



Office of Energy Projects Energy Infrastructure Update For June 2018

Natural Gas Highlights

- Elkton Acquisition received approval for a service area determination within which it may, without further Commission authorization, own and operate facilities in Delaware to provide natural gas distribution service to an area in Maryland.
- EGT Acquisition received approval for a service area determination where it may, without further Commission authorization, own and operate facilities in Pennsylvania to provide natural gas distribution service to an area in northwestern New Jersey.
- Dominion received authorization to establish a 2,000 foot boundary around the active limits of the Ellisburg Storage Pool in Potter County, PA.
- Columbia Gas received authorization to construct new wells 12606 and 12607 at its Pavonia Storage Field in Ashland County, OH. The wells will restore 9 MMcf/d of deliverability to the field.
- NGPL received authorization to abandon its Herscher Northwest Storage Field in Kankakee County, IL. NGPL stated that the field, with 18.5 Bcf of capacity and 65 MMcf/d deliverability, has underperformed for years.
- Columbia Gas received authorization to construct and operate Weaver Well 12622 and related pipeline and appurtenances at its Weaver Storage Field in Ashland, Holmes, Knox, and Richland Counties, OH.
- Southern Natural Gas requests authorization to abandon in place 6.5 miles of its West Point Line, and to abandon by removal a delivery meter, a regulator, and related appurtenances in Lowndes and Clay Counties, MS.
- Dominion Energy Carolina requests authorization for its Bushy Park Extension Project, which includes a new gas delivery point in Berkeley County, SC, to supply an industrial customer currently supplied by the LDC.
- Rover requests authorization for its Iron Bank Meter Station Project, which includes a new meter station on its Majorsville Lateral in Marshall County, PA, to allow it to receive up to 500 MMcf/d of gas from APP Midstream.
- Rover requests authorization to own and operate the Revolution Receipt Point on its Burgettstown Lateral in Washington County, PA in order to receive up to 525 MMcf/d of gas from ETC Northeast.
- Southern Star requests authorization to increase the maximum operating pressure on its Blue Mountain Chisholm Trail Lateral in Grady County, OK.
- Panhandle Eastern requests authorization to decrease the Maximum Allowable Operating Pressure of a segment of its State Line Lateral in Johnson County, KS and Jackson County, MO in order to meet DOT safety regulations.
- Transwestern requests authorization to abandon in place the Atoka 3 Compressor Station located in Eddy County, NM. The facility has not been used in 3-years.
- Texas Eastern requests authorization to abandon in place and by removal its Cameron System, located onshore Louisiana and Offshore in State and Federal waters. This system's utilization fell as production decreased.
- PNGTS requests authorization for Phase III of its Portland Xpress Project, which would include a new 6,300 HP compressor at the Eliot Compressor Station in York County, ME; and changes to the Westbrook Compressor Station in Cumberland County, ME and the Dracut meter and receiving station in Middlesex County, MA.
- Columbia Gas requests authorization for its Line 5 Launcher/Receiver Project in Jefferson and Columbiana Counties, OH and Brooke County, WV, consisting of equipment to allow for in-line inspection of its Line 5 pipeline.
- Columbia Gas requests authorization for its KA1 North Launcher/Receiver Project facilities in Madison and Fayette Counties, KY, which includes installing bi-directional launchers, receivers, and mainline valves.
- Dakota Natural Gas requests determination of a service area within which it may, without further Commission authorization, enlarge or expand its natural gas distribution facilities in order to supply a customer in Minnesota.
- Dakota Natural Gas requests a limited jurisdiction Hinshaw blanket certificate for a new pipeline that will supply a local industrial customer in the City of Drayton, ND.
- M&NE requests authorization to abandon by lease 7.2 MMcf/d of firm capacity to PNGTS, on the mainline pipeline that Maritimes and PNGTS own jointly. This Application is related Phase II of PNGTS PXP Project.
- ANR requests authorization for its Winfield Storage Field Well Abandonment Project, which includes abandoning 20 injection/withdrawal wells and one observation well in Mecosta and Montcalm Counties, MI.
- Columbia Gas requests authorization to abandon two injection/withdrawal wells at its Brinker Storage Field in Columbiana County, OH, one I/W well at its Victory B Storage Field, in Marshall County, WV, and associated pipelines and appurtenances. These abandonments will not impact current customers or operations.
- Corpus Christi Liquefaction requests authorization for its Stage 3 Project, which would increase the terminal's export capacity by 1.4 Bcf/d. It includes seven liquefaction trains, one storage tank, and 21 miles of new pipeline in San Patricio County, TX.



