



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

### Natural Gas Highlights

- Comanche Trail Pipeline received authorization to place in-service a border crossing (The San Elizario Crossing Project) on the International Boundary between the US and Mexico near the City of San Elizario, in El Paso County, TX. The border crossing will provide 1,100 MMcf/d of export/import capacity between the U.S. and Mexico.
- Transco received authorization to place in-service its Gulf Trace Expansion Project which will provide 1,200 MMcf/d of capacity on its system and through the proposed lateral to the Sabine Pass LNG export terminal in Cameron Parish, LA.
- Columbia received authorization to construct and operate its Leach XPress Project which will provide 1,530 MMcf/d of capacity from the Appalachian Basin to certain Ohio markets, pooling points, and an interconnection with Columbia Gulf near Leach, KY
- Columbia Gulf received authorization to construct and operate its Rayne XPress Expansion Project which will provide 621 MMcf/d of bi-directional capacity on its mainline system from the Leach, KY interconnection with Columbia to Gulf markets.
- Algonquin and Maritimes & Northeast received authorization to construct and operate its Atlantic Bridge Project which will provide a total capacity of 239 MMcf/d from receipt points in Bergen County, NJ and Ramapo, NY to markets in the Northeast.
- Texas Eastern received authorization to excavate, elevate, and/or replace certain sections of pipeline and appurtenant facilities (Marshall County Mine Panel 17W Project) located in Marshall County, WV. This project will ensure the safe and efficient operation of Texas Eastern's existing pipeline during the duration of the planned longwall mining activities of Marshall County Coal Company in Panel 17W of its Marshall County mine.
- Northern Natural received authorization to construct and operate its Northern Lights 2017 Expansion Project which would increase the peak-day capacity on its system in Isanti, Sherburne and Rice Counties, MN by 75.9 MMcf/d to serve market needs in MN.
- Spire requests authorization to construct, own, and operate a new interstate natural gas pipeline which would provide 400 MMcf/s of capacity from an interconnection with the Rockies Express Pipeline in Scott County, IL to pipeline facilities located in St. Louis County, MO to serve markets in the St. Louis metropolitan area.
- Eagle LNG requests authorization to construct and operate a liquefaction and export facility near the St. Johns River in Jacksonville, FL. The LNG export terminal will have a deliverability of 132 MMcf/d.

### Natural Gas Activities in January 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               |                        |                         | 2,300.0           | 7.2               | 64,000           |
| Certificated                     | 5               |                        |                         | 2,465.9           | 172.8             | 238,000          |
| Proposed                         | 1               |                        |                         | 400.0             | 66.0              | 0                |
| <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)                | 1               | 1.0                    | 132.0                   |                   |                   | 0                |

Source: Staff Database



# Office of Energy Projects Energy Infrastructure Update For January 2017

## Natural Gas Activities through January 31, 2017 January through January 31, 2016

| 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 January 31, 2016            | 2<br>1          |                        |                         | 2,300.0<br>22.0   | 7.2<br>35.2       | 64,000<br>0      |
| Certificated through January 31, 2016                 | 5<br>2          |                        |                         | 2,465.9<br>430.0  | 172.8<br>37.2     | 238,000<br>0     |
| <b>Storage</b>                                        |                 |                        |                         |                   |                   |                  |
| Placed in Service through January 31, 2016            | 0<br>0          | 0.0<br>0.0             | 0<br>0                  |                   |                   | 0<br>0           |
| Certificated through January 31, 2016                 | 0<br>0          | 0.0<br>0.0             | 0<br>0                  |                   |                   | 0<br>0           |
| <b>LNG (Import &amp; Export)</b>                      |                 |                        |                         |                   |                   |                  |
| Placed in Service through January 31, 2016            | 0<br>0          | 0<br>0                 | 0<br>0                  |                   |                   | 0<br>0           |
| Certificated (Import/Export) through January 31, 2016 | 0<br>0          | 0<br>0                 | 0<br>0                  |                   |                   | 0<br>0           |

Source: Staff Database

## Hydropower Highlights (nonfederal)

There were no hydropower activities this month.

