08	0.223053991	0.11502851	-0.237728987
23:23:12	0.223097003	0.120830493	-0.237987753	23:23:16	0.223140014	0.125539462	-0.238246519
23:23:20	0.223183025	0.129155415	-0.238505284	23:23:24	0.223226036	0.132771368	-0.23876405
23:23:28	0.223269047	0.136387321	-0.239022816	23:23:32	0.223312059	0.150200599	-0.239281582
23:23:36	0.22335507	0.166372771	-0.239540348	23:23:40	0.223398081	0.189621623	-0.239799114
23:23:44	0.223441092	0.212870475	-0.24005788	23:23:48	0.223484104	0.22644217	-0.240316646
23:23:52	0.223527115	0.240013864	-0.240575412	23:23:56	0.223570126	0.255252421	-0.240834178
23:24:00	0.223613137	0.272157848	-0.241092944	23:24:04	0.22163751	0.287859997	-0.24135171
23:24:08	0.219661883	0.302092525	-0.241610476	23:24:12	0.217686255	0.316325035	-0.241869242
23:24:16	0.215710628	0.323440348	-0.242128008	23:24:20	0.213735001	0.323438429	-0.242386774
23:24:24	0.211759374	0.323436509	-0.24264554	23:24:28	0.209783746	0.330202142	-0.242904306
23:24:32	0.207808119	0.336967757	-0.243163072	23:24:36	0.205832492	0.342227351	-0.243421837
23:24:40	0.203856865	0.34598089	-0.243680603	23:24:44	0.201881237	0.349734446	-0.243939369
23:24:48	0.19990561	0.356183974	-0.244198135	23:24:52	0.197929983	0.362633519	-0.244456901
23:24:56	0.195954356	0.371834835	-0.244715667	23:25:00	0.193978728	0.383787956	-0.244974433
23:25:04	0.19371321	0.396760429	-0.245233199	23:25:08	0.193447692	0.407837444	-0.245491965
23:25:12	0.193182174	0.418914459	-0.245750731	23:25:16	0.192916656	0.429247488	-0.246009497
23:25:20	0.192651138	0.438836602	-0.246268263	23:25:24	0.19238562	0.448425681	-0.246527029
23:25:28	0.192120102	0.461819178	-0.246785795	23:25:32	0.191854584	0.475212674	-0.247044561
23:25:36	0.191589066	0.485949637	-0.247303327	23:25:40	0.191323548	0.494030067	-0.247562093
23:25:44	0.19105803	0.502110496	-0.247820859	23:25:48	0.190792512	0.506422002	-0.248079624
23:25:52	0.190526994	0.510733507	-0.24833839	23:25:56	0.190261476	0.518663469	-0.248597156
23:26:00	0.189995958	0.530211888	-0.248855922	23:26:04	0.188255392	0.540881054	-0.249114688
23:26:08	0.186514825	0.547322718	-0.249373454	23:26:12	0.184774259	0.553764382	-0.24963222
23:26:16	0.183033693	0.556463804	-0.249890986	23:26:20	0.181293126	0.555421021	-0.250149752
23:26:24	0.17955256	0.554378238	-0.250408518	23:26:28	0.177811993	0.546590944	-0.250667284
23:26:32	0.176071427	0.538803649	-0.25092605	23:26:36	0.174330861	0.527057989	-0.251184816
23:26:40	0.172590294	0.511353997	-0.251443582	23:26:44	0.170849728	0.495650005	-0.251702348
23:26:48	0.169109162	0.487959102	-0.251961114	23:26:52	0.167368595	0.480268234	-0.25221988
23:26:56	0.165628029	0.466301239	-0.252478646	23:27:00	0.163887462	0.446058153	-0.252737412
23:27:04	0.163650855	0.426711553	-0.252996177	23:27:08	0.163414247	0.404636863	-0.253254943
23:27:12	0.16317764	0.382562173	-0.253513709	23:27:16	0.162941032	0.362518646	-0.253772475
23:27:20	0.162704425	0.344506264	-0.254031241	23:27:24	0.162467817	0.326493882	-0.254290007
23:27:28	0.16223121	0.322612433	-0.254548773	23:27:32	0.161994602	0.318730984	-0.254807539
23:27:36	0.161757995	0.317922206	-0.255066305	23:27:40	0.161521387	0.3201861	-0.255325071
23:27:44	0.16128478	0.322450012	-0.255583837	23:27:48	0.161048172	0.312837456	-0.255842603
