



Office of Energy Projects Energy Infrastructure Update For September 2014

Natural Gas Highlights

- Eastern Shore received authorization to place into service its White Oak Lateral Project which will provide 55.2 MMcf/d of capacity to serve Calpine Energy's proposed 309 megawatt power plant in Dover, DL.
- Dominion Cove Point received authorization to construct and operate an LNG export terminal (825 MMcf/d) at Cove Point's existing import terminal in Calvert County, MD, and pipeline facilities to provide 860 MMcf/d of capacity on Cove Point's existing pipeline to serve the proposed terminal.
- Florida Southeast requested authorization to construct and operate its Florida Southeast Connection Project. This project will provide 640 MMcf/d of capacity from the proposed Sabal Trail pipeline near Intercession City, FL, to a delivery point with Florida Power & Light near Indiantown, FL.
- Tennessee commenced the Commission's pre-filing process to construct and operate its Northeast Energy Direct Project which will provide 2,200 MMcf/d of capacity from Tennessee's system in PA, to markets in New England.
- ExxonMobil Alaska, ConocoPhillips Alaska, BP Alaska, TransCanada Alaska, and Alaska Gasline commenced the Commission's pre-filing process to construct and operate an LNG export terminal (2.55 Bcf/d) near Nikiski, AK, and pipeline facilities to provide 3,500 MMcf/d of capacity from the Alaska North Slope to the proposed terminal.

Natural Gas Activities in September 2014

Status	No. of Projects	Storage Capacity (Bcf)	Deliverability (MMcf/d)	Capacity (MMcf/d)	Miles of Pipeline	Compression (HP)
Pipeline						
Placed in Service	3			101.2	18.5	0
Certificated	2			960.0	9.3	62,500
Proposed	6			7,096.0	1,413.8	507,849
Storage						
Placed in Service	1	5.0	0			0
Certificated	0	0.0	0			0
Proposed	0	0.0	0			0
LNG (Import & Export)						
Placed in Service	0	0	0			0
Certificated (Export)	1	0	825			0
Proposed (Export)	1	10.5	2,550			0

Source: Staff Database

Natural Gas Activities through September 30, 2014 Through September 30, 2013

Status	No. of Projects	Storage Capacity (Bcf)	Deliverability (MMcf/d)	Capacity (MMcf/d)	Miles of Pipeline	Compression (HP)
Pipeline						
Placed in Service through September 30, 2013	12 18			989.4 2,046.6	92.4 124.7	30,950 86,090
Certificated through September 30, 2013	24 21			7,136.6 3,736.6	237.9 145.2	284,123 109,591
Storage						
Placed in Service through September 30, 2013	6 14	22.25 47.3	110 2,882			4,800 56,620
Certificated Through September 30, 2013	3 12	1.2 33.3	0 766			2,500 9,240
LNG (Import & Export)						
Placed in Service through September 30, 2013	0 0	0 0	0 0			0 0
Certificated (Export) through September 30, 2013	4 0	3.4 0	4,885 0			0 0

Source: Staff Database



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Hydropower Highlights (nonfederal)

- The Antrim Treatment Trust was issued an original license for the proposed 0.04 MW Antrim Micro-Hydropower Project No. 14537. The project will be located on an unnamed tributary to Bridge Run in Duncan Township, Tioga County, PA.
- PayneBridge, LLC was issued an original license for the proposed 4.0 MW Williams Dam Water Power Project No. 13346. The project will be located at the Indiana Department of Natural Resources' existing Williams dam, on the East Fork White River, in Lawrence County, IN.
- Mahoning Hydropower, LLC was issued an original license for the proposed 0.65 MW Lake Milton Hydroelectric Project No. 13953. The project will be located at the Ohio Department of Natural Resources' existing Lake Milton dam, on the Mahoning River, in Mahoning County, OH.