## Electric Generation Highlights

- Indiana Michigan Power's 102 MW nuclear powered Donald C Cook Phase 8 Rerate/Restart Project in Berrien County, MI is online.
- Tamp Electric Co.'s 1,195 MW natural gas-fired Polk Station Phase 10 Expansion Project in Polk County, FL is online.
- Basin Electric Power Cooperative's 112 MW natural gas-fired Pioneer Generation Station Phase 4 Expansion Project in Williams County, ND is online.
- Coffeyville Municipal Light and Power's 56 MW natural gas-fired Coffeyville Phase 12 Expansion Project in Montgomery County, KS is online.
- Cimarron Bend Wind Project LLC's 200 MW Cimarron Bend Wind Project in Clark County, KS is online.
- Deerfield Wind Energy LLC's 150 MW Deerfield Wind Energy Project in Huron County, MI is online. The power generated is sold to Wolverine Power Supply Coop. Inc. under long-term contract.
- Mesquite Solar 3 LLC's 150 MW Mesquite Solar Phase 11 Expansion Project in Maricopa County, AZ is online. The power generated is sold to the U.S. Dept. of Navy under long-term contract.
- Florida Power and Light Co.'s three solar projects, each 74.5 MW, in Florida are online: Babcock Ranch Solar Project in Charlotte County; Citrus Solar Energy Center Project in DeSoto County; and Manatee Solar Energy Center in Manatee County.
- Eurus Energy America Corp's 28 MW Waianae Solar Project in Honolulu County, HI is online. The power generated is sold to Hawaiian Electric Co. Inc. under long-term contract.
- DG AMP Solar LLC's 20 MW Bowling Green Solar Project in Wood County, OH is online. The power generated is sold to American Municipal Power Inc. under long-term contract.
- Rocky Mountain Power's 20 MW Rocky Mountain Power Subscriber Program Solar Project in Millard County, UT is online.
- Duke Energy Indiana's 17 MW NSA Crane Solar Project in Martin County, IN is online.
- Algonquin Power Co.'s 10 MW Bakersfield Solar Phase 2 Expansion Project in Kern County, CA is online. The power generated is sold to Pacific Gas and Electric Co. under long-term contract.



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

- TGC Westmont Holdings LLC's 6.5 MW SunE LADWP Project, and 7 MW SunE LADWP 2 Project in Los Angeles County, CA are online.

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

| Primary Fuel Type | January 2017 |                         | January 2016 |                         |
|-------------------|--------------|-------------------------|--------------|-------------------------|
|                   | No. of Units | Installed Capacity (MW) | No. of Units | Installed Capacity (MW) |
| Coal              | 0            | 0                       | 0            | 0                       |
| Natural Gas       | 16           | 1,363                   | 2            | 6                       |
| Nuclear           | 1            | 102                     | 0            | 0                       |
| Oil               | 0            | 0                       | 0            | 0                       |
| Water             | 0            | 0                       | 1            | 22                      |
| Wind              | 2            | 350                     | 9            | 738                     |
| Biomass           | 0            | 0                       | 0            | 0                       |
| Geothermal Steam  | 0            | 0                       | 0            | 0                       |
| Solar             | 17           | 505                     | 33           | 400                     |
| Waste Heat        | 0            | 0                       | 0            | 0                       |
| Other *           | 2            | 1                       | 1            | 0                       |
| <b>Total</b>      | <b>38</b>    | <b>2,321</b>            | <b>46</b>    | <b>1,166</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 Available Generating Capacity

|                  | Installed Capacity (GW) | % of Total Capacity |
|------------------|-------------------------|---------------------|
| Coal             | 291.45                  | 24.58%              |
| Natural Gas      | 512.00                  | 43.18%              |
| Nuclear          | 106.58                  | 8.99%               |
| Oil              | 44.84                   | 3.78%               |
| Water            | 100.71                  | 8.49%               |
| Wind             | 83.11                   | 7.01%               |
| Biomass          | 16.79                   | 1.42%               |
| Geothermal Steam | 3.90                    | 0.33%               |
| Solar            | 24.39                   | 2.06%               |
| Waste Heat       | 1.16                    | 0.10%               |
| Other*           | 0.76                    | 0.06%               |
| <b>Total</b>     | <b>1,185.68</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.