23:27:52	0.160811565	0.3032249	-0.256101369	23:27:56	0.160574957	0.291077961	-0.256360135
23:28:00	0.16033835	0.276396674	-0.256618901	23:28:04	0.159505037	0.261359701	-0.256877667
23:28:08	0.158671725	0.244041721	-0.257136433	23:28:12	0.157838412	0.226723742	-0.257395199
23:28:16	0.1570051	0.209875728	-0.257653965	23:28:20	0.156171787	0.193184381	-0.25791273
23:28:24	0.155338475	0.177669075	-0.258171496	23:28:28	0.154505162	0.165681941	-0.258430262
23:28:32	0.15367185	0.153694807	-0.258689028	23:28:36	0.152838537	0.143200676	-0.258947794
23:28:40	0.152005225	0.134199549	-0.25920656	23:28:44	0.151171912	0.125198421	-0.259465326
23:28:48	0.1503386	0.126136214	-0.259724092	23:28:52	0.149505287	0.127074007	-0.259982858
23:28:56	0.148671975	0.127677815	-0.260241624	23:29:00	0.147838662	0.127947632	-0.26050039
23:29:04	0.148124702	0.128884679	-0.260759156	23:29:08	0.148410742	0.133464946	-0.261017922
23:29:12	0.148696782	0.138045213	-0.261276688	23:29:16	0.148982822	0.142889322	-0.261535454
23:29:20	0.149268862	0.147997272	-0.26179422	23:29:24	0.149554902	0.153105222	-0.262052986
23:29:28	0.149840943	0.142583302	-0.262311752	23:29:32	0.150126983	0.132061383	-0.262570518
23:29:36	0.150413023	0.119051391	-0.262829283	23:29:40	0.150699063	0.103553323	-0.263088049
23:29:44	0.150985103	0.088055255	-0.263346815	23:29:48	0.151271143	0.080316121	-0.263605581
23:29:52	0.151557183	0.072576986	-0.263864347	23:29:56	0.151843223	0.068756135	-0.264123113
23:30:00	0.652129263	0.568853566	0.235618121	23:30:04	0.650906047	0.568051356	0.235359355
23:30:08	0.649682832	0.570188371	0.235100589	23:30:12	0.148459616	0.072325384	-0.265158177
23:30:16	0.1472364	0.064823575	-0.265416943	23:30:20	0.146013184	0.047682939	-0.265675709

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
23:30:24	0.144789969	0.030542305	-0.265934475	23:30:28	0.143566753	0.008542252	-0.266193241
23:30:32	0.142343537	-0.013457801	-0.266452007	23:30:36	0.141120322	-0.029941789	-0.266710773
23:30:40	0.139897106	-0.040909731	-0.266969539	23:30:44	0.13867389	-0.051877663	-0.267228305
23:30:48	0.137450674	-0.052244714	-0.26748707	23:30:52	0.136227459	-0.052611765	-0.267745836
23:30:56	0.135004243	-0.050083285	-0.268004602	23:31:00	0.133781027	-0.044659256	-0.268263368
23:31:04	0.134298803	-0.038197449	-0.268522134	23:31:08	0.134816579	-0.021594688	-0.2687809
23:31:12	0.135334354	-0.004991937	-0.269039666	23:31:16	0.13585213	0.009202832	-0.269298432
23:31:20	0.136369906	0.020989604	-0.269557198	23:31:24	0.136887682	0.032776381	-0.269815964
23:31:28	0.137405458	0.02240718	-0.27007473	23:31:32	0.137923233	0.012037975	-0.270333496
23:31:36	0.138441009	0.002992552	-0.270592262	23:31:40	0.138958785	-0.004729104	-0.270851028
23:31:44	0.139476561	-0.012450751	-0.271109794	23:31:48	0.139994336	-0.020172398	-0.27136856
23:31:52	0.140512112	-0.027894054	-0.271627326	23:31:56	0.141029888	-0.037988434	-0.271886092
23:32:00	0.141547664	-0.050455539	-0.272144858	23:32:04	0.140707037	-0.063732367	-0.272403623
23:32:08	0.13986641	-0.075442393	-0.272662389	23:32:12	0.139025783	-0.087152419	-0.272921155
23:32:16	0.138185156	-0.096360161	-0.273179921	23:32:20	0.13734453	-0.103065622	-0.273438687
23:32:24	0.136503903	-0.109771082	-0.273697453	23:32:28	0.135663276	-0.118427657	-0.273956219
