

Office of Energy Projects
Energy Infrastructure Update
For December 2010

Natural Gas Highlights

- Bison Pipeline placed Phase I of its Bison Pipeline Project in service. It will provide 407 MMcf/d of capacity from Gillette, Wyoming to an interconnection with Northern Border in Morton County, North Dakota.
- TETCO received authorization to construct and operate the Hot Spring Lateral to provide 112 MMcf/d of capacity to KGen Hot Spring LLC's generation facility in Hot Spring County, Arkansas.
- National Fuel received authorization for its Line R, I and N Expansion and Replacement projects that will provide 150 MMcf/d of capacity for the transportation of Marcellus Shale gas and other pipeline supplies.
- TETCO and Algonquin filed an application to construct and operate its NJ-NY Expansion Project which will provide 800 MMcf/d of capacity for transportation of natural gas to the New York City area.
- PetroLogistics filed an application to develop two new natural gas storage caverns totaling 18 Bcf at its existing storage facility in Iberville Parish, Louisiana.
- Freeport LNG filed a request to begin a pre-filing process for a proposed 1.4 Bcf liquefaction and export plant to be located at the existing Freeport LNG terminal in Quintana Island, Texas. (Request granted in January 2011.)

Natural Gas Activities in December 2010

Status	No. of Projects	Storage Capacity (Bcf)	Deliverability (MMcf/d)	Capacity (MMcf/d)	Miles of Pipeline	Compression (HP)
Pipeline						
Placed in Service	3			500.0	326.8	0
Certificated	3			315.0	28.5	4,740
Proposed	2			824.3	28.9	0
Storage						
Placed in Service	0	0.0	0			0
Certificated	1	2.36	0			0
Proposed	2	19.2	1,150			27,000
LNG						
Placed in Service	0	0	0			0
Certificated	0	0	0			0
Proposed	1	0	1,400			0

Source: Staff Database

Natural Gas Activities through December 31, 2010
Through December 31, 2009

Status	No. of Projects	Storage Capacity (Bcf)	Deliverability (MMcf/d)	Capacity (MMcf/d)	Miles of Pipeline	Compression (HP)
Pipeline						
Placed in Service	30			11,865	1,188.9	448,688
through December 31, 2009	34			15,425	2,382.3	802,886
Certificated	24			9,236	1,589.1	522,194
through December 31, 2009	31			14,203	1,285.1	773,950
Storage						
Placed in Service	8	47.8	4,060			48,000
through December 31, 2009	12	69.8	3,806			39,028
Certificated	19	142.2	5,535			138,104
through December 31, 2009	12	128.1	6,464			168,275
LNG						
Placed in Service	1	4.22	405			0
through December 31, 2009	2	20.7	3,200			0
Certificated	0	0	0			0
through December 31, 2009	2	16.9	2,500			0

Source: Staff Database

Office of Energy Projects
Energy Infrastructure Update
For December 2010

Hydropower Highlights

- On December 20, 2010, DHL staff issued an exemption from licensing for Slatersville Hydro, LLC's proposed 0.36-MW Slatersville Hydroelectric Project No. 13356. The project would be located on the Branch River in Providence County, Rhode Island.
- On December 22, 2010, DHL staff issued an exemption from licensing for Wagon Wheel Associates' proposed 0.31-MW Humphreys Hydroelectric Project No. 13871. The project would be located on Goose Creek in Mineral County, Colorado. A complete application allowed staff to issue the exemption approximately 2 months after application filing.
- On December 23, 2010, Fairlawn Hydroelectric Company, LLC filed an application for a major license for the proposed 14-MW Jennings Randolph Hydroelectric Project No. 12715. The project would be located at an existing U.S Army Corps of Engineers' dam on the North Branch Potomac River in Garrett County, Maryland and Mineral County, West Virginia.
- On December 29, 2010, Verdant Power, LLC filed a final pilot license application for the proposed 1-MW Roosevelt Island Tidal Energy Project No. 12611. The hydrokinetic project would be located in the East River in New York, New York.