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Natural Gas Activities in June 2018

| Status | No. of Projects | Storage Capacity (Bcf) | Deliverability (MMcf/d) | Capacity (MMcf/d) | Miles of Pipeline | Compression (HP) |
|----------------------------------|-----------------|------------------------|-------------------------|-------------------|-------------------|------------------|
| Pipeline | | | | | | |
| Placed in Service | 0 | | | 0 | 0 | 0 |
| Certificated | 0 | | | 0 | 0 | 0 |
| Proposed | 2 | | | 66 | 0 | 6,300 |
| Storage | | | | | | |
| Placed in Service | 0 | 0 | 0 | | | 0 |
| Certificated | 1 | 0 | 9 | | | 0 |
| Proposed | 0 | 0 | 0 | | | 0 |
| LNG (Import & Export) | | | | | | |
| Placed in Service (Export) | 0 | 0 | 0 | | | 0 |
| Certificated (Import/Export) | 0 | 0 | 0 | | | 0 |
| Proposed (Import/Export) | 1 | 1.5 | 1,400 | | | 44,000 |

Source: Staff Database

Natural Gas Activities through June 30, 2018 January through June 30, 2017

| Status | No. of Projects | Storage Capacity (BCF) | Deliverability (MMcf/d) | Capacity (MMcf/d) | Miles of Pipeline | Compression (HP) |
|----------------------------------|-----------------|------------------------|-------------------------|-------------------|-------------------|------------------|
| Pipeline | | | | | | |
| Placed in Service | 4 | | | 3,230.0 | 79.3 | 116,020 |
| through June 30, 2017 | 10 | | | 3134.3 | 193.4 | 158,939 |
| Certificated | 25 | | | 5,060.7 | 286.1 | 149,395 |
| through June 30, 2017 | 15 | | | 9627.9 | 1257.0 | 623,318 |
| Storage | | | | | | |
| Placed in Service | 0 | 0.0 | 0.0 | | | 0 |
| through June 30, 2017 | 1 | 7.5 | 600.0 | | | 9,500 |
| Certificated | 4 | 3,600.3 | 152.0 | | | 0 |
| through June 30, 2017 | 0 | 0.0 | 0.0 | | | 0 |
| LNG (Import & Export) | | | | | | |
| Placed in Service (Export) | 1 | 0.0 | 825.0 | | | 0 |
| through June 30, 2017 | 1 | 0.0 | 700.0 | | | 0 |
| Certificated (Import/Export) | 0 | 0.0 | 0.0 | | | 0 |
| through June 30, 2017 | 0 | 0.0 | 0.0 | | | 0 |

Source: Staff Database



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Hydropower Highlights (nonfederal)

There were no hydropower activities this month.

Hydropower Project Activities Year to Date (through June 30, 2018)

| 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 |
| 10-MW Exemption | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Capacity Amendment | 1 | 1,740 | 1 | 335,000 | 0 | 0 | 2 | 336,740 |
| Conduit Exemption | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Issued | | | | | | | | |
| 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 |
| Placed in Service | | | | | | | | |
| License | 2 | 12,000 | 0 | 0 | 0 | 0 | 2 | 12,000 |
| 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

- CPV Towantic LLC's 785.0 MW natural gas-fired Towantic Energy Center in New Haven County, CT is online.
- St. Joseph Energy Center LLC's 736.0 MW natural gas-fired St. Joseph Energy Center in Saint Joseph County, IN is online.
- PSEG Fossil LLC's 717.0 MW natural gas-fired Sewaren Project in Middlesex County, NJ is online.
- Cubit Power One Inc.'s 11.5 MW natural gas-fired Cubit Power One Project in Richmond County, NY is online.
- Sunselect Produce (California) Inc.'s 6.0 MW natural gas-fired Sunselect Produce (California) Inc. Project in Kern County, CA is online.
- Municipal Energy Agency of Nebraska's 30.0 MW Kimball (MEAN) Wind Expansion in Kimball County, NE is online.
- Kimball Wind LLC's 30.0 MW Kimball Wind Project in Kimball County, NE is online.
- Buckthorn WesTex LLC's 150.0 MW Buckthorn Solar 1 Project in Pecos County, TX is online.
- Gray Hawk Solar LLC's 70.0 MW Gray Hawk Solar Project in Mohave County, AZ is online.
- Enel Green Power North America Inc.'s 27.0 MW Wynn Las Vegas Solar Project in Churchill County, NV is online.
- Southern Current LLC's 10.6 MW Nimitz Solar Project in Jasper County, SC is online. The power generated is sold to South Carolina Electric & Gas Co. under long-term contract.
- Springfield Solar LLC's 6.1 MW Springfield Solar Project in Orangeburg County, SC is online. The power generated is sold to South Carolina Electric & Gas Co. under long-term contract.
- MCP Independence II LLC's 8.5 MW Independence II Solar Farm in Jackson County, MO is online.
- Weisshorn Solar I LLC's 5.3 MW Broome County Solar Project in Broome County, NY is online.
- DG Minnesota CSG LLC's 5.0 MW Big Lake Solar Project in Sherburne County, MN is online.



