

Office of Energy Projects

Energy Infrastructure Update

For September 2012

Natural Gas Highlights

- Tennessee received authorization to place into service a portion of its Northeast Supply Diversification Project which will provide 105 MMcf/d of incremental capacity along Tennessee's Line 300 located in PA and NJ.
- National Fuel received authorization to place into service its Line N 2012 Expansion Project which will provide 163 MMcf/d of new capacity for shippers and replace old pipe on National Fuel's Line N system located in PA.
- Alliance received authorization to construct and operate its Tioga Lateral Project. This project will provide 106.5 MMcf/d of firm transportation capacity from the Bakken Shale formation in MT and ND to Midwest market areas.
- D'Lo Gas Storage received authorization to construct and operate a salt dome natural gas storage facility (D'Lo Gas Storage Project) in Simpson County, MS. This storage facility will have a working gas capacity of 24 Bcf.
- Discovery Gas requests authorization to construct and operate its Junction Platform Project located in the Gulf of Mexico, offshore LA. This project will provide 405 MMcf/d of capacity for delivery of offshore gas to onshore pipelines.
- Leaf River Energy requested authorization to expand the working gas capacity in three of its caverns at the Leaf River Energy Center (Leaching Expansion Project) in MS by a total of 16 Bcf.

Natural Gas Activities in September 2012

Status	No. of Projects	Storage Capacity (Bcf)	Deliverability (MMcf/d)	Capacity (MMcf/d)	Miles of Pipeline	Compression (HP)
Pipeline						
Placed in Service	3			477.0	11.7	30,090
Certificated	2			256.5	89.5	6,000
Proposed	3			506.8	19.5	2,180
Storage						
Placed in Service	0	0.0	0			0
Certificated	1	24.0	1,200			36,735
Proposed	1	16.0	0			0
LNG (Import & Export)						
Placed in Service	0	0	0			0
Certificated (Export)	0	0	0			0
Proposed (Export)	0	0	0			0

Source: Staff Database

Natural Gas Activities through September 30, 2012 Through September 30, 2011

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, 2011	12 22			1,794.1 11,141.4	222.8 1,554.1	85,040 723,771
Certificated through September 30, 2011	17 13			3,880.3 3,107.7	194.9 268.0	92,660 203,405
Storage						
Placed in Service through September 30, 2011	10 9	54.7 35.8	880 2,504			80,100 25,483
Certificated through September 30, 2011	9 11	76.8 173.7	2,940 4,495			85,755 143,010
LNG (Import & Export)						
Placed in Service through September 30, 2011	0 2	0 23.2	0 3,500			0 0
Certificated (Export) through September 30, 2011	1 0	0 0	2,600 0			0 0

Source: Staff Database

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Hydropower Highlights

- Black Bear Hydro Partners, LLC was issued orders amending licenses for the 1.950 MW Stillwater Project No. 2712 and the 2.332 MW Orono Project No. 2710 located on the Stillwater Branch of the Penobscot River in Penobscot County, ME. The order authorizes Black Bear Hydro Partners, LLC (licensee) at the Stillwater Project to install a second powerhouse containing three units, with the total installed capacity to increase from 1.950 to 4.179 MW. At the Orono Project, the licensee is authorized to construct a second powerhouse containing three units, with the installed capacity increasing from 2.332 to 6.082 MW.
- Calleguas Municipal Water District was issued an order granting exemption from licensing (conduit) for the 0.330 MW Grandsen Hydroelectric Generation Station Project No. 14404, in Ventura County, CA.
- The City of Broken Bow, OK was issued an original license for the proposed 4.0 MW Broken Bow Re-Regulation Dam Hydroelectric Project No. 12470. The project will be located at the U.S. Army Corps of Engineers' Broken Bow Re-Regulation Dam on the Mountain Fork River, in McCurtain County, OK.
- Lock+ Hydro Friends Fund XLII, LLC filed an original license application for the proposed 3.75 MW Braddock Locks and Dam Hydroelectric Project No. 13739. The project would be located at the U.S. Army Corps of Engineers' Braddock Locks and Dam on the Monongahela River, near the boroughs of Braddock and West Mifflin, in Allegheny County, PA.