Hydropower Activities in December 2010

Status	Conventional		Pumped Storage		Hydrokinetic		Total No. of Projects	Total Capacity (MW)
	No.	Capacity (MW)	No.	Capacity (MW)	No.	Capacity (MW)		
Filed								
License	1	14.000	0	0	1	1.000	2	15.000
5-MW Exemption	0	0	0	0	0	0	0	0
Capacity Amendment	1	20.000	0	0	0	0	1	20.000
Conduit Exemption	1	1.300	0	0	0	0	1	1.300
Issued								
License	0	0	0	0	0	0	0	0
5-MW Exemption	2	0.670	0	0	0	0	2	0.670
Capacity Amendment	2	49.367	0	0	0	0	2	49.367
Conduit Exemption	5	6.036	0	0	0	0	5	6.036
Placed in Service								
License	0	0	0	0	0	0	0	0
5-MW Exemption	0	0	0	0	0	0	0	0
Capacity Amendment	0	0	0	0	0	0	0	0
Conduit Exemption	0	0	0	0	0	0	0	0

Source: Staff Database

Hydropower Activities Year to Date (through December 31, 2010)

Status	Conventional		Pumped Storage		Hydrokinetic		Total No. of Projects	Total Capacity (MW)
	No.	Capacity (MW)	No.	Capacity (MW)	No.	Capacity (MW)		
Filed								
License	9	76.905	0	0	2	2.500	11	79.405
5-MW Exemption	3	1.165	0	0	1	0.00005	4	1.16505
Capacity Amendment	17	166.438	0	0	0	0	17	166.438
Conduit Exemption	15	8.572	0	0	0	0	15	8.572
Issued								
License	6	15.297	0	0	0	0	6	15.297
5-MW Exemption	7	2.1171	0	0	0	0	7	2.1171

Office of Energy Projects
Energy Infrastructure Update
For December 2010

Status	Conventional		Pumped Storage		Hydrokinetic		Total No. of Projects	Total Capacity (MW)
	No.	Capacity (MW)	No.	Capacity (MW)	No.	Capacity (MW)		
Capacity Amendment	12	110.234	0	0	0	0	12	110.234
Conduit Exemption	14	23.347	0	0	0	0	14	23.347
Placed in Service								
License	3	15.540	0	0	0	0	3	15.540
5-MW Exemption	2	0.270	0	0	0	0	2	0.270
Capacity Amendment	1	0.600	0	0	0	0	1	0.600
Conduit Exemption	2	0.763	0	0	0	0	2	0.763

Source: Staff Database

Electric Generation Highlights

- Pacific Gas & Electric's Colusa Generating Station near Maxwell, California began commercial operation on December 22, 2010. The 660-MW gas-fired facility – incorporating the latest technology – uses less fuel, emits 35 percent less carbon dioxide and uses 96 percent less water than older conventional power plants.
- PowerSouth's McIntosh Power Plant's second set of two natural gas units went commercial on December 2, 2010, with a capacity of 370 MW. The McIntosh Power Plant, in the state of Alabama, is unique in having a 100-MW Compressed Air Energy Storage (CAES) unit, the only one of its kind in the U.S. and one of only two in the world. The McIntosh CAES unit has been commercial since 1991. Total McIntosh capacity is 710 MW.
- Semptra's Copper Mountain Solar is now the largest utility-scale photovoltaic (PV) plant in the U.S. The 48-MW plant in Boulder City, Nevada came online on December 1, 2010. It is comprised of 775,000 First Solar thin-film PV panels which converts sunlight directly into electricity. The power from Copper Mountain Solar is sold to Pacific Gas & Electric under a 20-year contract.
- CPV Renewable Energy Company's 152-MW Keenan II Wind Farm in Northwest Oklahoma began commercial operation on December 22, 2010. Keenan II is comprised of 66 Siemens 2.3 MW wind turbines. The power is sold to Oklahoma Gas & Electric under a 20-year contract.
- Edison Mission Group's 150-MW Cedro Hill Wind Farm in southern Texas began commercial operation on December 23, 2010. The Cedro Hill project is comprised of 100 GE 1.5 MW wind turbines. The power generated is sold under a 20-year contract to CPS Energy of San Antonio.

