

Office of Energy Projects

Energy Infrastructure Update

For June 2011

Natural Gas Highlights

- Weaver's Cove LNG and Mill River Pipeline filed to surrender their certificates to construct and operate the LNG terminal and associated pipeline near Fall River, MA. (The Commission vacated the authorizations on July 6, 2011.)
- TETCO placed into service its Hot Spring Lateral Project. These pipeline lateral facilities will enable TETCO to provide 112 MMcf/d of transportation to KGen Hot Springs LLC's energy facility in Hot Springs County, Arkansas.
- Dominion received authorization to construct and operate its Appalachian Gateway Project which will provide 484 MMcf/d of additional capacity for the transportation of gas from supply areas in West Virginia and Pennsylvania.
- Duke Energy received authorization to construct and operate its Gallagher Station Pipeline Project which will provide 134 MMcf/d of gas to R. Gallagher Generating Station in Floyd County, Indiana.
- Wabash Gas Storage commenced the Commission's pre-filing process to redevelop a currently abandoned aquifer gas storage facility in Edgar County, Illinois with a working gas capacity of 14 Bcf.
- Alliance commenced the Commission's pre-filing process to construct and operate a 77 mile lateral to transport 120 MMcf/d of natural gas produced in association with oil production in the Bakken Shale region in North Dakota.

Natural Gas Activities in June 2011

Status	No. of Projects	Storage Capacity (Bcf)	Deliverability (MMcf/d)	Capacity (MMcf/d)	Miles of Pipeline	Compression (HP)
Pipeline						
Placed in Service	2			166.0	8.4	0
Certificated	2			618.7	126.8	17,965
Proposed	1			120.0	77.0	4,500
Storage						
Placed in Service	0	0.0	0			0
Certificated	0	0.0	0			0
Proposed	1	14.0	200			14,000
LNG						
Placed in Service	0	0	0			0
Certificated	0	0	0			0
Proposed	0	0	0			0

Source: Staff Database

Natural Gas Activities through June 30, 2011 Through June 30, 2010

Status	No. of Projects	Storage Capacity (Bcf)	Deliverability (MMcf/d)	Capacity (MMcf/d)	Miles of Pipeline	Compression (HP)
Pipeline						
Placed in Service	12			6,204.5	731.8	431,045
through June 30, 2010	10			5,090.2	225.4	140,905
Certificated	6			1,816.7	188.3	77,230
through June 30, 2010	11			6,000.5	1,407.9	431,274
Storage						
Placed in Service	5	15.3	2,545			6,283
through June 30, 2010	6	43.9	1,011			8,180
Certificated	6	103.3	2,720			58,710
through June 30, 2010	7	49.0	648			15,783
LNG						
Placed in Service	1	16.4	2,000			0
through June 30, 2010	1	4.22	400			0
Certificated	0	0	0			0
through June 30, 2010	0	0	0			0

Source: Staff Database

Office of Energy Projects

Energy Infrastructure Update

For June 2011

Hydropower Highlights

- On June 15, 2011, Turnbull Hydro, LLC, of Idaho Falls, Idaho brought on line the Upper Turnbull Project, FERC No. 12597. The project is located on the Spring Valley Canal in Teton County, Montana, and contains a single unit rated at 7.7 MW. This project was one year in construction.
- On June 27, 2011, DHAC issued to City of Frostburg, Maryland (exemptee) an order granting exemption from licensing (conduit) for the 0.075-MW Frostburg Low Head Hydroelectric Project (FERC No. 14059), located on the City of Frostburg's municipal raw water supply line in Alleghany County, Maryland. The project would generate 240 Megawatt-hours annually.

