



## Office of Energy Projects Energy Infrastructure Update For February 2017

### Natural Gas Highlights

- Elba Express received authorization to place into service the Rincon Compressor Station associated with the EEC Modification Project in Effingham County, GA.
- Dominion Cove Point LNG received authorization to place into service its Keys Energy Project which will provide 107 MMcf/d of capacity to Keys Energy Center's 735 MW power plant in Prince Georges County, MD.
- Rover Pipeline received authorization to construct and operate its Rover Pipeline Project which would provide 3,250 MMcf/d of capacity from supply areas in WV, PA, and OH to interconnection with Vector Pipeline in Livingston County, MI.
- Panhandle Eastern received authorization to construct and operate its Panhandle Backhaul Project which will provide 750 MMcf/d of east-to-west backhaul capacity from production areas in OH and PA to markets in the Midwest and Gulf Coast.
- Trunkline received authorization to construct and operate its Trunkline Backhaul Project which will provide 750 MMcf/d of north-to-south backhaul capacity from producing areas in OH and PA to markets in the Midwest and Gulf Coast.
- National Fuel and Empire received authorization to construct and operate its Northern Access 2016 Project which will provide 497 MMcf/d of capacity from National Fuel's system in PA to Empire's system in NY.
- Transco received authorization to construct and operate its Atlantic Sunrise Project which will provide 1,700 MMcf/d of capacity from northern PA to Transco's Station 85 in AL.
- Tennessee received authorization to construct and operate its Orion Project which will provide 135 MMcf/d of capacity on its existing Line 300 system in PA to serve markets in the Middle Atlantic and New England regions.
- Dominion Carolina received authorization to construct and operate its Transco to Charleston Project which will provide 80 MMcf/d of capacity to serve markets in Charleston, Dillon, Lexington, and Marlboro Counties, SC.
- Transco and Tennessee received authorization to abandon certain wholly- and jointly-owned offshore gathering facilities and related metering facilities located Offshore, Texas.
- Southern Natural Gas requests authorization to construct and operate its Fairburn Expansion Project. The project consists of two new pipeline segments, an existing lateral to be acquired from Georgia Power Company, a new 18,000 hp electric-driven compressor station, and three new meter stations, all located in Georgia. The project is designed to provide 343.2 MMcf/d of firm transportation service to serve markets in AL, GA, TN, SC, and FL.
- Texas Eastern and Brazoria Interconnector Gas Pipeline jointly request authorization to construct the proposed Stratton Ridge Expansion Project. The Project would create 322 MMcf/d of firm transportation capacity to deliver natural gas from multiple receipt points on Texas Eastern's interstate pipeline system to a delivery point on Brazoria Interconnector's intrastate pipeline system at Stratton Ridge in Brazoria County, TX.
- Transco requests authorization to construct and operate its St. James Supply Expansion Project in LA. The Project would enable Transco to provide 161.5 MMcf/day of firm transportation capacity from St. Helena Parish, LA southward YCI St. James Enterprises LLC, at the proposed Yuhuang Chemical Plant in St. James Parish, LA.
- Guthrie Natural Gas requests a service area determination to enlarge or expand its natural gas distribution facilities without further Commission authorization. Guthrie also requests a determination that it qualifies as a local distribution company for purposes of section 311 of the Natural Gas Policy Act of 1978 (NGPA) and a waiver of all accounting and reporting requirements and other regulatory requirements ordinarily applicable to natural gas companies under the NGA and the NGPA.
- Stepe Petroleum USA Inc. and Bakken Hunter request authorization to transfer the NGA section 3 Authorization and Presidential Permit issued to Bakken Hunter to Stepe Petroleum USA Inc. This authorization would transfer to Stepe Petroleum USA Inc. the permit to construct, operate, and maintain the North Dakota facilities at the borders of the U.S. and Canada for the import of natural gas from Canada.
- Gulf South requests authorization to install a gas-fired Solar Titan 130 turbine compressor unit in place of the currently certificated gas-fired Solar Mars 100 turbine compressor unit at the Magasco Compressor Station, located in Sabine County, TX, for the Coastal Bend Header Project.
- Venture Global Gator Express, LLC (Gator Express) and Venture Global Plaquemines LNG, LLC (Plaquemines LNG) jointly request authorization to construct the proposed Plaquemines LNG and Gator Express Pipeline Project. The project consists of (i) a new LNG export terminal and associated facilities in Plaquemines Parish, LA, capable of liquefying 24 MTPA (~3,400 MMcf/d); (ii) a 15.1-mile-long, 42-inch-diameter pipeline lateral; (iii) a 11.7-mile-long, 42-inch-diameter pipeline lateral. Each pipeline lateral would have a capacity of 1,970 MMcf/d.
- Approval letter of Jordan Cove Energy Project, L.P.(JCEP) and Pacific Connector Gas Pipeline, L.P.(PCGP) Pre-Filing request was issued on 02/10/2017. The Applicants request approval to initiate the pre-filing review process for JCEP's proposed LNG export terminal and PCGP's associated pipeline. The LNG terminal at Coos Bay, OR would be designed to liquefy about 7.8 MTPA of LNG for export to markets across the Pacific Rim. PCGP proposes to



## Office of Energy Projects Energy Infrastructure Update For February 2017

construct approximately 233-mile-long transmission pipeline through Klamath, Jackson, Douglas, and Coos Counties, OR. The Pipeline would transport 1,200 MMcf/d of natural gas to the LNG Terminal from interconnections with the existing Ruby Pipeline LLC and Gas Transmission Northwest LLC systems near Malin, OR.