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New Generation In-Service (New Build and Expansion)

| Primary Fuel Type | June 2018 | | January – June 2018 Cumulative | | January – June 2017 Cumulative | |
|-------------------|--------------|-------------------------|--------------------------------|-------------------------|--------------------------------|-------------------------|
| | No. of Units | Installed Capacity (MW) | No. of Units | Installed Capacity (MW) | No. of Units | Installed Capacity (MW) |
| Coal | 0 | 0 | 4 | 10 | 0 | 0 |
| Natural Gas | 7 | 2,259 | 45 | 8,514 | 56 | 9,543 |
| Nuclear | 0 | 0 | 1 | 4 | 1 | 102 |
| Oil | 0 | 0 | 10 | 17 | 6 | 23 |
| Water | 0 | 0 | 8 | 22 | 8 | 17 |
| Wind | 2 | 60 | 21 | 2,149 | 48 | 4,015 |
| Biomass | 0 | 0 | 11 | 66 | 18 | 172 |
| Geothermal Steam | 0 | 0 | 2 | 21 | 1 | 18 |
| Solar | 23 | 301 | 243 | 2,308 | 270 | 2,488 |
| Waste Heat | 0 | 0 | 2 | 80 | 1 | 220 |
| Other * | 1 | 0 | 11 | 5 | 19 | 1 |
| Total | 33 | 2,620 | 358 | 13,196 | 428 | 16,599 |

Sources: Data derived from Velocity Suite, ABB Inc. and The C Three Group LLC. 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.

Total Available Installed Generating Capacity

| | Installed Capacity (GW) | % of Total Capacity |
|------------------|-------------------------|---------------------|
| Coal | 268.59 | 22.65% |
| Natural Gas | 520.13 | 43.86% |
| Nuclear | 108.18 | 9.12% |
| Oil | 41.39 | 3.49% |
| Water | 100.22 | 8.45% |
| Wind | 91.08 | 7.68% |
| Biomass | 16.33 | 1.38% |
| Geothermal Steam | 3.84 | 0.32% |
| Solar | 33.87 | 2.86% |
| Waste Heat | 1.38 | 0.12% |
| Other* | 0.79 | 0.07% |
| Total | 1,185.80 | 100.00% |

Sources: Data derived from Velocity Suite, ABB Inc. and The C Three Group LLC. The data may be subject to update.



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Proposed Generation Additions and Retirements by July 2021

| Primary Fuel Type | Additions | | Retirements | |
|-------------------|--------------|-------------------------|--------------|-------------------------|
| | No. of Units | Installed Capacity (MW) | No. of Units | Installed Capacity (MW) |
| Coal | 1 | 17 | 66 | 15,948 |
| Natural Gas | 315 | 84,044 | 121 | 12,617 |
| Nuclear | 7 | 7,721 | 8 | 7,579 |
| Oil | 16 | 726 | 24 | 311 |
| Water | 253 | 13,328 | 18 | 538 |
| Wind | 493 | 88,719 | 1 | 50 |
| Biomass | 56 | 641 | 23 | 116 |
| Geothermal Steam | 20 | 1,014 | 0 | 0 |
| Solar | 1858 | 57,293 | 5 | 2 |
| Waste Heat | 6 | 96 | 0 | 0 |
| Other * | 79 | 688 | 0 | 0 |
| Total | 3,104 | 254,287 | 266 | 37,161 |

Sources: Data derived from Velocity Suite, ABB Inc. and The C Three Group LLC. 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

- Pioneer Transmission, LLC has completed the 69.4 mile, 765 kV Greentown – Reynolds Transmission Project in IN.
- Northern Indiana Public Service Company has completed the 100.0 mile, 345 kV Reynolds – Burr Oak – Hiple Transmission Project in IN.
- Entergy Mississippi has completed the 65.0 mile, 230 kV Baxter Wilson – Natchez Transmission Project in MS.
- Southwestern Public Service has completed the 47.2 mile, 345 kV Hobbs – Kiowa Transmission Project in NM.

