

Office of Energy Projects

Energy Infrastructure Update

For August 2012

Natural Gas Highlights

- SG Resources Mississippi placed into service Cavern 4 of its Southern Pines Energy Center Project which will add 10 Bcf of working gas capacity to its facilities located in Green County, MS.
- Dominion received authorization to place into service its Appalachian Gateway Project which will increase capacity by 484 MMcf/d from supply areas in WV and PA to an interconnection with Texas Eastern in Westmoreland Co., PA.
- Tennessee received authorization to construct and operate facilities in PA as part of its MPP Project which will provide 240 MMcf/d of firm capacity for the transportation of Marcellus Gas to Tennessee's markets.
- CIG requested authorization to construct and operate its High Plains 2013 Expansion Project which will provide 225 MMcf/d of transportation capacity connecting processing and producing facilities to CIG's High Plains System in CO.
- Freeport LNG filed to construct and operate a liquefaction terminal adjacent to its existing import terminal near Freeport, in Brazoria Co., TX. This export facility will have a liquefaction capacity of 1.8 Bcf/d.
- Corpus Christi LNG and Corpus Christi Pipeline filed to construct and operate an export/import terminal and related pipeline facilities near Corpus Christi, TX. This export/import terminal will have a liquefaction capacity of 2.1 Bcf/d and a regasification capacity of 0.4 Bcf/d, and the pipeline will have a capacity of 2.25 Bcf/d.

Natural Gas Activities in August 2012

Status	No. of Projects	Storage Capacity (Bcf)	Deliverability (MMcf/d)	Capacity (MMcf/d)	Miles of Pipeline	Compression (HP)
Pipeline						
Placed in Service	3			629.3	130.0	33,745
Certificated	2			606.0	8.2	0
Proposed	4			2,925.0	125.7	99,532
Storage						
Placed in Service	2	17.5	100			31,800
Certificated	1	0.0	40			0
Proposed	0	0.0	0			0
LNG (Import & Export)						
Placed in Service	0	0	0			0
Certificated (Export)	0	0	0			0
Proposed (Export)	2	10.14	3,900			0

Source: Staff Database

Natural Gas Activities through August 31, 2012 Through August 31, 2011

Status	No. of Projects	Storage Capacity (Bcf)	Deliverability (MMcf/d)	Capacity (MMcf/d)	Miles of Pipeline	Compression (HP)
Pipeline						
Placed in Service through August 31, 2011	9 17			1,317.1 8,220.5	211.1 1,495.9	54,950 645,771
Certificated through August 31, 2011	15 11			3,623.8 2,707.7	105.4 260.7	86,660 192,605
Storage						
Placed in Service through August 31, 2011	10 7	54.7 33.3	880 2,449			80,100 25,483
Certificated through August 31, 2011	8 10	52.8 151.3	1,740 3,495			49,020 101,010
LNG (Import & Export)						
Placed in Service through August 31, 2011	0 1	0 16.4	0 2,000			0 0
Certificated (Export) through August 31, 2011	1 0	0 0	2,600 0			0 0

Source: Staff Database

Office of Energy Projects

Energy Infrastructure Update

For August 2012

Hydropower Highlights

- Contra Costa Water District placed in service a 1 MW conduit exemption for the Los Vaqueros Pipeline Energy Recovery Project No. 13524, located on the District's water distribution pipeline in the City of Antioch, CA.
- Silt Water Conservancy District was granted exemptions from licensing (Conduit) for the 0.075 MW Harvey Gap 50 Project No. 14342 and the 0.875 MW Harvey Gap 400 Project No. 14343, both located on the Grand Valley Irrigation Canal, in Mesa County, CO.
- Ocean Power Technology was issued an original license for the 1.5 MW Reedsport OPT Wave Park Project No. 12713. The hydrokinetic project will consist of 10 power buoys located in Oregon's territorial waters about 2.5 miles off the coast, near Reedsport, in Douglas County, OR.
- Green Island Power Authority was issued a new license for the existing Green Island Project No. 13. The new license authorizes an increase in total project capacity from 6 MW to 48 MW. The project is located at the U.S. Army Corps of Engineers' Green Island-Troy Lock and Dam on the Hudson River, in Albany County, NY.
- Whitman River Dam, Inc. was issued an original license for the proposed 0.145 MW Crocker Dam Hydroelectric Project No. 13237. The project will be located at the existing Crocker Pond dam on the Whitman River, in Worcester County, MA.
- City of Hillsboro, OR filed an Application for Exemption from Licensing (Conduit) for the Will Crandall Reservoir Project No. 14445, located on the city's water distribution system, in Washington County, OR. The proposed project would develop 0.094 MW.
- Placer County Water Agency filed an Application for Exemption from Licensing (Conduit) for the Lincoln Metering Station Project No. 14444, located in Placer County, CA. The proposed project would develop 0.76 MW.
- P Coulee Powerplant LLC filed an Application for Exemption from Licensing (Conduit) for the P Coulee Powerplant Project No. 14448, located in Twin Falls County, ID. The proposed project would develop 0.06 MW.
- L.S. Starrett Company filed a small-hydro exemption application for the existing, unlicensed Crescent Street Dam Project No. 14447. The exemption application proposes an increase in total project capacity from 0.25 MW to 0.448 MW. The project is located on the Millers River, near the Town of Athol, in Worcester County, MA.