New Generation In-Service (New Build and Expansion)

Primary Fuel Type	December 2010		January – December 2010 Cumulative		January – December 2009 Cumulative	
	No. of Plants	Installed Capacity (MW)	No. of Plants	Installed Capacity (MW)	No. of Plants	Installed Capacity (MW)
Coal	0	0	25	6,682	9	3,574
Natural Gas	3	1,030	85	7,324	71	10,633
Nuclear	0	0	0	0	0	0
Oil	0	0	3	5	29	69
Water	1	0	13	23	12	18
Wind	5	469	63	3,690	150	9,449
Biomass	5	6	58	283	143	276
Geothermal Steam	0	0	1	50	8	122
Solar	10	60	63	212	88	286
Waste Heat	0	0	5	104	7	275
Other	0	0	0	0	0	0
Total	24	1,565	316	18,372	517	24,704

Source: Data derived from Ventyx Global LLC, Velocity Suite.

Office of Energy Projects

Energy Infrastructure Update

For December 2010

Total Installed Operating Generation Capacity

Primary Fuel Type	Installed Capacity (GW)	% of Total Capacity
Coal	343.97	30.37%
Natural Gas	462.12	40.80%
Nuclear	108.31	9.56%
Oil	61.24	5.41%
Water	99.10	8.75%
Wind	38.50	3.40%
Biomass	13.26	1.17%
Geothermal Steam	3.30	0.29%
Solar	1.12	0.10%
Waste Heat	0.82	0.07%
Other	0.94	0.08%
Total	1,132.68	100.00%

Source: Data derived from Ventyx Global LLC, Velocity Suite.

Electric Transmission Highlights

- In December, Tennessee Valley Authority energized the second circuit of the 9 mile, 230kV Center Point to Moss Lake transmission line in northern Georgia.
- In December, Dominion Virginia Power released its Virginia Offshore Wind Integration Study. The study found that it is possible to interconnect approximately 4,500 MW of total installed capability of offshore wind generation facilities in the Virginia Beach area.

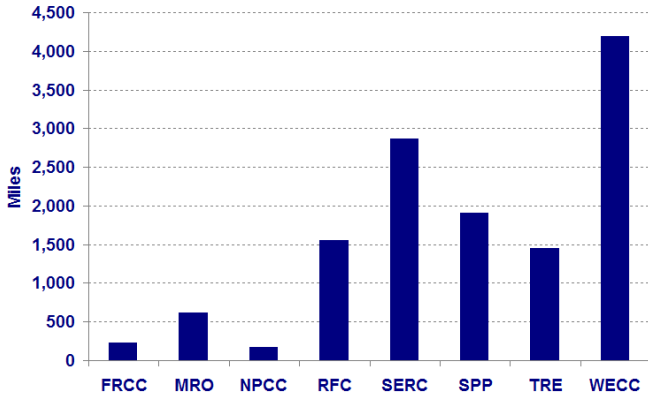
Voltage (kV)	Transmission Projects Completed				Proposed Transmission Projects
	December 2010	December 2009	January - December 2010	January - December 2009	In-Service by December 2012
	Line Length (miles)				
≤230	18.0	259.5	699.8	957.5	5,960.2
345	0	119.0	628.5	659.7	3,645.6
500	0	27.1	112.0	160.1	3,139.6
765	0	0	0	0	250.0
Total U.S.	18.0	405.6	1,440.3	1,777.3	12,995.4

Office of Energy Projects

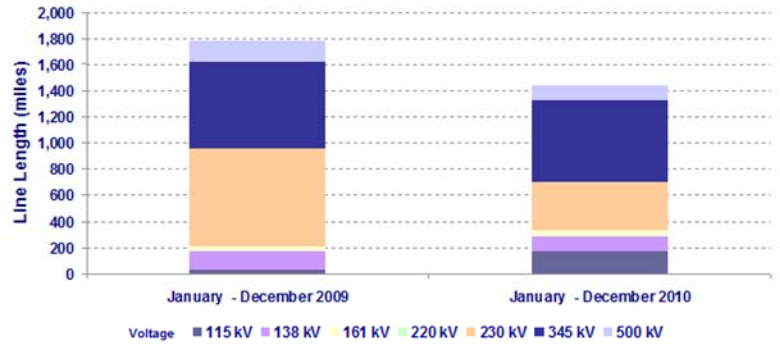
Energy Infrastructure Update

For December 2010

Transmission Projects with a Proposed In-Service Date through November 2012



Transmission Projects Completed in 2009 and 2010



Source: Data derived from Staff Database and U.S. Electric Transmission Projects ©2009 The C-Three Group, LLC

Disclaimer: This Report contains analyses, presentations and conclusions that may be based on or derived from the data sources cited, but do not necessarily reflect the positions or recommendations of the data providers.