



## Office of Energy Projects Energy Infrastructure Update For September 2013

### Natural Gas Highlights

- Petal Gas Storage placed into service its converted storage Cavern No. 12A, within the Petal Salt Dome, in Forrest County, MS. This cavern will provide 5 Bcf of working gas capacity.
- Dominion received authorization to construct and operate its Natrium to Market Project which will provide 185 MMcf/d of capacity from a receipt point in Marshall County, WV to an interconnection with TETCO in Greene County, PA.
- Gulf Crossing received authorization to construct and operate a pipeline lateral (Panda Sherman Project), which will provide 125 MMcf/d of firm service to Panda Sherman's proposed 758 megawatt power plant in Grayson County, TX.
- Tennessee received authorization to construct and operate its Rose Lake Expansion Project. This project will provide 230 MMcf/d of firm transportation capacity for two shippers on Tennessee's Line 300 system in northeastern PA.
- Transco requested authorization to construct and operate its Leidy Southeast Project, which will provide 525 MMcf/d of capacity from Transco's Leidy Line in PA to various delivery points along its mainline as far south as AL.
- Sabine Pass Liquefaction and Creole Trail Pipeline requested authorization to expand the liquefaction capabilities (Trains 5 and 6) at the existing Sabine Pass LNG terminal in Cameron Parish, LA by 1,400 MMcf/d and to construct and operate pipeline facilities which will provide 1,500 MMcf/d of firm reverse flow capacity to the terminal.

#### Natural Gas Activities in September 2013

Status	No. of Projects	Storage Capacity (Bcf)	Deliverability (MMcf/d)	Capacity (MMcf/d)	Miles of Pipeline	Compression (HP)
<b>Pipeline</b>						
Placed in Service	5			168.2	20.0	6,300
Certificated	4			540.0	41.5	48,041
Proposed	3			2,625.0	134.3	137,813
<b>Storage</b>						
Placed in Service	4	12.1	1,512			9,240
Certificated	1	1.7	0			0
Proposed	1	-3.0	-300			0
<b>LNG (Import &amp; Export)</b>						
Placed in Service	0	0	0			0
Certificated (Export)	0	0	0			0
Proposed (Export)	1	0	1,400			0

Source: Staff Database

#### Natural Gas Activities through September 30, 2013 Through September 30, 2012

Status	No. of Projects	Storage Capacity (Bcf)	Deliverability (MMcf/d)	Capacity (MMcf/d)	Miles of Pipeline	Compression (HP)
<b>Pipeline</b>						
Placed in Service through September 30, 2012	17 13			2,026.7 2,030.6	124.7 222.8	84,140 85,040
Certificated through September 30, 2012	21 18			3,736.6 4,116.8	145.2 194.9	109,591 92,660
<b>Storage</b>						
Placed in Service through September 30, 2012	14 11	47.3 72.7	2,882 1,345			56,620 94,305
Certificated through September 30, 2012	12 9	33.3 76.8	766 2,940			9,240 85,755
<b>LNG (Import &amp; Export)</b>						
Placed in Service through September 30, 2012	0 0	0 0	0 0			0 0
Certificated (Export) through September 30, 2012	0 1	0 0	0 2,600			0 0

Source: Staff Database



## Office of Energy Projects Energy Infrastructure Update For September 2013

### Hydropower Highlights (nonfederal)

- Wisconsin Electric Power Company was issued an amendment to its license for its Twin Falls Project No. 11831 which increased the project's total installed capacity from 6.1 to 9.0 MW. The project is located on the Menominee River in Iron and Dickinson counties, MI and Florence County, WI.
- Boyce Hydro Power LLC was issued an amendment to its license for its Sanford Project No. 2785 which increased the project's total installed capacity from 3.3 to 3.6 MW. The project is located on the Tittabawassee River in Midland County, MI.
- Lock 7 Hydro Partners LLC filed an amendment to its license for its Mother Ann Lee Hydroelectric Project No. 539 to replace the runner of Unit 2, which will increase the project's total installed capacity from 2.040 MW to 2.210 MW. The project is located on the Kentucky River in Mercer County, KY.