Hydropower Activities in August 2012

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	1	0.198	0	0	0	0	1	0.198
Capacity Amendment	0	0	0	0	0	0	0	0
Conduit Exemption	3	0.914	0	0	0	0	3	0.914
Issued								
License	2	42.145	0	0	1	1.500	3	43.645
5-MW Exemption	0	0	0	0	0	0	0	0
Capacity Amendment	0	0	0	0	0	0	0	0
Conduit Exemption	2	0.950	0	0	0	0	2	0.950
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	1	1.000	0	0	0	0	1	1.000

Source: Staff Database

Office of Energy Projects

Energy Infrastructure Update

For August 2012

Hydropower Activities Year to Date (through August 31, 2012)

Status	Conventional		Pumped Storage		Hydrokinetic		Total No. of Projects	Total Capacity (MW)
	No.	Capacity (MW)	No.	Capacity (MW)	No.	Capacity (MW)		
Filed								
License	5	19.905	0	0	2	1.100	7	21.005
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	10	84.985	0	0	3	2.850	13	87.835
5-MW Exemption	2	1.125	0	0	0	0	2	1.125
Capacity Amendment	9	52.382	3	149.500	0	0	12	262.594
Conduit Exemption	10	10.635	0	0	0	0	10	10.635
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

- Basin Electric Power Coop's 300 MW combined cycle Deer Creek Station in Brookings County, South Dakota is online. The facility features a 170 MW natural gas-fired turbine and a 130 MW turbine powered by waste heat.
- Riverstone Holding LLC's 152 MW Spring Valley Wind Phase I in White Pine County, Nevada is online. The electricity generated is sold to NV Energy under a long-term agreement. The second phase of 140 MW is in development and is expected to be operational by June 2013.
- Exelon Corp's Mount St. Marys University 16 MW Solar Phase II expansion project in Frederick County, Maryland is online. The 2 MW Solar Phase I came online in April 2012.
- Third Sun Solar's 4 MW Columbus Zoo Solar in Franklin County, Ohio is online. The electricity generated is used on site.

New Generation In-Service (New Build and Expansion)

Primary Fuel Type	August 2012		January – August 2012 Cumulative		January – August 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	13	1,710
Natural Gas	1	300	61	4,636	76	8,436
Nuclear	0	0	1	125	0	0
Oil	0	0	8	13	29	61
Water	1	1	10	9	11	20
Wind	2	153	69	3,604	83	3,227
Biomass	1	2	70	329	78	250
Geothermal Steam	0	0	7	105	6	30
Solar	4	22	130	766	149	343
Waste Heat	0	0	1	3	1	135
Other	0	0	2	0	9	0
Total	11	478	362	11,866	455	14,212

Source: Data derived from Ventyx Global LLC, Velocity Suite. Page 3 of 5

Office of Energy Projects

Energy Infrastructure Update

For August 2012

Total Installed Operating Generating Capacity

	Installed Capacity (GW)	% of Total Capacity
Coal	340.78	29.53%
Natural Gas	482.80	41.84%
Nuclear	106.77	9.25%
Oil	51.70	4.48%
Water	98.06	8.50%
Wind	50.77	4.40%
Biomass	14.39	1.25%
Geothermal Steam	3.61	0.31%
Solar	3.20	0.28%
Waste Heat	0.80	0.07%
Other	1.04	0.09%
Total	1,153.91	100.00%