Hydropower Activities in September 2014

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
10-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
Issued								
License	3	4.690	0	0	0	0	3	4.690
10-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
Placed in Service								
License	0	0	0	0	0	0	0	0
10-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 September 30, 2014)

Status	Conventional		Pumped Storage		Hydrokinetic		Total No. of Projects	Total Capacity (MW)
	No.	Capacity (MW)	No.	Capacity (MW)	No.	Capacity (MW)		
Filed								
License	13	177.800	0	0	0	0	13	177.800
10-MW Exemption	2	1.800	0	0	0	0	2	1.800
Capacity Amendment	0	0	0	0	0	0	0	0
Conduit Exemption	2	49.400	0	0	0	0	2	49.400
Issued								
License	10	141.910	3	1,736.000	1	0.600	14	1,878.510
10-MW Exemption	0	0	0	0	0	0	0	0
Capacity Amendment	2	5.185	0	0	0	0	2	5.185
Conduit Exemption	1	0.300	0	0	0	0	1	0.300
Placed in Service								
License	3	11.805	0	0	0	0	3	11.805
10-MW Exemption	1	0.700	0	0	0	0	1	0.700
Capacity Amendment	0	0	0	0	0	0	0	0
Conduit Exemption	0	0	0	0	0	0	0	0

Source: Staff Database



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Electric Generation Highlights

- Miami Wind I LLC's 286 MW Miami Wind Energy Center Phase I in Roberts, Hemphill, Gray and Wheeler Counties, TX is online. Miami Wind Phase I project consists of 156 GE 1.85 MW wind turbines and provides power into Texas' new Competitive Renewable Energy Zone transmission infrastructure.
- DTE Energy Co.'s 62 MW Echo Wind Park Phase II expansion project in Huron County, MI is online. Phase I, with 50 MW, came online in February 2014. Echo Wind Park has a total of 112 MW wind generation capacity.
- Marsh Hill Energy LLC's 16 MW Marsh Hill Wind Farm in Steuben County, NY is online.
- BNB Texas Solar LLC's 18 MW Barilla Solar Phase I project in Pecos County, TX is online.
- Mid-Kansas Electric Cooperative's 110 MW natural gas-fired Rubart Station project in Grant County, KS is online. The power generated will serve Mid-Kansas' members in central and western Kansas.
- Xcel Energy Inc.'s Monticello Nuclear Generating Plant in Wright County, MN has completed a nine-year process of rebuilding the plant, uprating its capacity from 600 MW to 671 MW.
- Santa Cruz Cogeneration Associates' 4.4 MW natural gas-fired UC Santa Cruz Cogeneration in Santa Cruz County, CA is online. The power generated is used on-site at the UC Santa Cruz campus.
- Kiuc Renewable Solutions Two LLC's 12 MW KRS II Koloa Solar project in Kauai, HI is online. The power generated is sold to Kauai Island Utility Cooperative under long-term contract.
- Solar Star California XXIX LLC's 3 MW UC Riverside Solar project in Riverside County, CA is online. The power generated is used on-site at the UC Riverside campus.
- Cornell University's 2 MW Snyder Road Solar Farm project in Tompkins County, NY is online. The power generated is used on-site at the Cornell University campus.
- Santa Fe Community College's 1.5 MW Santa Fe Community College Solar project in Santa Fe County, NM is online. The power generated is used on-site at the Santa Fe Community College campus.
- Connecticut Municipal Electric Energy Cooperative's 10 MW oil-fired Matlack Road Microgrid project in New London County, CT is online. The Matlock Road Microgrid project serves as emergency backup power for the Backus Hospital campus and adjacent critical facilities.
- Southern California Edison's Tehachapi Wind Energy Storage project in Kern County, CA is online. The Tehachapi Wind Energy Storage consists of an 8 MW-4 hour (32 MWh) lithium-ion battery and a smart inverter system, will help store energy from the existing 5,000 wind turbines and any future additions in the Techachapi Wind Resource Area. Housed inside a 6,300 square foot facility, it is the largest battery energy storage in North America.



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New Generation In-Service (New Build and Expansion)

Primary Fuel Type	September 2014		January – September 2014 Cumulative		January – September 2013 Cumulative	
	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)
Coal	0	0	0	0	2	1,543
Natural Gas	13	114	41	5,153	71	6,643
Nuclear	1	71	1	71	0	0
Oil	4	10	11	33	11	35
Water	0	0	7	141	16	119
Wind	4	367	28	1,614	11	965
Biomass	0	0	38	140	78	312
Geothermal Steam	0	0	5	32	1	14
Solar	8	41	187	1,671	197	1,746
Waste Heat	0	0	0	0	2	76
Other	1	0	6	7	4	0
Total	31	603	324	8,860	393	11,452