#### Hydropower Activities in September 2013

Status	Conventional		Pumped Storage		Hydrokinetic		Total No. of Projects	Total Capacity (MW)
	No.	Capacity (MW)	No.	Capacity (MW)	No.	Capacity (MW)		
<b>Filed</b>								
License	0	0	0	0	0	0	0	0
5-MW Exemption	0	0	0	0	0	0	0	0
Capacity Amendment	1	0.170	0	0	0	0	1	0.170
Conduit Exemption	0	0	0	0	0	0	0	0
<b>Issued</b>								
License	0	0	0	0	0	0	0	0
5-MW Exemption	0	0	0	0	0	0	0	0
Capacity Amendment	2	3.200	0	0	0	0	2	3.200
Conduit Exemption	0	0	0	0	0	0	0	0
<b>Placed in Service</b>								
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, 2013)

Status	Conventional		Pumped Storage		Hydrokinetic		Total No. of Projects	Total Capacity (MW)
	No.	Capacity (MW)	No.	Capacity (MW)	No.	Capacity (MW)		
<b>Filed</b>								
License	8	96.860	0	0	0	0	8	96.860
5-MW Exemption	1	0.040	0	0	0	0	1	0.040
Capacity Amendment	1	0.170	0	0	0	0	1	0.170
Conduit Exemption	4	0.552	0	0	0	0	4	0.552
<b>Issued</b>								
License	6	19.060	0	0	0	0	6	19.060
5-MW Exemption	4	1.033	0	0	0	0	4	1.033
Capacity Amendment	4	10.575	0	0	0	0	4	10.575
Conduit Exemption	5	0.680	0	0	0	0	5	0.680
<b>Placed in Service</b>								
License	1	4.400	0	0	0	0	1	4.400
5-MW Exemption	0	0	0	0	0	0	0	0
Capacity Amendment	2	0.960	0	0	0	0	2	0.960
Conduit Exemption	1	0.037	0	0	0	0	1	0.037

Source: Staff Database



## Office of Energy Projects Energy Infrastructure Update For September 2013

### Electric Generation Highlights

- Basin Electric Power Cooperative's 45 MW natural gas-fired Pioneer Generating Station Phase 1 in Williams County, ND is online. Phase 2, with 90 MW, is expected to come online in January 2014.
- GreenWhey Energy's 3.2 MW biomass fueled project in Polk County, WI is online. GreenWhey's two anaerobic digesters convert wastewater from the area cheese processing plants into electricity which is sold under long-term contract to Xcel Energy.
- Three solar plants with a total of 5.6 MW capacity in NC are online: 1) 2 MW Central Farm 2 in Robeson County; 2) 1.6 MW Innovative Solar 1 & 2 in Buncombe County; and 3) FLS Energy Inc.'s 2 MW Taylor Solar Farm in Robeson County. The power generated from these facilities is sold to Progress Energy Carolinas under long-term contracts.

### New Generation In-Service (New Build and Expansion)

Primary Fuel Type	September 2013		January – September 2013 Cumulative		January – September 2012 Cumulative	
	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)
Coal	0	0	2	1,543	3	2,359
Natural Gas	1	45	51	5,854	91	5,079
Nuclear	0	0	0	0	1	0
Oil	0	0	7	27	38	73
Water	0	0	11	116	10	8
Wind	1	2	9	961	87	5,043
Biomass	3	5	57	192	102	413
Geothermal Steam	0	0	1	14	9	148
Solar	5	7	146	1,935	228	1,091
Waste Heat	0	0	2	76	1	3
Other	2	0	3	0	4	0
<b>Total</b>	<b>12</b>	<b>58</b>	<b>289</b>	<b>10,717</b>	<b>574</b>	<b>14,217</b>

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

### Total Installed Operating Generating Capacity

	Installed Capacity (GW)	% of Total Capacity
Coal	336.38	28.94%
Natural Gas	487.96	41.98%
Nuclear	106.78	9.19%
Oil	47.15	4.06%
Water	96.66	8.32%
Wind	60.15	5.18%
Biomass	15.20	1.31%
Geothermal Steam	3.78	0.33%
Solar	6.27	0.54%
Waste Heat	1.14	0.10%
Other	0.80	0.07%
<b>Total</b>	<b>1,162.27</b>	<b>100.00%</b>