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

Electric Transmission Highlights

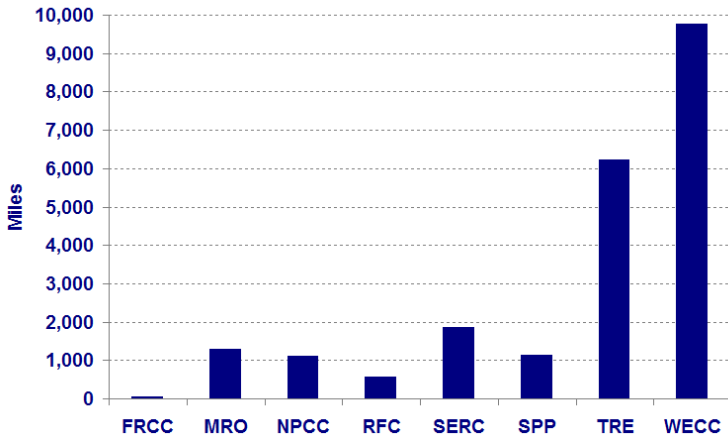
- The National Park Service issued its final environmental impact statement on the 500 kV, 147-mile Susquehanna-Roseland. The \$1 billion interstate project from Berwick, PA to Roseland, NJ is a joint project by Public Service Electric & Gas and PPL Electric Utilities Corp. Pre-construction activities have started and the line is expected to be energized by June 2015.
- Due to a slow economy and reduced demand, the PJM Board has decided to cancel the 765 kV, 250-mile Potomac-Appalachian Transmission Highline (PATH). The interstate project would have crossed WV, MD and VA.
- Due to a slow economy and reduced demand, the PJM Board has decided to cancel the Mid-Atlantic Power Pathway (MAPP). The approximately 250-mile Interstate transmission project would have crossed DE, MD and VA.

Voltage (kV)	Transmission Projects Completed				Proposed Transmission Projects In-Service by August 2014	
	August 2012	August 2011	January –August 2012 Cumulative	January –December 2011 Cumulative	High Probability of Completion	All
	Line Length (miles)					
≤230	0	1.3	254.0	909.3	1,672.0	5,252.2
345	0	0	529.8	516.5	8,033.2	9,963.7
500	0	0	170.1	262.0	1,862.0	6,785.0
Total U.S.	0	1.3	953.9	1,687.8	11,567.2	22,000.9

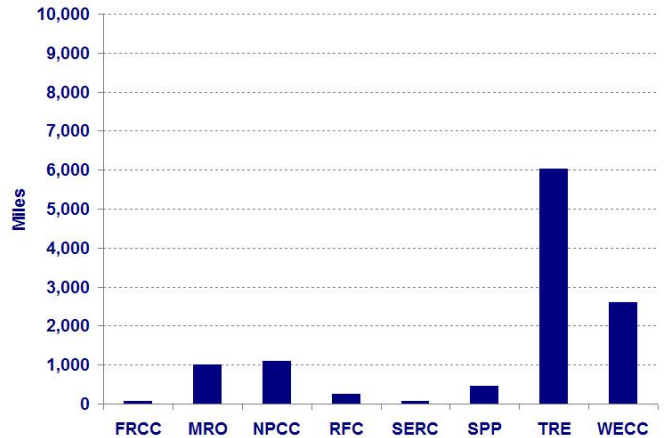
Sources: Data derived from Staff Database and U.S. Electric Transmission Projects ©2012 The C Three Group, LLC

Office of Energy Projects Energy Infrastructure Update *For August 2012*

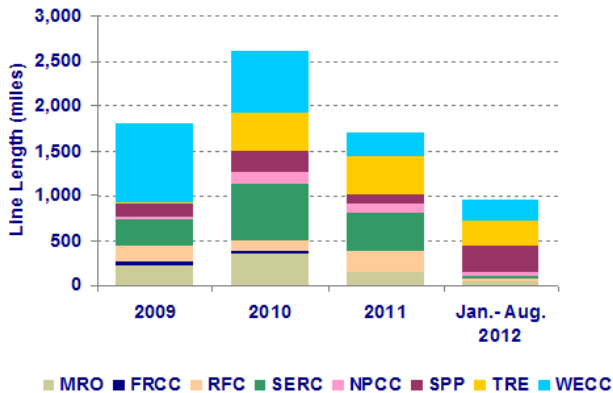
All Transmission Projects with a Proposed In-Service Date by August 2014



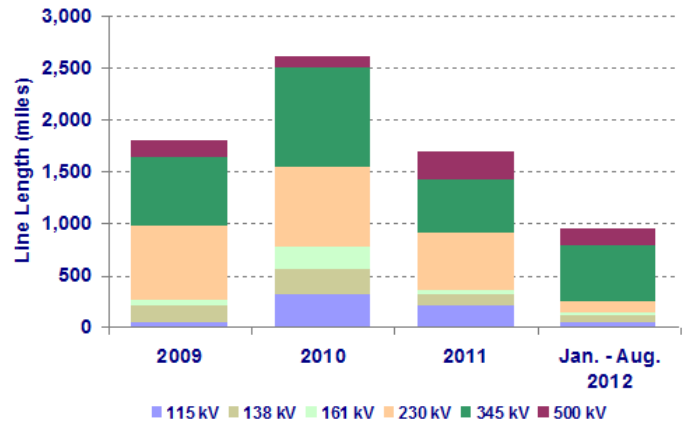
Transmission Projects with a High Probability of being completed by August 2014



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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