



Office of Energy Projects Energy Infrastructure Update For February 2018

Natural Gas Highlights

- WBI Energy received authorization to construct its Line Section 27 Cherry Creek to Spring Creek Expansion Project, including 12 miles of 24-inch pipeline and expansion of its Spring Creek and Wild Basin Meter Stations in McKenzie County, ND. The project will increase takeaway capacity from two processing plants by 206 MMcf/d.
- Columbia Gas received authorization to replace two segments of its Line O-731 totaling 7.64 miles, and to perform other related activities in Coshocton and Muskingum Counties, OH.
- Texas Eastern received authorization to construct and operate its South Texas Expansion Project, including the acquisition by lease of the Pomelo Connector. The project would provide 400 MMcf/d of bi-directional capacity on Texas Eastern's existing Line 16 system in Texas.
- Texas Eastern received authorization to excavate, elevate, and replace sections of four different pipelines in Marshall County, WV to accommodate planned longwall mining activities.
- Southern Natural Gas received authorization to construct and operate its Fairburn Expansion Project, consisting of two new pipeline segments, an existing lateral to be acquired from Georgia Power Company, a new 18,000 hp compressor station, and three new meter stations, all located in Georgia. The project is designed to provide 343 MMcf/d of firm transportation service to markets in AL, GA, TN, SC, and FL.
- WBI Energy received authorization to construct its Valley Expansion Project, which includes interconnect facilities with Viking Gas Transmission in Clay County, MN; 37.3 miles of pipeline in Clay County, MN and Cass County, ND; a 3,000 horsepower electric compressor station in Cass County, ND; and replacement of two existing town border stations and construction of a regulator station in Burleigh, Stutsman and Barnes Counties, ND.
- Transco received authorization to install three additional water heaters at its Meadows Facility in Bergen County, NJ.
- NGPL received authorization to abandon certain compressor units at its compressor stations 310 and 311 in Piatt County, IL, while retaining compressor units 1 and 7 in CS 310 and units 2 and 4 in CS 311 to serve as backups.
- Columbia Gas received authorization to perform installations and activities to enable the in-line inspection of approximately 53.6 miles of its 20-inch diameter Line D-600 in Allen, Paulding, and Putnam Counties, OH.
- Columbia Gas received authorization to construct and operate one new storage well and related pipeline and appurtenances at its Donegal Storage Field in Washington County, PA.
- Dominion Energy Questar received authorization for its Clay Basin Delivery Project, which would allow it to convert a portion of the deliverability at its Clay Basin Storage facility in Daggett County, UT, from interruptible to firm capacity.
- Equitrans received authorization to add a new horizontal well at its Mobley Storage Field in Wetzel County, WV. The new well would add 348 MMcf of new capacity and increase deliverability by 125 MMcf/d.
- Northern requests authorization to construct and operate its Marquette Branch Line Expansion Project, which would add 3,180 HP of new compression and 24.6 MMcf/d of additional firm capacity to supply two proposed electric generation plants in Upper Michigan.
- Southwest Gas seeks approval for an amendment to its service area within which it may provide natural gas distribution service on the north shore of Lake Tahoe in California and Nevada.
- Empire requests authorization to construct its Empire North Project, which includes two new compressor stations, modifications to meter and regulator stations, and pipeline segments in Ontario County, NY and Tioga County, PA in order to provide an additional 205 MMcf/d of firm capacity to customers in the Northeast and Canada.
- Transco seeks to amend its Commission authorization to abandon by sale to Tana Exploration 21 miles of pipeline gathering assets located in Offshore Texas, and instead abandon these assets in place.
- Gulf South requests authorization to abandon 100 MMcf/d of capacity currently leased from Destin in MS, and Destin requests authorization to reacquire this capacity.
- CIG requests authorization for its 2018 Line Nos. 5A and 5B Expansion Project, which would modify three compressor stations in Weld County, CO, to allow for 230 MMcf/d of additional capacity from mainline receipt points along the Colorado Front Range to the Cheyenne Hub Complex.
- EGT Acquisition requests a service area determination where it may own and operate facilities in Pennsylvania to provide natural gas distribution service across state lines in an area in northwestern New Jersey.
- Elkton Acquisition requests a service area determination within which it may own and operate facilities in Delaware to provide natural gas distribution service across state lines in an area in Maryland.