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



# Office of Energy Projects Energy Infrastructure Update For September 2013

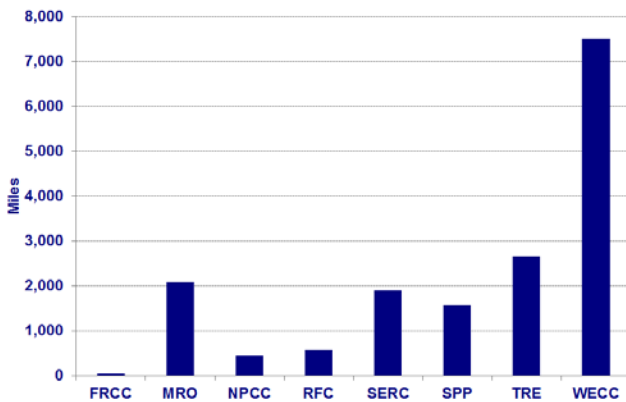
## Electric Transmission Highlights

- Lower Colorado River Authority has completed the 140 mile, 345 kV Big Hill – Kendall Transmission Project. The \$345 million project is a part of the Competitive Renewable Energy Zone initiative (CREZ) in TX.
- ITC Transmission has completed the 62 mile, 345 kV Bauer – Rapson Transmission Project. The project is a part of the Thumb Loop in MI.
- Southern California Edison Co has completed the 15 mile, 115 kV Devers - Mirage Transmission Project in CA.
- Lincoln Electric System has completed the 2 mile, 115 kV 30th & A - 56th & Everett Transmission Project. The project is part of the Central Lincoln Reliability Project line in NE.

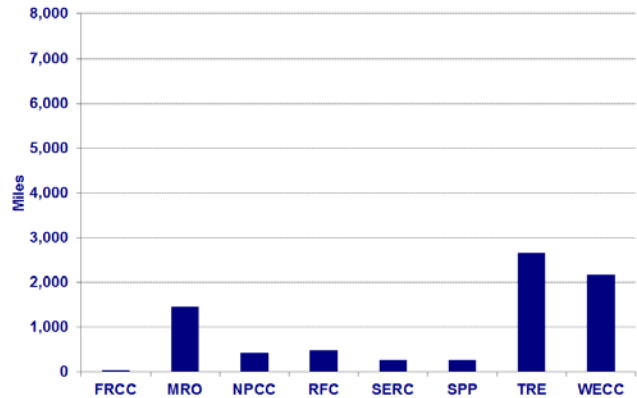
Voltage (kV)	Transmission Projects Completed				Proposed Transmission Projects In-Service by September 2015	
	September 2013	September 2012	January – September 2013 Cumulative	January – December 2012 Cumulative	High Probability of Completion	All
	Line Length (miles)					
≤230	17.0	77.2	107.7	1,072.8	1,162.6	4,337.1
345	202.0	0.0	1,749.6	1,086.6	4,822.4	6,740.7
500	0.0	0.0	176.0	187.5	1,772.7	5,690.8
<b>Total U.S.</b>	<b>219.0</b>	<b>77.2</b>	<b>2,033.3</b>	<b>2,346.9</b>	<b>7,757.7</b>	<b>16,768.6</b>

Sources: Data derived from Staff Database and U.S. Electric Transmission Projects ©2013 The C Three Group, LLC

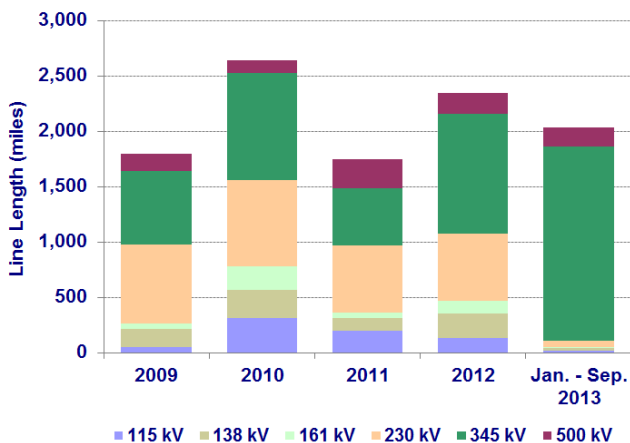
**All Transmission Projects with a Proposed In-Service Date by September 2015**



**Transmission Projects with a High Probability of being completed by September 2015**



**New Transmission Projects by Voltage**



Sources: Data derived from Staff Database and U.S. Electric Transmission Projects ©2013 The C Three Group, LLC

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