### Natural Gas Activities in February 2017

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			876.0	0.0	132,300
Certificated	7			7,162.0	1,080.4	380,584
Proposed	6			4,766.0	35.5	35,238
<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 (Export)	0	0.0	0.0			0
Certificated (Import/Export)	0	0.0	0.0			0
Proposed (Import/Export)	1	17.2	3,400.0			0

Source: Staff Database

### Natural Gas Activities through February 28, 2017 January through February 29, 2016

Source: Staff Database

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 February 28, 2016	4 3			3,176.0 897.0	7.2 47.8	196,300 15,900
Certificated through February 28, 2016	12 8			9,627.9 4,154.2	1,253.2 757.0	618,584 455,057
<b>Storage</b>						
Placed in Service through February 28, 2016	0 0	0.0 0.0	0.0 0.0			0 0
Certificated through February 28, 2016	0 0	0.0 0.0	0.0 0.0			0 0
<b>LNG (Import &amp; Export)</b>						
Placed in Service (Export) through February 28, 2016	0 0	0.0 0.0	0.0 0.0			0 0
Certificated (Import/Export) through February 28, 2016	0 0	0.0 0.0	0.0 0.0			0 0



## Office of Energy Projects Energy Infrastructure Update For February 2017

### Hydropower Highlights (nonfederal)

- BOST4 Hydroelectric, LLC was issued an original license for the 28.1 MW Red River Lock and Dam No. 4 Hydroelectric Project No. 12757. The project will be located at the U.S. Army Corps of Engineers' Lock and Dam No. 4 on the Red River, near the town of Coushatta, Red River Parish, LA.
- Alpine Pacific Utilities Hydro, LLC filed an original license application for the proposed 1.5 MW Fresno Dam Hydroelectric Project No. 14751. The project would be located at the U.S. Bureau of Reclamation's Fresno Dam on the Milk River, near the town of Kremlin, Hill County, MT.

#### Hydropower Project Activities in February 2017

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	1	1.500	0	0	0	0	1	1.500
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
<b>Issued</b>								
License	1	28.100	0	0	0	0	1	28.100
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
<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

#### Hydropower Project Activities Year to Date (through February 28, 2017)

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	1	1.500	0	0	0	0	1	1.500
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
<b>Issued</b>								
License	1	28.100	0	0	0	0	1	28.100
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
<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 February 2017

### Electric Generation Highlights

- Bethel Wind Farm LLC's 276 MW Bethel Wind Farm Project in Castro County, TX is online. The power generated is sold to Google Inc. under long-term contract.
- Desert Wind Farm LLC's 208 MW Desert Wind Energy Project in Perquimans County, NC is online. The power generated is sold to Amazon Web Services under long-term contract.
- Cotton Plains Wind I LLC's 50.4 MW Cotton Plains Wind Phase 1 Project in Floyd County, TX is online.
- Optimum Wind LLC's 15 MW Optimum Wind Phases 1 through 5 Project in Story County, IA is online.
- Boulder Solar II LLC's 50 MW Boulder Solar Project in Clark County, NV is online. The power generated is sold to NV Energy under long-term contract.
- Tampa Electric Co.'s 25 MW Big Bend Solar Expansion Project in Hillsborough County, FL is online.
- SR Solis Oro Loma LLC's 18 MW SR Solis Oro Loma Solar Project in Fresno County, CA is online. The power generated is sold to Pacific Gas and Electric Co. under long-term contract.
- Duke Energy Indiana's 17 MW NSA Crane Solar Project in Martin County, IN is online.

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

Primary Fuel Type	February 2017		January – February 2017 Cumulative		January – February 2016 Cumulative	
	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)
Coal	0	0	0	0	0	0
Natural Gas	2	1	19	1,443	6	31
Nuclear	0	0	1	102	0	0
Oil	0	0	0	0	1	2
Water	0	0	0	0	4	130
Wind	8	549	11	999	12	903
Biomass	0	0	0	0	0	0
Geothermal Steam	0	0	0	0	0	0
Solar	18	132	44	736	58	747
Waste Heat	0	0	0	0	0	0
Other *	2	0	5	1	1	0
<b>Total</b>	<b>30</b>	<b>682</b>	<b>80</b>	<b>3,281</b>	<b>82</b>	<b>1,814</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.