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

Total Installed Operating Generating Capacity

	Installed Capacity (GW)	% of Total Capacity
Coal	328.21	28.19%
Natural Gas	490.25	42.10%
Nuclear	107.50	9.23%
Oil	46.25	3.97%
Water	98.37	8.45%
Wind	62.30	5.35%
Biomass	16.04	1.38%
Geothermal Steam	3.87	0.33%
Solar	9.74	0.84%
Waste Heat	1.13	0.10%
Other	0.81	0.07%
Total	1,164.46	100.00%

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



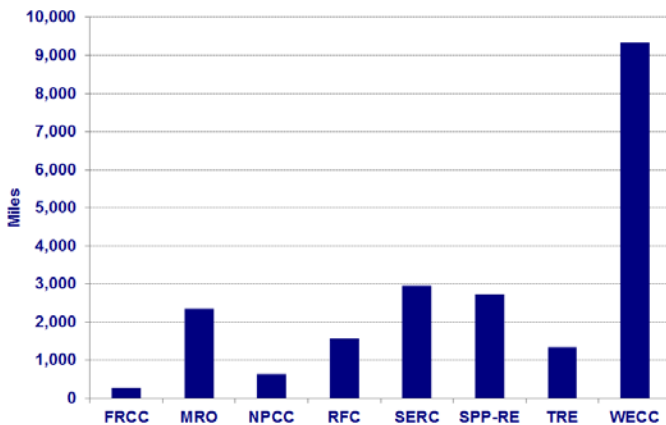
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Electric Transmission Highlights

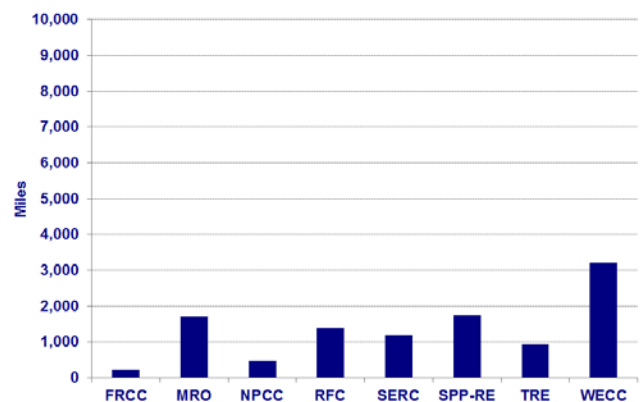
- Southwestern Public Service has completed the 202 mile, 345 kV TUCO – Stateline Transmission Line. The \$205 million project is located in OK.

Voltage (kV)	Transmission Projects Completed				Proposed Transmission Projects In-Service by September 2016	
	September 2014	September 2013	January – September 2014 Cumulative	January – December 2013 Cumulative	High Probability of Completion	All
	Line Length (miles)					
≤230	0.0	195.0	373.7	543.3	3,440.5	7,684.3
345	202.0	389.9	1,137.6	3,631.5	4,399.9	7,076.1
≥500	0.0	36.0	62.0	466.0	2,031.7	6,396.0
Total U.S.	202.0	620.9	1,573.3	4,640.8	9,872.1	21,156.4

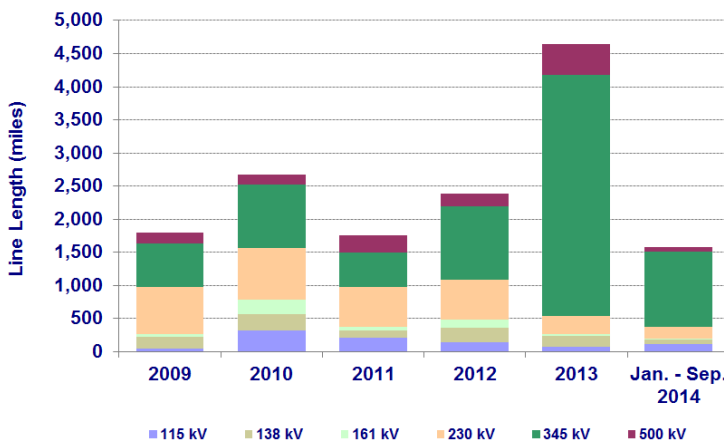
All Transmission Projects with a Proposed In-Service Date by September 2016



Transmission Projects with a High Probability of being completed by September 2016



New Transmission Projects by Voltage



Sources: Data derived from Staff Database and U.S. Electric Transmission Projects ©2014 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.