



# Office of Energy Projects Energy Infrastructure Update *For August 2015*

## Natural Gas Highlights

- Transco received authorization to place into service the remaining facilities of its Virginia Southside Expansion Project which will provide the remaining 20 MMcf/d of capacity out of the authorized 270 MMcf/d on its system from NJ to NC.
- Texas Eastern received authorization to place into service the remaining portion (181 MMcf/d) of its U2GC Project which will provide 425 MMcf/d authorized capacity from receipt points in PA to an interconnection with Panhandle Eastern near Gas City, IN.
- Southern Star received authorization under the Commission's prior notice proceeding to construct and operate its Line XMAA Expansion Project which will provide 24 MMcf/d of capacity on its Line XMAA in MO for one shipper with markets in Boone County, MO.
- Dominion received authorization to construct, and operate its Clarington Project which will provide 250 MMcf/d of capacity for one shipper on its system from an interconnection in Lightburn, WV to delivery points in Monroe County, OH.
- Kaiser-Frontier Midstream received authorization to construct and operate pipeline facilities to its existing system and to operate this pipeline (Silo Pipeline) as a jurisdictional pipeline. These facilities will provide an additional 5 MMcf/d of capacity from its Silo Gas Processing Plant in Laramie County, WY to an interconnection with WIC in Weld County, CO.
- Texas Gas received authorization to construct and operate its Ohio-Louisiana Access Project which will provide 626 MMcf/d of transportation capacity for shippers from IN to new markets in the Midwest and South.
- The Commission vacated the certificate issued to PetroLogistics (now Boardwalk Storage) to construct and operate storage Cavern 28 at its existing Choctaw Hub Storage facility in Iberville Parish, LA. The storage facility would have provided 10.7 Bcf of working gas capacity.
- WBI Energy Transmission requests authorization under the Commission's prior-notice procedures to construct and operate facilities in ND that would provide 18 MMcf/d of capacity from the Bakken area to an interconnection with Northern Border in McKenzie County, ND.
- Southern Natural requests authorization under the Commission's prior-notice procedures to construct and operate its South Main Expansion Project which would provide 5 MMcf/d of capacity for one shipper to serve municipal gas systems located across Southern Natural's South Georgia Lateral.
- Leader One Energy requests authorization to vacate the certificate issued to construct and operate the Leader One Gas Storage Project which would provide 11 Bcf of working gas at a storage facility located in Adams County, CO.

**Natural Gas Activities in August 2015**

Status	No. of Projects	Storage Capacity (Bcf)	Deliverability (MMcf/d)	Capacity (MMcf/d)	Miles of Pipeline	Compression (HP)
<b>Pipeline</b>						
Placed in Service	2			201.0	98.0	21,830
Certificated	4			905.0	31.4	27,245
Proposed	2			23.2	0.0	2,180
<b>Storage</b>						
Placed in Service	0	0.0	0.0			0
Certificated	0	0.0	0.0			0
Proposed	0	0.0	0.0			0
<b>LNG (Import &amp; Export)</b>						
Placed in Service	0	0	0			0
Certificated (Import/Export)	0	0	0			0
Proposed (Export)	0	0	0			0

Source: Staff Database



## Office of Energy Projects Energy Infrastructure Update For August 2015

### Natural Gas Activities through August 31, 2015 January through August 31, 2014

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 August 31, 2014	15 9			5,230.7 888.2	194.5 73.9	127,925 30,950
Certificated through August 31, 2014	24 22			6,711.0 6,176.6	326.5 228.6	234,818 221,623
<b>Storage</b>						
Placed in Service through August 31, 2014	3 5	3.4 17.25	53 110			0 4,800
Certificated through August 31, 2014	2 3	2.7 1.2	0 0			0 2,500
<b>LNG (Import &amp; Export)</b>						
Placed in Service through August 31, 2014	0 0	0 0	0 0			0 0
Certificated (Import/Export) through August 31, 2014	1 3	0 3.4	1,400 4,060			0 0

Source: Staff Database

### Hydropower Highlights (nonfederal)

- 5440 Hydro, Inc. was issued a small-hydro exemption from licensing for the proposed 0.6 MW Brooklyn Dam Hydroelectric Project No. 13806. The project will be located on the Upper Ammonoosuc River in Coos County, NH.
- The City of Brainerd Public Utilities Commission filed an amendment application to install a new 0.600 MW unit at its existing 3.342 MW Brainerd Hydroelectric Project No. 2533. The project is located on the Mississippi River in Crow Wing County, MN.