Hydropower Activities in September 2012

Status	Conventional		Pumped Storage		Hydrokinetic		Total No. of Projects	Total Capacity (MW)
	No.	Capacity (MW)	No.	Capacity (MW)	No.	Capacity (MW)		
Filed								
License	1	3.750	0	0	0	0	1	3.750
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
Issued								
License	1	4.000	0	0	0	0	1	4.000
5-MW Exemption	0	0	0	0	0	0	0	0
Capacity Amendment	2	6.000	0	0	0	0	2	6.000
Conduit Exemption	2	1.830	0	0	0	0	2	1.830
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 September 30, 2012)

Status	Conventional		Pumped Storage		Hydrokinetic		Total No. of Projects	Total Capacity (MW)
	No.	Capacity (MW)	No.	Capacity (MW)	No.	Capacity (MW)		
Filed								
License	6	23.655	0	0	2	1.100	8	24.755
5-MW Exemption	3	0.931	0	0	0	0	3	0.931
Capacity Amendment	3	9.040	0	0	0	0	3	9.040
Conduit Exemption	16	4.365	0	0	0	0	16	4.365
Issued								
License	11	88.985	0	0	3	2.850	14	91.835
5-MW Exemption	2	1.125	0	0	0	0	2	1.125
Capacity Amendment	11	58.382	3	149.500	0	0	14	207.882

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Status	Conventional		Pumped Storage		Hydrokinetic		Total No. of Projects	Total Capacity (MW)
	No.	Capacity (MW)	No.	Capacity (MW)	No.	Capacity (MW)		
Conduit Exemption	12	12.465	0	0	0	0	12	12.465
Placed in Service								
License	2	8.530	0	0	0	0	2	8.530
5-MW Exemption	1	0.170	0	0	0	0	1	0.170
Capacity Amendment	0	0	0	0	0	0	0	0
Conduit Exemption	1	1.000	0	0	0	0	1	1.000

Source: Staff Database

Electric Generation Highlights

- NRG Energy & MidAmerican Renewables, LLC's 50 MW Phase 5 Aqua Caliente Solar Project expansion in Yuma County, Arizona is online. The Aqua Caliente Project is a 290 MW photovoltaic project, 250 MW is operational. Phase 6 with 50 MW is under construction with expected online date in 2014. Aqua Caliente is currently the largest photovoltaic facility in the country. The electricity generated is sold under long-term contract to PG&E.
- K Road Ventures' 25 MW McHenry Solar Farm in Stanislaus County, California is online. The electricity generated is sold under long-term contract to Modesto Irrigation District.
- Zongyi Solar America's 20 MW Tinton Falls Solar in Monmouth County, New Jersey, is online. Tinton Falls Solar is the largest photovoltaic project in New Jersey.
- Southern Sky Renewable Energy LLC's 5.6 MW Canton Landfill Solar Project in Canton County, Massachusetts is online. This photovoltaic project is built on the closed and capped Canton Landfill. It is the largest solar facility in New England. The electricity generated is sold to the Town of Canton under a long-term agreement.
- SunEdison's 3.6 MW Phase 2 Lakeland Regional Airport Solar Project expansion in Polk County, Florida is online. The Lakeland Regional Airport Solar has a total capacity of 6.3 MW. It is the largest photovoltaic project in Florida. The electricity generated is sold under long-term contract to Lakeland Department of Electric Water Utilities.
- EDF Group's 140 MW Phase 1 Pacific Wind in Kern County, California is online. Phase 2 with 110 MW is under construction with expected online date in June 2013. The electricity generated is sold under long-term contract to San Diego Gas & Electric.
- Forsyth Street Advisor LLC's 57.6 MW Phase 1 Horse Butt Wind Farm in Bonneville County, Idaho is online. Phase 2 with 41 MW is under construction with expected online date in December 2012. The electricity generated is sold under long-term contract to Utah Associated Municipal Power.
- KODE Novus I LLC's 80 MW Phase 1 Novus Wind Farm in Texas County, Oklahoma is online. Phase 2 with 40 MW is under construction with expected online date in December 2012. Phases 3 and 4 with a total of 250 MW are in development stage. The electricity generated is sold under long-term contract to Xcel Energy.
- Fire Island Wind LLC's 17.6 MW Phase 1 Fire Island Wind Project in Anchorage Borough, Alaska is online. Phase 2 with 35.2 MW is in development with expected online date in December 2013. The electricity generated is sold under long-term contract to Chugach Electric Association.
- Kodiak Electric Association's 4.5 MW Phase 2 Pillar Mountain Wind project expansion in Kodiak Island Borough, Alaska is online. Phase 1 with 4.5 MW came online in July 2009. Phase 3 with 3 MW is a natural gas-fired unit currently under construction with expected online date in December 2012.