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- National Fuel requests authorization to abandon well lines CW-1407 & 1408 and convert two storage wells to observation wells at its Holland Storage Field in Erie County, NY.
- Dominion requests authorization to establish a 2,000 foot boundary around the active limits of the Ellisburg Storage Pool in Potter County, PA.

Natural Gas Activities in February 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	4			920	70	37,800
Proposed	3			460	1	56,248
Storage						
Placed in Service	0	0.0	0.0			0
Certificated	1	0.3	125.0			0
Proposed	0	0.0	0.0			0
LNG (Import & Export)						
Placed in Service (Export)	0	0.0	0.0			0
Certificated (Import/Export)	0	0.0	0.0			0
Proposed (Import/Export)	0	0.0	0.0			0

Source: Staff Database

Natural Gas Activities through February 28, 2018 January through February 28, 2017

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	0.0	0
through February 28, 2017	4			876	0	132,300
Certificated	11			2,787.5	202.0	121,015
through February 28, 2017	12			9,628	1,253	618,584
Storage						
Placed in Service	0	0.0	0.0			0
through February 28, 2017	0	0	0			0
Certificated	1	0.3	125.0			0
through February 28, 2017	0	0	0			0
LNG (Import & Export)						
Placed in Service (Export)	0	0.0	0.0			0
through February 28, 2017	0	0	0			0
Certificated (Import/Export)	0	0.0	0.0			0
through February 28, 2017	0	0	0			0

Source: Staff Database



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Hydropower Highlights (nonfederal)

- Calligan Power LLC placed in service the 6.0 MW Calligan Creek Project No. 13948. The project is located on Calligan Creek in King County, WA.
- Hancock Power LLC placed in service the 6.0 MW Hancock Creek Project No. 13994. The project is located on Hancock Creek in King County, WA.

Hydropower Project Activities in February 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	0	0	0	0	0	0	0	0
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

Hydropower Project Activities Year to Date (through February 28, 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	0	0	0	0	0	0	0	0
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



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Electric Generation Highlights

- MidAmerican Energy Co.'s 170 MW Beaver Creek Wind Project in Greene County, IA is online.
- Prairie Wind Energy LLC's 168 MW Prairie Wind Project in Mahaska County, IA is online.
- Phase 2 of Copenhagen Infrastructure II's 163 MW wind powered Bearkat Renewable Energy Project in Glasscock County, TX is online.
- Big Timber Wind LLC's 25 MW Big Timber Wind Farm in Sweet Grass County, MT is online.
- Stuttgart Solar LLC's 81 MW Stuttgart Solar Project in Arkansas County, AR is online. The power generated is sold to Entergy Arkansas Inc. under long-term contract.
- Georgia Power Co.'s 46 MW Marine Corps Logistics Base Solar Facility in Dougherty County, GA is online.
- SunPower Corp's 10 MW Redstone Arsenal Army Base Solar Project in Madison County, AL is online.
- PNMR Development & Management Co.'s 10 MW Facebook Solar Energy Center in Bernalillo County, NM is online.
- Solar Mission 1 LLC's 9 MW Fort Meade Solar Project in Anne Arundel County, MD is online.
- Housatonic Solar 1 LLC's 7 MW Highgate Solar Project in Franklin County, VT is online.
- ETCAP NES CS MN 06 LLC's 7 MW Novel CSG of Waseca Solar Project in Waseca County, MN is online.
- Phelps 158 Solar Farm LLC's 5 MW Phelps 158 Solar Farm LLC in Northampton County, NC is online. The power generated is sold to Dominion Energy Inc under long-term contract.