23:32:32	0.134822649	-0.12708425	-0.274214985	23:32:36	0.133982022	-0.137717539	-0.274473751
23:32:40	0.133141395	-0.150327543	-0.274732517	23:32:44	0.132300768	-0.162937546	-0.274991283
23:32:48	0.131460141	-0.172941254	-0.275250049	23:32:52	0.130619515	-0.182944944	-0.275508815
23:32:56	0.129778888	-0.191226613	-0.275767581	23:33:00	0.128938261	-0.197786243	-0.276026347
23:33:04	0.129298836	-0.203629855	-0.276285113	23:33:08	0.129659411	-0.20310452	-0.276543879
23:33:12	0.130019986	-0.202579184	-0.276802645	23:33:16	0.130380561	-0.19837119	-0.277061411
23:33:20	0.130741136	-0.192935619	-0.277320176	23:33:24	0.131101711	-0.187500066	-0.277578942
23:33:28	0.131462286	-0.173946542	-0.277837708	23:33:32	0.131822861	-0.160393	-0.278096474
23:33:36	0.132183435	-0.15112688	-0.27835524	23:33:40	0.13254401	-0.15472299	-0.278614006
23:33:44	0.132904585	-0.158319101	-0.278872772	23:33:48	0.13326516	-0.173123353	-0.279131538
23:33:52	0.133625735	-0.187927606	-0.279390304	23:33:56	0.13398631	-0.194854669	-0.27964907
23:34:00	0.134346885	-0.193904544	-0.279907836	23:34:04	0.134481501	-0.193089109	-0.280166602
23:34:08	0.134616116	-0.186506329	-0.280425368	23:34:12	0.134750732	-0.179923548	-0.280684134
23:34:16	0.134885347	-0.171892465	-0.2809429	23:34:20	0.135019963	-0.162413061	-0.281201666
23:34:24	0.135154578	-0.152933656	-0.281460432	23:34:28	0.135289193	-0.160954794	-0.281719198
23:34:32	0.135423809	-0.168975913	-0.281977963	23:34:36	0.135558424	-0.176412538	-0.282236729
23:34:40	0.13569304	-0.183264651	-0.282495495	23:34:44	0.135827655	-0.190116764	-0.282754261
23:34:48	0.135962271	-0.188443739	-0.283013027	23:34:52	0.136096886	-0.186770696	-0.283271793
23:34:56	0.136231502	-0.181015857	-0.283530559	23:35:00	0.136366117	-0.171179222	-0.283789325
23:35:04	0.136862662	-0.161126848	-0.284048091	23:35:08	0.137359207	-0.159644591	-0.284306857
23:35:12	0.137855751	-0.158162335	-0.284565623	23:35:16	0.138352296	-0.164153672	-0.284824389
23:35:20	0.13884884	-0.177618583	-0.285083155	23:35:24	0.139345385	-0.191083494	-0.285341921
23:35:28	0.13984193	-0.205320157	-0.285600687	23:35:32	0.140338474	-0.219556803	-0.285859453
23:35:36	0.140835019	-0.230562333	-0.286118219	23:35:40	0.141331564	-0.240490789	-0.286376985
23:35:44	0.141828108	-0.250419246	-0.286635751	23:35:48	0.142324653	-0.25616582	-0.286894516
23:35:52	0.142821198	-0.261912395	-0.287153282	23:35:56	0.143317742	-0.264578072	-0.287412048
23:36:00	0.143814287	-0.264162817	-0.287670814	23:36:04	0.142440379	-0.26486251	-0.28792958
23:36:08	0.141066472	-0.274324252	-0.288188346	23:36:12	0.139692564	-0.283785993	-0.288447112
23:36:16	0.138318656	-0.287977089	-0.288705878	23:36:20	0.136944749	-0.286897541	-0.288964644
23:36:24	0.135570841	-0.285817992	-0.28922341	23:36:28	0.134196933	-0.291003699	-0.289482176
23:36:32	0.132823026	-0.296189405	-0.289740942	23:36:36	0.131449118	-0.299295753	-0.289999708
23:36:40	0.13007521	-0.300322743	-0.290258474	23:36:44	0.128701303	-0.304221077	-0.29051724
23:36:48	0.127327395	-0.31673348	-0.290776006	23:36:52	0.125953487	-0.329245883	-0.291034772
23:36:56	0.12457958	-0.341758285	-0.291293538	23:37:00	0.123205672	-0.354270688	-0.291552304