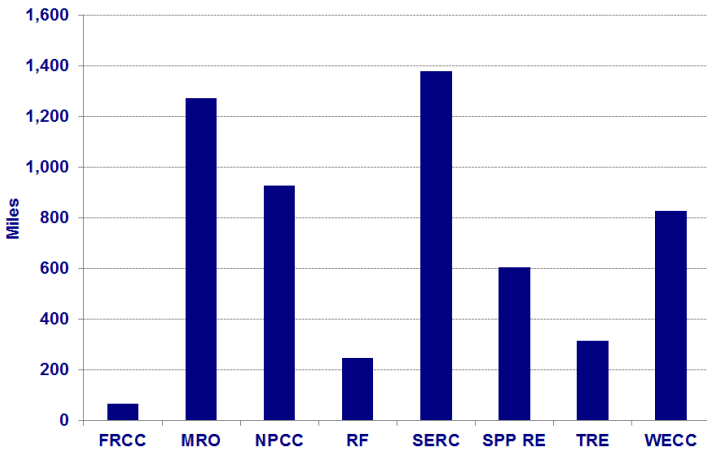
| Voltage (kV) | Transmission Projects Completed | | | | Proposed Transmission Projects In-Service by July 2020 | |
|---------------------|---------------------------------|--------------|--------------------------------|------------------------------------|--|----------------|
| | June 2018 | June 2017 | January – June 2018 Cumulative | January – December 2017 Cumulative | High Probability of Completion | All |
| Line Length (miles) | | | | | | |
| ≤230 | 65.0 | 86.3 | 150.0 | 316.9 | 540.4 | 1,913.3 |
| 345 | 147.2 | 57.0 | 288.2 | 218.5 | 1,099.0 | 3,005.0 |
| 500 | 69.4 | 0.0 | 69.4 | 0.0 | 386.0 | 725.4 |
| Total U.S. | 281.6 | 143.3 | 507.6 | 535.4 | 2,025.4 | 5,643.7 |

Sources: Data derived from Staff Database and U.S. Electric Transmission Projects ©2018 The C Three Group, LLC.

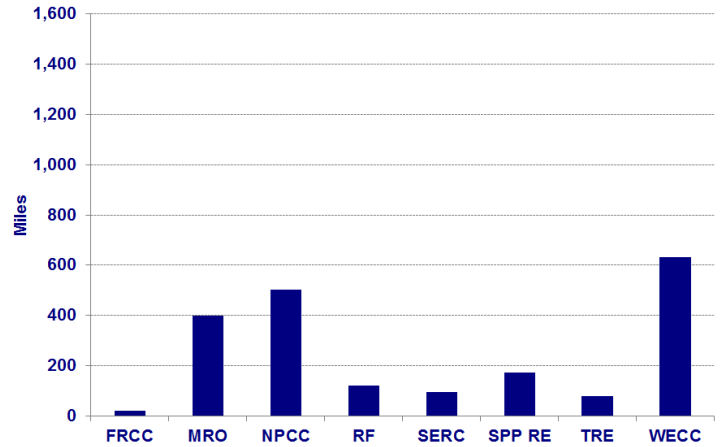


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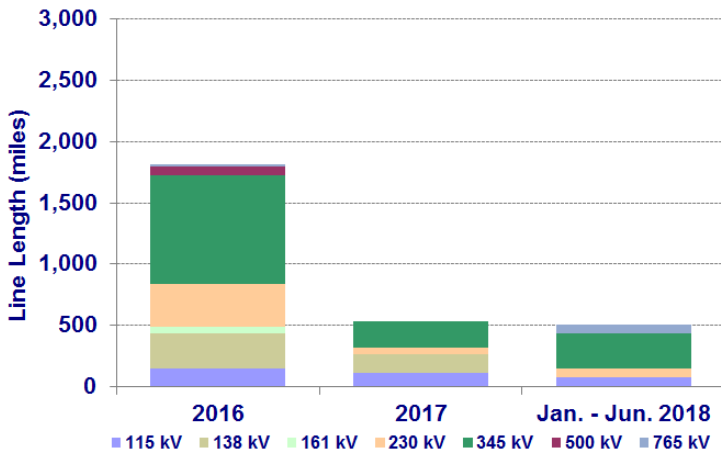
All Transmission Projects with a Proposed In-Service Date by July 2020



Transmission Projects with a High Probability of being completed by July 2020



New Transmission Projects by Voltage



Sources: Data derived from Staff Database and U.S. Electric Transmission Projects ©2018 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.