## Office of Energy Projects Energy Infrastructure Update For February 2017

### Total Available Installed Generating Capacity

	Installed Capacity (GW)	% of Total Capacity
Coal	289.49	24.36%
Natural Gas	512.59	43.15%
Nuclear	108.15	9.10%
Oil	44.81	3.77%
Water	100.72	8.48%
Wind	84.11	7.08%
Biomass	16.82	1.42%
Geothermal Steam	3.90	0.33%
Solar	25.66	2.16%
Waste Heat	1.04	0.09%
Other*	0.75	0.06%
<b>Total</b>	<b>1,188.04</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.

### Electric Transmission Highlights

- Allete started construction on the 220 mile, 500 kV Great Northern Transmission Line which will connect Manitoba and Minnesota. The project is expected to be completed by 2020.

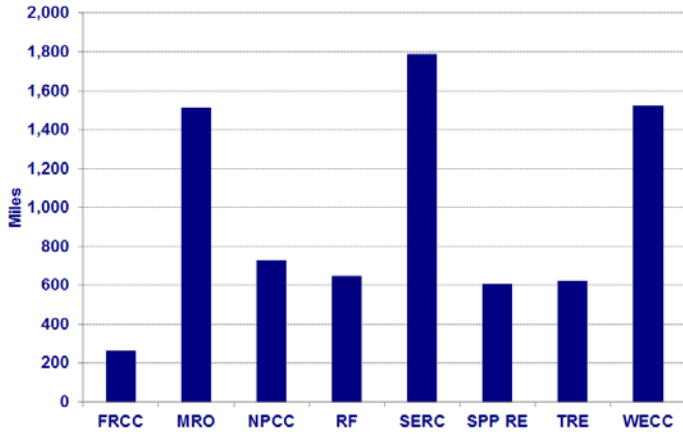
Voltage (kV)	Transmission Projects Completed				Proposed Transmission Projects In-Service by February 2019	
	February 2017	February 2016	January – February 2017 Cumulative	January – December 2016 Cumulative	High Probability of Completion	All
	Line Length (miles)					
≤230	0.0	0.0	0.0	401.8	1,926.3	3,727.0
345	0.0	0.0	0.0	508.9	1,912.8	3,161.1
500	0.0	0.0	0.0	43.0	273.4	810.4
<b>Total U.S.</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>953.7</b>	<b>4,112.5</b>	<b>7,698.5</b>

Sources: Data derived from Staff Database and U.S. Electric Transmission Projects ©2017 The C Three Group, LLC.

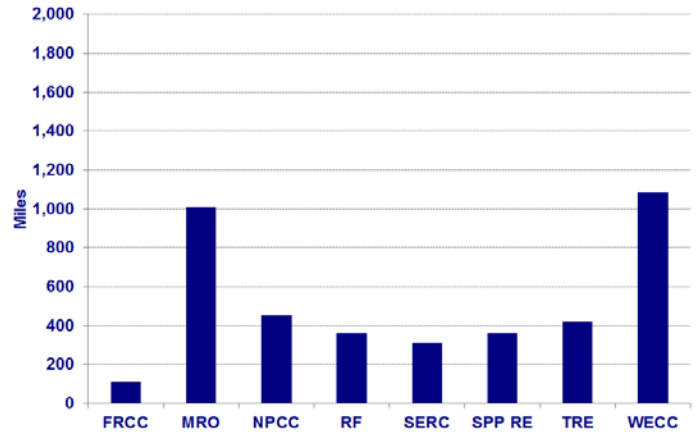


# Office of Energy Projects Energy Infrastructure Update *For February 2017*

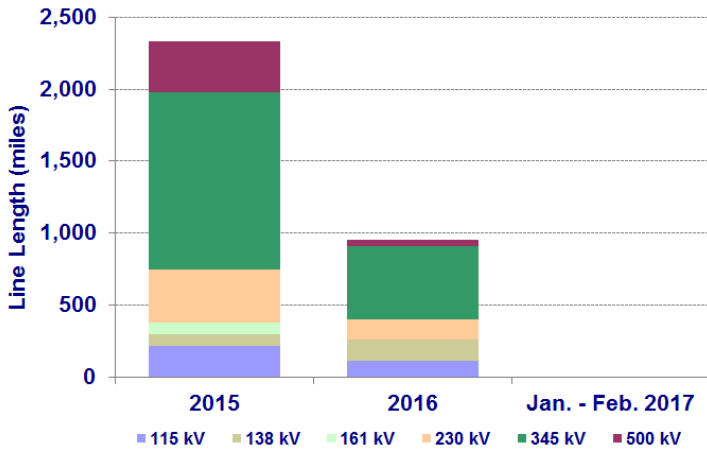
**All Transmission Projects with a Proposed In-Service Date by February 2019**



**Transmission Projects with a High Probability of being completed by February 2019**



**New Transmission Projects by Voltage**



**Sources:** Data derived from Staff Database and U.S. Electric Transmission Projects ©2017 The C Three Group, LLC.

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