23:37:04	0.12279244	-0.366210447	-0.291811069	23:37:08	0.122379207	-0.379748852	-0.292069835
23:37:12	0.121965974	-0.393287257	-0.292328601	23:37:16	0.121552742	-0.400660564	-0.292587367
23:37:20	0.121139509	-0.401868844	-0.292846133	23:37:24	0.120726277	-0.403077124	-0.293104899
23:37:28	0.120313044	-0.412609873	-0.293363665	23:37:32	0.119899811	-0.422142622	-0.293622431
23:37:36	0.119486579	-0.428671359	-0.293881197	23:37:40	0.119073346	-0.432196085	-0.294139963
23:37:44	0.118660114	-0.435720812	-0.294398729	23:37:48	0.118246881	-0.421264213	-0.294657495
23:37:52	0.117833649	-0.406807578	-0.294916261	23:37:56	0.117420416	-0.394672897	-0.295175027

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
23:38:00	0.117007183	-0.384860098	-0.295433793	23:38:04	0.116030868	-0.37538298	-0.295692559
23:38:08	0.115054552	-0.365905826	-0.295951325	23:38:12	0.114078237	-0.356428672	-0.296210091
23:38:16	0.113101921	-0.347450635	-0.296468856	23:38:20	0.112125605	-0.338971679	-0.296727622
23:38:24	0.11114929	-0.330492688	-0.296986388	23:38:28	0.110172974	-0.322013733	-0.297245154
23:38:32	0.109196659	-0.313534777	-0.29750392	23:38:36	0.108220343	-0.310247805	-0.297762686
23:38:40	0.107244028	-0.308691505	-0.298021452	23:38:44	0.106267712	-0.307135206	-0.298280218
23:38:48	0.105291396	-0.300283568	-0.298538984	23:38:52	0.104315081	-0.293431895	-0.298797775
23:38:56	0.103338765	-0.292781844	-0.299056516	23:39:00	0.10236245	-0.298333344	-0.299315282
23:39:04	0.1025464	-0.303193263	-0.299574048	23:39:08	0.10273035	-0.312786801	-0.299832814
23:39:12	0.102914299	-0.322380338	-0.30009158	23:39:16	0.103098249	-0.324204163	-0.300350346
23:39:20	0.103282199	-0.318258276	-0.300609112	23:39:24	0.103466149	-0.310843425	-0.300867878
23:39:28	0.103650099	-0.299021614	-0.301126644	23:39:32	0.103834049	-0.287199802	-0.301385409
23:39:36	0.104017999	-0.274237568	-0.301644175	23:39:40	0.104201949	-0.260134982	-0.301902941
23:39:44	0.104385898	-0.246032396	-0.302161707	23:39:48	0.104569848	-0.236929224	-0.302420473
23:39:52	0.104753798	-0.227826016	-0.302679239	23:39:56	0.104937748	-0.216243335	-0.302938005
23:40:00	0.105121698	-0.202181128	-0.303196771	23:40:04	0.105524541	-0.18798846	-0.303455537
23:40:08	0.105927384	-0.166695685	-0.303714303	23:40:12	0.106330227	-0.14540291	-0.303973069
23:40:16	0.10673307	-0.122552881	-0.304231835	23:40:20	0.107135913	-0.098145598	-0.304490601
23:40:24	0.107538756	-0.073738297	-0.304749367	23:40:28	0.107941599	-0.055260925	-0.305008133
23:40:32	0.108344442	-0.036783545	-0.305266899	23:40:36	0.108747285	-0.019089969	-0.305525665
23:40:40	0.109150128	-0.002180186	-0.305784431	23:40:44	0.109552971	0.014729594	-0.306043197
23:40:48	0.109955814	0.042532362	-0.306301962	23:40:52	0.110358657	0.07033513	-0.306560728
23:40:56	0.1107615	0.094479477	-0.306819494	23:41:00	0.111164343	0.114965406	-0.30707826
23:41:04	0.110488657	0.134808437	-0.307337026	23:41:08	0.109812972	0.146799718	-0.307595792
23:41:12	0.109137286	0.158791003	-0.307854558	23:41:16	0.1084616	0.173882477	-0.308113324
23:41:20	0.107785915	0.192074159	-0.30837209	23:41:24	0.107110229	0.210265831	-0.308630856
23:41:28	0.106434543	0.227067229	-0.308889622	23:41:32	0.105758857	0.243868618	-0.309148388
23:41:36	0.105083172	0.266349507	-0.309407154	23:41:40	0.104407486	0.294509878	-0.30966592