### Hydropower Project Activities in August 2015

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
10-MW Exemption	0	0	0	0	0	0	0	0
Capacity Amendment	1	0.600	0	0	0	0	1	0.600
Conduit Exemption	0	0	0	0	0	0	0	0
<b>Issued</b>								
License	0	0	0	0	0	0	0	0
10-MW Exemption	1	0.600	0	0	0	0	1	0.600
Capacity Amendment	0	0	0	0	0	0	0	0
Conduit Exemption	0	0	0	0	0	0	0	0
<b>Placed in Service</b>								
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



## Office of Energy Projects Energy Infrastructure Update For August 2015

### Hydropower Project Activities Year to Date (through August 31, 2015)

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	2	5.600	1	240.000	0	0	3	245.600
10-MW Exemption	1	0.192	0	0	0	0	1	0.192
Capacity Amendment	1	0.600	0	0	0	0	1	0.600
Conduit Exemption	0	0	0	0	0	0	0	0
<b>Issued</b>								
License	3	17.250	0	0	0	0	3	17.250
10-MW Exemption	1	0.600	0	0	0	0	1	0.600
Capacity Amendment	0	0	0	0	0	0	0	0
Conduit Exemption	0	0	0	0	0	0	0	0
<b>Placed in Service</b>								
License	0	0	1	21.250	0	0	1	21.250
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

## Electric Generation Highlights

- Green Pastures Wind I LLC's 150 MW Green Pastures Wind Phase 1 Project in Knox County, TX is online.
- Rising Tree Wind Farm III LLC's 99 MW Rising Tree Wind Farm Phase 3 Project in Kern County, CA is online. Rising Tree Wind Farm now has 198 MW total capacity. The power generated is sold to Southern California Edison Co. under long-term contract.
- North Star Solar LLC's 62.5 MW North Star Solar Phase 1 Project in Fresno County, CA is online. The power generated is sold to Pacific Gas & Electric Co. under long-term contract.
- Solar Star California XIX LLC's 85 MW Antelope Valley I Solar Phase 6 Project in Kern County, CA is online. Antelope Valley I now has 310 MW total capacity. The power generated is sold to Southern California Edison Co. under long-term contract.
- Solar Star California XX LLC's 43 MW Solar Star II Phase 6 Project in Kern County, CA is online. Solar Star II now has 276 MW in total capacity. The power generated is sold to Southern California Edison Co. under long-term contract.
- BNB Texas Solar LLC's 30 MW Barilla Solar Phase 3 Project in Pecos County, TX is online. Barilla Solar now has 80 MW total capacity.
- Victor Dry Farm Ranch A LLC's 5 MW Victor Dry Farm Ranch A Solar Project in San Bernardino County, CA is online. The power generated is sold to Southern California Edison Co. under long-term contract.
- Victor Dry Farm Ranch B LLC's 5 MW Victor Dry Farm Ranch B Solar Project in San Bernardino County, CA is online. The power generated is sold to Southern California Edison Co. under long-term contract.
- Indiana Municipal Power Agency's 3 MW Peru Solar Farm in Miami County, IN is online.
- Public Service Company of Colorado's 626 MW natural gas-fired Cherokee Expansion Project in Adams County, CO is online.
- Balko wind LLC's 300 MW Balko Wind Project in Beaver County, OK is online. The power generated is sold to Public Service Co. of Oklahoma and Western Farmers Electric Cooperative under long-term contracts.
- K4 Wind Farm LLC's 176.9 MW Pilot Hill Wind Expansion Project in Kankakee County, IL is online. The power generated is sold to Microsoft Corp. under long-term contract.
- Route 66 Wind Power Co.'s 150 MW Pullman Road Wind Phase 1 Project in Armstrong County, TX is online.



## Office of Energy Projects Energy Infrastructure Update For August 2015

- Red Horse Wind 2 LLC's 85 MW Red Horse 2 Wind and Solar Project in Cochise County, AZ is online. This hybrid project consists of 42.5 MW of solar and 42.5 MW of wind generation. The power generated is sold to Tucson Electric Power under long-term contract.
- Breckinridge Wind Project LLC's 98.8 MW Breckinridge Wind Project in Garfield County, OK is online. The power generated is sold to Grand River Dam Authority under long-term contract.

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

Primary Fuel Type	August 2015		January – August 2015 Cumulative		January – August 2014 Cumulative	
	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)
Coal	0	0	1	3	1	30
Natural Gas	1	626	34	3,182	38	5,693
Nuclear	0	0	0	0	9	181
Oil	0	0	7	10	13	59
Water	0	0	19	149	13	181
Wind	9	1,017	30	3,336	29	1,405
Biomass	1	27	15	242	55	97
Geothermal Steam	0	0	1	45	7	36
Solar	30	449	160	1,326	228	1,753
Waste Heat	0	0	0	0	2	68
Other *	1	0	7	0	7	22
<b>Total</b>	<b>42</b>	<b>2,119</b>	<b>274</b>	<b>8,294</b>	<b>402</b>	<b>9,526</b>

Sources: Data derived from Velocity Suite, ABB Inc. and The C Three Group LLC which include plants with nameplate capacity of 1 MW or greater. The data may be subject to update.