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New Generation In-Service (New Build and Expansion)

Primary Fuel Type	September 2012		January – September 2012 Cumulative		January – September 2011 Cumulative	
	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)
Coal	0	0	3	2,276	14	1,865
Natural Gas	0	0	61	4,587	82	9,172
Nuclear	0	0	1	125	0	0
Oil	0	0	8	13	35	119
Water	0	0	10	9	14	40
Wind	5	300	77	4,055	88	3,239
Biomass	1	0	76	340	83	308
Geothermal Steam	0	0	7	123	7	31
Solar	18	133	154	936	178	525
Waste Heat	0	0	1	3	1	135
Other	0	0	2	0	9	0
Total	24	433	400	12,466	511	15,435

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

Total Installed Operating Generating Capacity

	Installed Capacity (GW)	% of Total Capacity
Coal	338.98	29.41%
Natural Gas	483.92	41.99%
Nuclear	106.77	9.26%
Oil	50.38	4.37%
Water	98.06	8.51%
Wind	51.07	4.43%
Biomass	14.40	1.25%
Geothermal Steam	3.62	0.31%
Solar	3.37	0.29%
Waste Heat	0.80	0.07%
Other	1.03	0.09%
Total	1,152.41	100.00%

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

Electric Transmission Highlights

- The Electric Reliability Council of Texas, Inc. (ERCOT) Board approved \$57 million for transmission projects in south TX. The projects include a new 47 miles, 138 kV transmission line. The projects will support oil and gas exploration and production in the Eagle Ford Shale area.
- NStar has started construction on the 26 miles, 345 kV, \$106 million Carver to Plymouth transmission Line. The transmission project is a part of the Lower SEMA (Southeastern Massachusetts) Load Zone Upgrades and is expected to be completed by June 2013.
- The U.S. Bureau of Land Management (BLM) released its preferred route for the interstate Gateway West transmission project. The 1,100 miles, 230/500 kV Wyoming – Idaho project is composed of 10 segments that would be completed between 2016 and 2021.