23:41:44	0.1037318	0.315991591	-0.309924686	23:41:48	0.103056115	0.317437332	-0.310183452
23:41:52	0.102380429	0.318883072	-0.310442218	23:41:56	0.101704743	0.328389173	-0.310700984
23:42:00	0.101029058	0.345955617	-0.310959749	23:42:04	0.101759497	0.36436023	-0.311218515
23:42:08	0.102489937	0.378140194	-0.311477281	23:42:12	0.103220376	0.391920123	-0.311736047
23:42:16	0.103950816	0.407163863	-0.311994813	23:42:20	0.104681256	0.423871378	-0.312253579
23:42:24	0.105411695	0.440578894	-0.312512345	23:42:28	0.106142135	0.45029131	-0.312771111
23:42:32	0.106872574	0.460003725	-0.313029877	23:42:36	0.107603014	0.469716141	-0.313288643
23:42:40	0.108333454	0.479428556	-0.313547409	23:42:44	0.109063893	0.489140972	-0.313806175
23:42:48	0.109794333	0.497120903	-0.314064941	23:42:52	0.110524772	0.505100798	-0.314323707
23:42:56	0.111255212	0.504569127	-0.314582473	23:43:00	0.111985652	0.495525818	-0.314841239
23:43:04	0.111828096	0.485953225	-0.315100005	23:43:08	0.111670541	0.466382267	-0.315358771
23:43:12	0.111512985	0.446811308	-0.315617537	23:43:16	0.111355543	0.429950568	-0.315876302
23:43:20	0.111197875	0.415800118	-0.316135068	23:43:24	0.111040319	0.401649632	-0.316393834
23:43:28	0.110882764	0.385160033	-0.3166526	23:43:32	0.110725209	0.368670433	-0.316911366
23:43:36	0.110567653	0.356579196	-0.317170132	23:43:40	0.110410098	0.357683065	-0.317428898
23:43:44	0.110252542	0.358786934	-0.317687664	23:43:48	0.110094987	0.35771404	-0.31794643
23:43:52	0.109937432	0.356641164	-0.318205196	23:43:56	0.109779876	0.356918424	-0.318463962
23:44:00	0.109622321	0.358545854	-0.318722728	23:44:04	0.110721803	0.360179327	-0.318981494
23:44:08	0.111821285	0.359583081	-0.31924026	23:44:12	0.112920767	0.358986836	-0.319499026
23:44:16	0.114020249	0.361087805	-0.319757792	23:44:20	0.115119731	0.365885989	-0.320016558
23:44:24	0.116219214	0.370684173	-0.320275324	23:44:28	0.117318696	0.369690673	-0.32053409
23:44:32	0.118418178	0.368697173	-0.320792855	23:44:36	0.11951766	0.362284319	-0.321051621
23:44:40	0.120617142	0.350452095	-0.321310387	23:44:44	0.121716624	0.338619853	-0.321569153
23:44:48	0.122816106	0.319393284	-0.321827919	23:44:52	0.123915588	0.300166715	-0.322086685
23:44:56	0.12501507	0.283307045	-0.322345451	23:45:00	-0.373885448	-0.231185728	-0.822604217
23:45:04	-0.37447666	-0.246686316	-0.822862983	23:45:08	-0.375067873	-0.260759972	-0.823121749
23:45:12	0.124340914	0.225166355	-0.323380515	23:45:16	0.123749701	0.214439809	-0.323639281
23:45:20	0.123158488	0.207060364	-0.323898047	23:45:24	0.122567275	0.199680918	-0.324156813
23:45:28	0.121976063	0.185936451	-0.324415579	23:45:32	0.12138485	0.172191985	-0.324674345

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
23:45:36	0.120793637	0.157139867	-0.324933111	23:45:40	0.120202424	0.14078008	-0.325191877
23:45:44	0.119611211	0.124420294	-0.325450642	23:45:48	0.119019998	0.101648987	-0.325709408
23:45:52	0.118428786	0.078877679	-0.325968174	23:45:56	0.117837573	0.055573329	-0.32622694
23:46:00	0.11724636	0.031735935	-0.326485706	23:46:04	0.118351221	0.008909545	-0.326744472
23:46:08	0.119456082	-0.005520017	-0.327003238	23:46:12	0.120560944	-0.019949574	-0.327262004