Hydropower Activities in June 2011

Status	Conventional		Pumped Storage		Hydrokinetic		Total No. of Projects	Total Capacity (MW)
	No.	Capacity (MW)	No.	Capacity (MW)	No.	Capacity (MW)		
Filed								
License	0	0	0	0	0	0	0	0
5-MW Exemption	0	0	0	0	0	0	0	0
Capacity Amendment	1	4.310	0	0	0	0	1	4.310
Conduit Exemption	2	0.571	0	0	0	0	2	0.571
Issued								
License	0	0	0	0	0	0	0	0
5-MW Exemption	0	0	0	0	0	0	0	0
Capacity Amendment	1	12.612	0	0	0	0	1	12.612
Conduit Exemption	1	0.075	0	0	0	0	1	0.075
Placed in Service								
License	1	7.700	0	0	0	0	1	7.700
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

Hydropower Activities Year to Date (through June 30, 2011)

Status	Conventional		Pumped Storage		Hydrokinetic		Total No. of Projects	Total Capacity (MW)
	No.	Capacity (MW)	No.	Capacity (MW)	No.	Capacity (MW)		
Filed								
License	8	258.423	0	0	0	0	8	258.423
5-MW Exemption	4	1.346	0	0	0	0	4	1.346
Capacity Amendment	6	24.750	0	0	0	0	6	24.750
Conduit Exemption	4	5.946	0	0	0	0	4	5.946
Issued								
License	4	47.790	0	0	0	0	4	47.790
5-MW Exemption	0	0	0	0	0	0	0	0
Capacity Amendment	8	27.030	0	0	0	0	8	27.030
Conduit Exemption	4	1.725	0	0	0	0	4	1.725
Placed in Service								
License	1	7.700	0	0	0	0	1	7.700
5-MW Exemption	1	0.065	0	0	0	0	1	0.065
Capacity Amendment	1	3.000	0	0	0	0	1	3.000
Conduit Exemption	3	1.340	0	0	0	0	3	1.340

Source: Staff Database

Office of Energy Projects

Energy Infrastructure Update

For June 2011

Electric Generation Highlights

- Associated Electric Cooperative's 533-MW Chouteau 2 combined-cycle natural gas-fired power plant began commercial operation. Chouteau 2 is a capacity expansion of the existing Chouteau plant in Pryor, Oklahoma. A 33-mile gas pipeline was constructed by Engex, LLC to provide gas delivery for the plant.
- Progress Energy Carolinas's 570-MW Power Block 5 at the Richmond County Energy Complex in North Carolina began commercial operation. The \$600 million project included a 64-mile 230-kV transmission line. Power Block 5 is a combined-cycle dual fuel unit primarily using natural gas. With the new Power Block 5 online, Progress Energy will shut its 170-MW W.H. Weatherspoon coal-fired plant this fall, six years ahead of the original schedule.
- GenConn Energy's 200-MW peaking power plant at NRG's Middletown Station in Connecticut came online. The new Middletown plant comprises of four 50-MW natural gas turbines that can be fully operational within ten minutes.
- Marshfield Utilities' 60-MW natural gas-fired peaking plant in the City of Marshfield, Wisconsin came online. Cleco Power LLC's 33-MW natural gas-fired peaker Teche Unit 4 at Teche Power Station in Baldwin, Louisiana came online. Teche Unit 4 is a blackstart generating unit which enables the company to restore its generation system quickly in the event of a total system shutdown.
- Southern California Edison's solar projects, Photon Ontario 1-3, Photon Rancho Cucamonga 1-3 and Twentynine Palms came online. These new rooftop and ground-mount solar projects total 7.88 MW, serving the utility's Inland Empire customers in Redlands and Fontana, California.
- Next Era Energy's 5.1-MW Paradise Solar Energy Center in West Deptford, New Jersey came online. Paradise Solar consists of 26,200 panels sited on 160 acres of private land, with only 35 acres used for power generating facilities, can provide 8,000 MWh of electricity enough to power 700 homes.
- Beacon Power Corporation announced that its first flywheel energy storage plant in Stephentown, New York is in full operation. The 20-MW facility is the world's first grid-scale flywheel energy storage. It consists of 200 high-speed Beacon flywheels to provide fast-response frequency regulation services to the New York electricity grid.