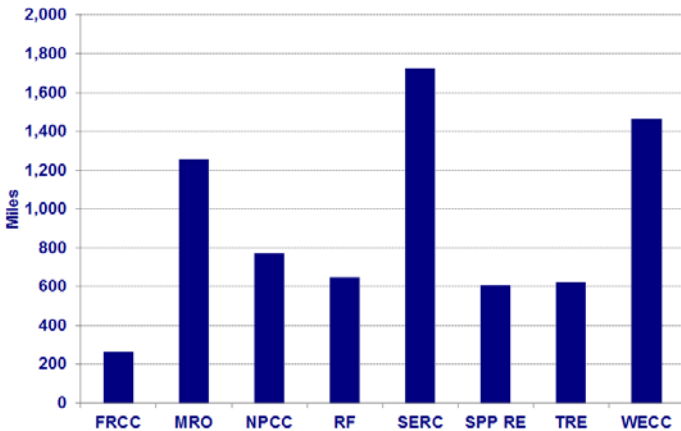
# Office of Energy Projects Energy Infrastructure Update For January 2017

## Electric Transmission Highlights

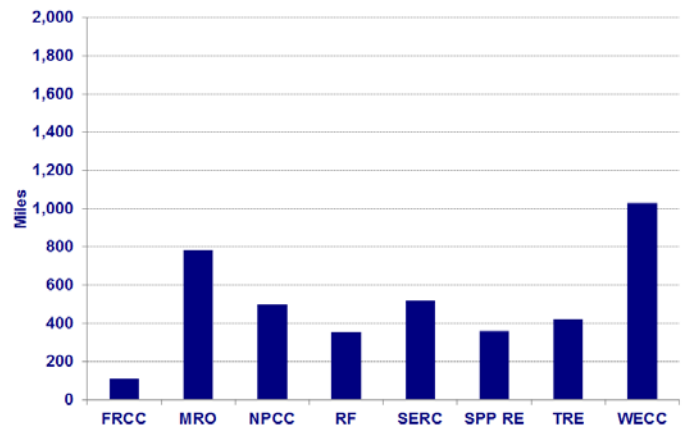
- The Southwest Power Pool Board of Directors approved the 1mi, 230 kV Knoll – Post Rock Transmission Project. It is estimated to cost \$3.4 million.

| Voltage (kV)      | Transmission Projects Completed |              |                                    | Proposed Transmission Projects In-Service by January 2019 |                |
|-------------------|---------------------------------|--------------|------------------------------------|-----------------------------------------------------------|----------------|
|                   | January 2017                    | January 2016 | January – December 2016 Cumulative | High Probability of Completion                            | All            |
|                   | Line Length (miles)             |              |                                    |                                                           |                |
| ≤230              | 0.0                             | 38.0         | 329.8                              | 2,020.4                                                   | 3,647.1        |
| 345               | 0.0                             | 0.0          | 326.9                              | 1,799.8                                                   | 2,941.1        |
| ≥500              | 0.0                             | 0.0          | 43.0                               | 258.4                                                     | 767.4          |
| <b>Total U.S.</b> | <b>0.0</b>                      | <b>38.0</b>  | <b>699.7</b>                       | <b>4,078.6</b>                                            | <b>7,355.6</b> |

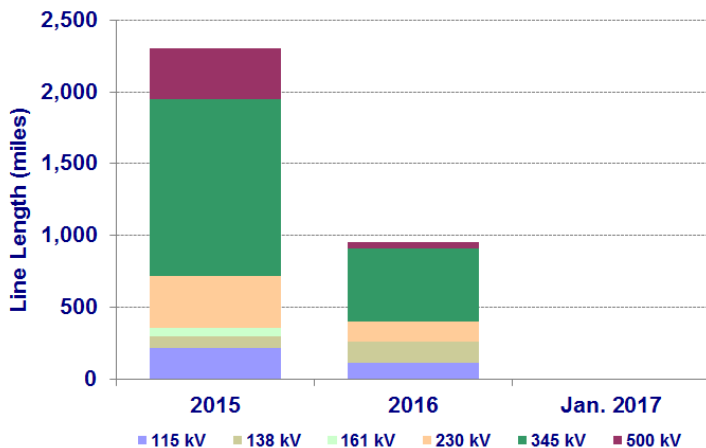
**All Transmission Projects with a Proposed In-Service Date by January 2019**



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



**New Transmission Projects by Voltage**



**Sources:** Data derived from Staff Database and U.S. Electric Transmission Projects ©2017 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.