23:46:16	0.121665805	-0.027814444	-0.32752077	23:46:20	0.122770666	-0.029114625	-0.327779536
23:46:24	0.123875527	-0.030414805	-0.328038302	23:46:28	0.124980389	-0.040097288	-0.328297068
23:46:32	0.12608525	-0.049779761	-0.328555834	23:46:36	0.127190111	-0.06202673	-0.3288146
23:46:40	0.128294973	-0.075128526	-0.329073366	23:46:44	0.129399834	-0.090471172	-0.329332132
23:46:48	0.130504695	-0.112536371	-0.329590898	23:46:52	0.131609556	-0.134601571	-0.329849664
23:46:56	0.132714418	-0.144308115	-0.33010843	23:47:00	0.133819279	-0.141655987	-0.330367195
23:47:04	0.134077312	-0.139508659	-0.330625961	23:47:08	0.134335345	-0.139370269	-0.330884727
23:47:12	0.134593378	-0.139231879	-0.331143493	23:47:16	0.134851411	-0.137146496	-0.331402259
23:47:20	0.135109444	-0.133114101	-0.331661025	23:47:24	0.135367477	-0.129081724	-0.331919791
23:47:28	0.13562551	-0.132226234	-0.332178557	23:47:32	0.135883543	-0.135370743	-0.332437323
23:47:36	0.136141576	-0.14797485	-0.332696089	23:47:40	0.136399609	-0.170038554	-0.332954855
23:47:44	0.136657642	-0.192102259	-0.333213621	23:47:48	0.136915675	-0.221397796	-0.333472387
23:47:52	0.137173708	-0.250693386	-0.333731153	23:47:56	0.137431741	-0.274027356	-0.333989919
23:48:00	0.137689774	-0.291399775	-0.334248685	23:48:04	0.13822234	-0.30860855	-0.334507451
23:48:08	0.138754905	-0.325817325	-0.334766217	23:48:12	0.13928747	-0.3430261	-0.335024983
23:48:16	0.139820036	-0.358058131	-0.335283748	23:48:20	0.140352601	-0.370913417	-0.335542514
23:48:24	0.140885166	-0.383768703	-0.33580128	23:48:28	0.141417731	-0.386586968	-0.336060046
23:48:32	0.141950297	-0.389405233	-0.336318812	23:48:36	0.142482862	-0.392223462	-0.336577578
23:48:40	0.143015427	-0.395041727	-0.336836344	23:48:44	0.143547993	-0.397859991	-0.33709511
23:48:48	0.144080558	-0.392784688	-0.337353876	23:48:52	0.144613123	-0.387709385	-0.337612642
23:48:56	0.145145689	-0.380421915	-0.337871408	23:49:00	0.145678254	-0.370922241	-0.338130174
23:49:04	0.145213525	-0.362017111	-0.33838894	23:49:08	0.144748795	-0.35311191	-0.338647706
23:49:12	0.144284066	-0.344206779	-0.338906472	23:49:16	0.143819336	-0.333660546	-0.339165238
23:49:20	0.143354607	-0.321473245	-0.339424004	23:49:24	0.142889878	-0.309285944	-0.33968277
23:49:28	0.142425148	-0.286118493	-0.339941536	23:49:32	0.141960419	-0.262951042	-0.340200301
23:49:36	0.141495689	-0.238562873	-0.340459067	23:49:40	0.14103096	-0.212953983	-0.340717833
23:49:44	0.14056623	-0.187345077	-0.340976599	23:49:48	0.140101501	-0.172354399	-0.341235365
23:49:52	0.139636772	-0.157363739	-0.341494131	23:49:56	0.139172042	-0.139851201	-0.341752897
23:50:00	0.138707313	-0.119816823	-0.342011663	23:50:04	0.138980718	-0.099342453	-0.342270429
23:50:08	0.139254122	-0.080194468	-0.342529195	23:50:12	0.139527527	-0.061046491	-0.342787961
23:50:16	0.139800932	-0.050399076	-0.343046727	23:50:20	0.140074337	-0.048252221	-0.343305493
23:50:24	0.140347742	-0.046105376	-0.343564259	23:50:28	0.140621147	-0.038767471	-0.343823025
23:50:32	0.140894551	-0.031429575	-0.344081791	23:50:36	0.141167956	-0.025927217	-0.344340557
23:50:40	0.141441361	-0.022260415	-0.344599323	23:50:44	0.141714766	-0.018593604	-0.344858088
23:50:48	0.141988171	-0.016207166	-0.345116854	23:50:52	0.142261576	-0.013820728	-0.34537562