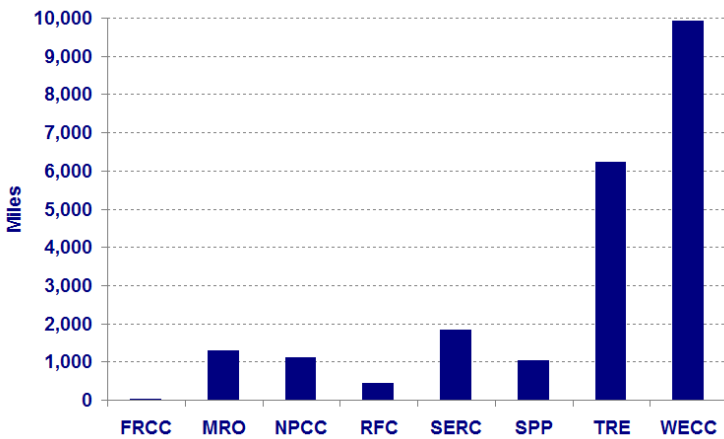
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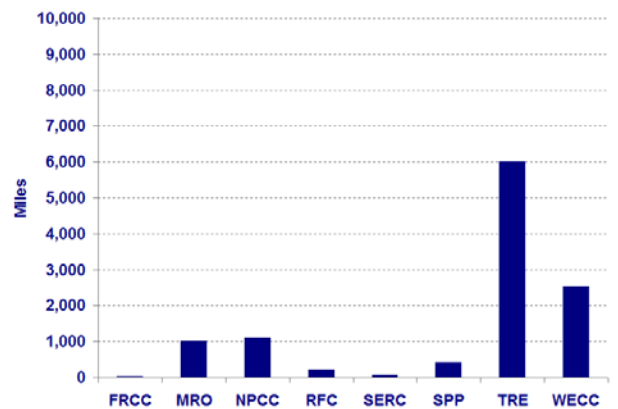
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Voltage (kV)	Transmission Projects Completed				Proposed Transmission Projects In-Service by September 2014	
	September 2012	September 2011	January – September 2012 Cumulative	January – December 2011 Cumulative	High Probability of Completion	All
	Line Length (miles)					
≤230	0	0	359.0	929.3	1,465.2	5,027.2
345	0	0	654.8	516.5	8,015.5	9,956.2
500	0	0	170.1	262.0	1,862.0	6,859.0
Total U.S.	0	0	1,183.9	1,707.8	11,342.7	21,842.4

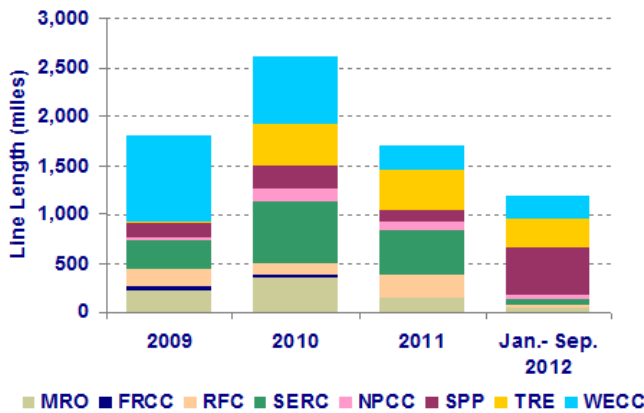
All Transmission Projects with a Proposed In-Service Date by September 2014



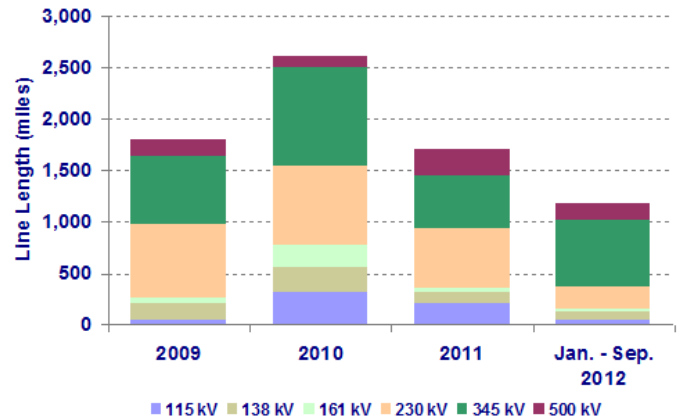
Transmission Projects with a High Probability of being completed by September 2014



New Transmission Projects by Region



New Transmission Projects by Voltage



Sources: Data derived from Staff Database and U.S. Electric Transmission Projects ©2012 The C Three Group, LLC

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