New Generation In-Service (New Build and Expansion)

Primary Fuel Type	June 2011		January – June 2011 Cumulative		January – June 2010 Cumulative	
	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)
Coal	0	0	8	835	18	4,812
Natural Gas	8	1,396	37	5,069	57	4,164
Nuclear	0	0	0	0	0	0
Oil	0	0	0	0	3	5
Water	0	0	5	4	10	19
Wind	0	0	45	2,435	33	1,372
Biomass	6	7	35	85	43	244
Geothermal Steam	0	0	2	23	0	0
Solar	14	19	74	169	25	66
Waste Heat	0	0	1	135	2	19
Other	2	12	9	20	0	0
Total	30	1,435	216	8,775	191	10,703

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

Office of Energy Projects

Energy Infrastructure Update

For June 2011

Total Installed Operating Generation Capacity

Primary Fuel Type	Installed Capacity (GW)	% of Total Capacity
Coal	343.61	30.13%
Natural Gas	473.65	41.54%
Nuclear	108.68	9.53%
Oil	52.56	4.61%
Water	99.14	8.69%
Wind	42.49	3.73%
Biomass	13.46	1.18%
Geothermal Steam	3.40	0.30%
Solar	1.31	0.11%
Waste Heat	0.96	0.08%
Other	1.04	0.09%
Total	1,140.29	100.00%

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

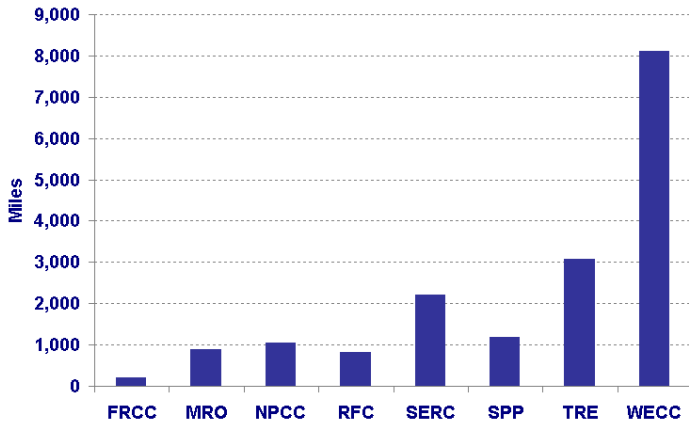
Electric Transmission Highlights

- On June 7, the Montana Supreme Court reversed a lower court's decision refusing eminent domain power to Tonbridge Power Inc., the private developer of the Montana Alberta Tie transmission project. The 230-kV, 214-mile electric transmission project will connect the Montana and Alberta markets.
- Pioneer Transmission LLC, a joint venture between Duke Energy Corp. and American Electric Power Co., plans to build a 55-mile, 765-kV transmission line in partnership with Tennessee Valley Authority (TVA). The proposed transmission line will connect Rockport, Indiana to the TVA Paradise Station in Drakesboro, Kentucky. It is estimated to cost \$275 million and will be the highest voltage transmission project in TVA's System.

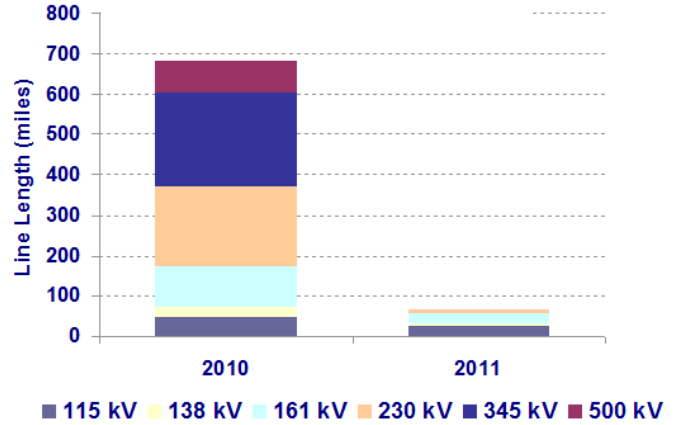
Voltage (kV)	Transmission Projects Completed		Proposed Transmission Projects In-Service by June 2013	
	June 2011	June 2010	High Probability of Completion	All
	Line Length (miles)			
≤230	65.5	370.4	3,144.7	5,853.4
345	0	231.3	4,322.8	5,741.4
500	0	81.0	1,706.8	5,930.5
Total U.S.	65.5	682.7	9,174.3	17,525.3

Office of Energy Projects Energy Infrastructure Update *For June 2011*

**Transmission Projects with a Proposed
In-Service Date by June 2013**



**Transmission Projects
Completed in June**



Sources: Data derived from Staff Database and U.S. Electric Transmission Projects ©2011 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.