23:50:56	0.14253498	-0.008875035	-0.345634386	23:51:00	0.142808385	-0.00137008	-0.345893152
23:51:04	0.142843717	0.005992954	-0.346151918	23:51:08	0.142879049	0.013971891	-0.346410684
23:51:12	0.142914381	0.021950823	-0.34666945	23:51:16	0.142949713	0.029336721	-0.346928216
23:51:20	0.142985045	0.036129584	-0.347186982	23:51:24	0.143020376	0.042922448	-0.347445748
23:51:28	0.143055708	0.045691646	-0.347704514	23:51:32	0.14309104	0.048460844	-0.34796328
23:51:36	0.143126372	0.050888673	-0.348222046	23:51:40	0.143161704	0.052975131	-0.348480812
23:51:44	0.143197036	0.05506159	-0.348739578	23:51:48	0.143232368	0.066139552	-0.348998344
23:51:52	0.143267699	0.077217514	-0.34925711	23:51:56	0.143303031	0.094659763	-0.349515876
23:52:00	0.143338363	0.1184663	-0.349774641	23:52:04	0.143287674	0.142221561	-0.350033407
23:52:08	0.143236985	0.173360919	-0.350292173	23:52:12	0.143186296	0.204500269	-0.350550939
23:52:16	0.143135607	0.236245742	-0.350809705	23:52:20	0.143084918	0.268597346	-0.351068471
23:52:24	0.143034229	0.300948933	-0.351327237	23:52:28	0.14298354	0.327324171	-0.351586003
23:52:32	0.142932851	0.353699392	-0.351844769	23:52:36	0.142882161	0.371958614	-0.352103535
23:52:40	0.142831472	0.3821018	-0.352362301	23:52:44	0.142780783	0.392244985	-0.352621067
23:52:48	0.142730094	0.407835344	-0.352879833	23:52:52	0.142679405	0.423425739	-0.353138599
23:52:56	0.142628716	0.434714197	-0.353397365	23:53:00	0.142578027	0.441700791	-0.353656131
23:53:04	0.142094777	0.448429506	-0.353914897	23:53:08	0.141611527	0.446504111	-0.354173663

Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation	Time	Renewables No Regulation	Renewables with Regulation	No Renewables No Regulation
	Signal (p.u.)	Signal (p.u.)	Signal (p.u.)		Signal (p.u.)	Signal (p.u.)	Signal (p.u.)
23:53:12	0.141128276	0.444578752	-0.354432429	23:53:16	0.140645026	0.443557971	-0.354691194
23:53:20	0.140161776	0.443441804	-0.35494996	23:53:24	0.139678526	0.443325638	-0.355208726
23:53:28	0.139195276	0.442623023	-0.355467492	23:53:32	0.138712025	0.441920443	-0.355726258
23:53:36	0.138228775	0.441780081	-0.355985024	23:53:40	0.137745525	0.443326548	-0.35624379
23:53:44	0.137262275	0.444873015	-0.356502556	23:53:48	0.136779025	0.44560252	-0.356761322
23:53:52	0.136295774	0.446332059	-0.357020088	23:53:56	0.135812524	0.441290665	-0.357278854
23:54:00	0.135329274	0.430478335	-0.35753762	23:54:04	0.135478313	0.420042903	-0.357796386
23:54:08	0.135627351	0.412480876	-0.358055152	23:54:12	0.13577639	0.404918849	-0.358313918
23:54:16	0.135925429	0.400312052	-0.358572684	23:54:20	0.136074467	0.398660555	-0.35883145
23:54:24	0.136223506	0.397009057	-0.359090216	23:54:28	0.136372545	0.396615834	-0.359348981
23:54:32	0.136521583	0.396222575	-0.359607747	23:54:36	0.136670622	0.398298539	-0.359866513
23:54:40	0.136819661	0.402843725	-0.360125279	23:54:44	0.136968699	0.407388876	-0.360384045
23:54:48	0.137117738	0.40740552	-0.360642811	23:54:52	0.137266777	0.407422164	-0.360901577
23:54:56	0.137415815	0.40529841	-0.361160343	23:55:00	0.137564854	0.401034258	-0.361419109
23:55:04	0.137076635	0.396390246	-0.361677875	23:55:08	0.136588415	0.389316734	-0.361936641
23:55:12	0.136100196	0.382243222	-0.362195407	23:55:16	0.135611977	0.365012723	-0.362454173