### Total Installed Operating Generating Capacity

	Installed Capacity (GW)	% of Total Capacity
Coal	308.16	26.47%
Natural Gas	499.07	42.86%
Nuclear	107.02	9.19%
Oil	45.02	3.87%
Water	100.06	8.59%
Wind	69.20	5.94%
Biomass	16.63	1.43%
Geothermal Steam	3.91	0.34%
Solar	13.32	1.14%
Waste Heat	1.15	0.10%
Other *	0.77	0.07%
<b>Total</b>	<b>1,164.32</b>	<b>100.00%</b>

Sources: Data derived from Velocity Suite, ABB Inc. and The C Three Group LLC which include plants with nameplate capacity of 1 MW or greater. The data may be subject to update.

\* "Other" includes purchased steam, tires, and miscellaneous technology such as batteries, fuel cells, energy storage, and fly wheel.



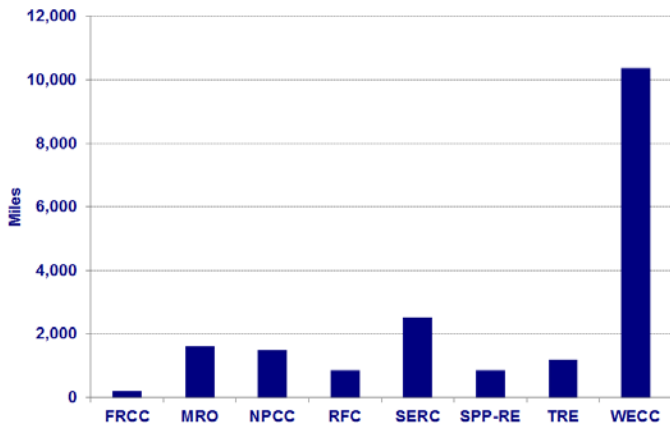
# Office of Energy Projects Energy Infrastructure Update *For August 2015*

## Electric Transmission Highlights

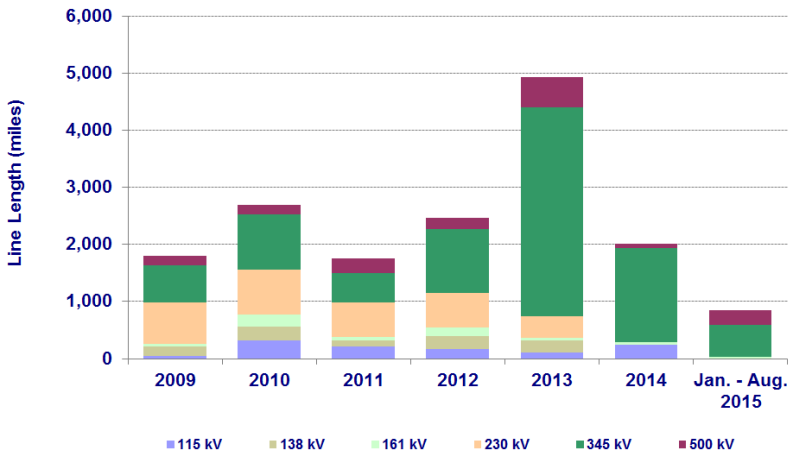
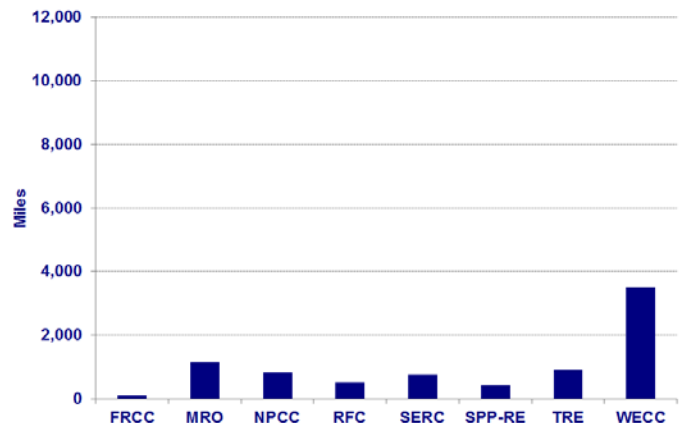
- In October 2015, Duke Energy Progress plans to announce the final path of the 40 mile, 230 kV Campobello – Asheville Transmission Line. The \$320 million interstate transmission project will connect NC and SC.

Voltage (kV)	Transmission Projects Completed				Proposed Transmission Projects In-Service by August 2017	
	August 2015	August 2014	January – August 2015 Cumulative	January – December 2014 Cumulative	High Probability of Completion	All
	Line Length (miles)					
≤230	0.0	46.0	116.4	1,218.5	3,493.5	6,546.2
345	0.0	0.0	556.7	1,659.8	2,498.8	5,053.6
500	0.0	0.0	256.0	70.0	2,205.9	7,533.9
<b>Total U.S.</b>	<b>0.0</b>	<b>46.0</b>	<b>929.1</b>	<b>2,948.3</b>	<b>8,198.2</b>	<b>19,133.7</b>

**All Transmission Projects with a Proposed In-Service Date by August 2017**



**Transmission Projects with a High Probability of being completed by August 2017**



**Sources:** Transmission data derived from Staff Database and U.S. Electric Transmission Projects ©2015 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.