23:55:20	0.135123758	0.337625292	-0.362712939	23:55:24	0.134635539	0.310237842	-0.362971705
23:55:28	0.134147319	0.283432968	-0.363230471	23:55:32	0.1336591	0.256628077	-0.363489237
23:55:36	0.133170881	0.232191345	-0.363748003	23:55:40	0.132682662	0.210122745	-0.364006769
23:55:44	0.132194443	0.188054154	-0.364265534	23:55:48	0.131706224	0.178038132	-0.3645243
23:55:52	0.131218004	0.16802211	-0.364783066	23:55:56	0.130729785	0.155766661	-0.365041832
23:56:00	0.130241566	0.141271784	-0.365300598	23:56:04	0.130993617	0.127516214	-0.365559364
23:56:08	0.131745668	0.117272112	-0.36581813	23:56:12	0.132497719	0.107028012	-0.366076896
23:56:16	0.13324977	0.099502489	-0.366335662	23:56:20	0.134001821	0.094695548	-0.366594428
23:56:24	0.134753873	0.089888606	-0.366853194	23:56:28	0.135505924	0.090058451	-0.36711196
23:56:32	0.136257975	0.090228294	-0.367370726	23:56:36	0.137010026	0.100891291	-0.367629492
23:56:40	0.137762077	0.12204744	-0.367888258	23:56:44	0.138514128	0.143203591	-0.368147024
23:56:48	0.139266179	0.151100333	-0.36840579	23:56:52	0.14001823	0.158997074	-0.368664556
23:56:56	0.140770281	0.167783516	-0.368923322	23:57:00	0.141522332	0.177459668	-0.369182087
23:57:04	0.141277594	0.18654164	-0.369440853	23:57:08	0.141032855	0.195623612	-0.369699619
23:57:12	0.140788117	0.204705593	-0.369958385	23:57:16	0.140543378	0.217675166	-0.370217151
23:57:20	0.140298639	0.234532339	-0.370475917	23:57:24	0.140053901	0.251389513	-0.370734683
23:57:28	0.139809162	0.260834756	-0.370993449	23:57:32	0.139564424	0.270280016	-0.371252215
23:57:36	0.139319685	0.270180426	-0.371510981	23:57:40	0.139074947	0.260536021	-0.371769747
23:57:44	0.138830208	0.250891616	-0.372028513	23:57:48	0.138585469	0.238168322	-0.372287279
23:57:52	0.138340731	0.225445037	-0.372546045	23:57:56	0.138095992	0.213518054	-0.372804811
23:58:00	0.137851254	0.202387383	-0.373063577	23:58:04	0.137769772	0.191354028	-0.373322343
23:58:08	0.137688291	0.181530572	-0.373581109	23:58:12	0.137606809	0.171707117	-0.373839874
23:58:16	0.137525328	0.162428861	-0.37409864	23:58:20	0.137443846	0.153695803	-0.374357406
23:58:24	0.137362365	0.144962745	-0.374616172	23:58:28	0.137280883	0.133008325	-0.374874938
23:58:32	0.137199402	0.121053905	-0.375133704	23:58:36	0.13711792	0.115998616	-0.37539247
23:58:40	0.137036439	0.117842455	-0.375651236	23:58:44	0.136954957	0.119686295	-0.375910002
23:58:48	0.136873476	0.106983257	-0.376168768	23:58:52	0.136791995	0.094280218	-0.376427534
23:58:56	0.136710513	0.082754967	-0.3766863	23:59:00	0.136629032	0.072407503	-0.376945066
23:59:04	0.136543301	0.062057506	-0.377203832	23:59:08	0.13645757	0.066699822	-0.377462598
23:59:12	0.136371839	0.071342137	-0.377721364	23:59:16	0.136286108	0.073853385	-0.37798013
23:59:20	0.136200377	0.074233564	-0.378238896	23:59:24	0.136114647	0.074613743	-0.378497662
23:59:28	0.136028916	0.079585568	-0.378756427	23:59:32	0.135943185	0.084557393	-0.379015193
23:59:36	0.135857454	0.096632895	-0.379273959	23:59:40	0.135771723	0.115812075	-0.379532725
23:59:44	0.135685992	0.134991254	-0.379791491	23:59:48	0.135600261	0.153491194	-0.380050257
23:59:52	0.135514531	0.171991135	-0.380309023	23:59:56	0.1354288	0.189744341	-0.380567789

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