New Generation In-Service (New Build and Expansion)

Primary Fuel Type	February 2018		January – February 2018 Cumulative		January – February 2017 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	0	0	2	40	22	1,462
Nuclear	0	0	1	4	1	102
Oil	0	0	3	8	1	1
Water	2	12	2	12	0	0
Wind	4	526	16	1,757	16	1,755
Biomass	3	3	3	3	1	1
Geothermal Steam	0	0	1	19	0	0
Solar	30	198	69	917	96	869
Waste Heat	0	0	0	0	0	0
Other *	2	0	5	5	8	1
Total	41	739	102	2,765	145	4,191

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.



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Total Available Installed Generating Capacity

	Installed Capacity (GW)	% of Total Capacity
Coal	273.29	23.11%
Natural Gas	512.55	43.34%
Nuclear	108.18	9.15%
Oil	42.10	3.56%
Water	100.89	8.53%
Wind	90.73	7.67%
Biomass	16.55	1.40%
Geothermal Steam	3.85	0.33%
Solar	32.32	2.73%
Waste Heat	1.26	0.11%
Other*	0.79	0.07%
Total	1,182.51	100.00%

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

Proposed Generation Additions and Retirements by March 2021

Primary Fuel Type	Additions		Retirements	
	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)
Coal	5	1,827	70	17,008
Natural Gas	366	92,965	136	15,544
Nuclear	6	6,363	5	4,532
Oil	29	754	39	523
Water	262	12,545	25	706
Wind	474	84,392	2	68
Biomass	61	680	18	70
Geothermal Steam	24	1,130	0	0
Solar	1,761	48,816	5	2
Waste Heat	8	176	0	0
Other *	49	680	1	0
Total	3,045	250,328	301	38,453

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.



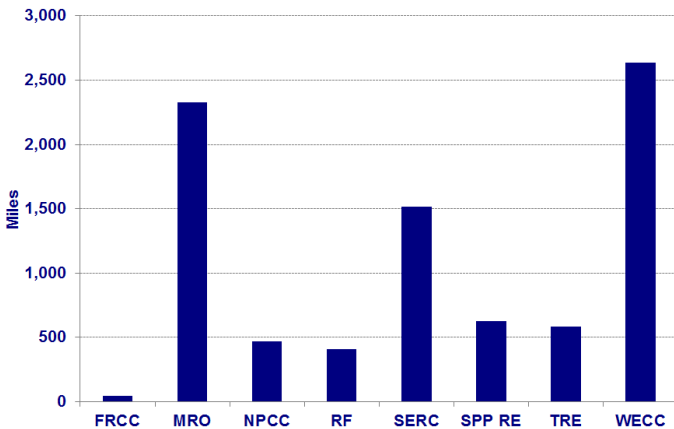
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Electric Transmission Highlights

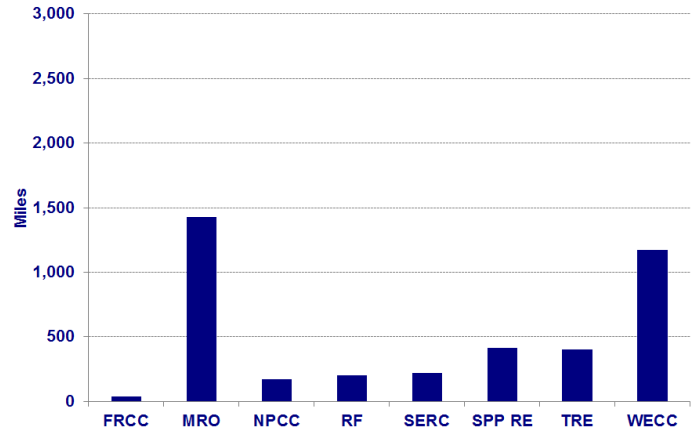
- Basin Electric Power Cooperative has completed the 36.0 mile, 115 kV Plaza – Blaisdell Transmission Project in ND.

Voltage (kV)	Transmission Projects Completed				Proposed Transmission Projects In-Service by February 2020	
	February 2018	February 2017	January – February 2018 Cumulative	January – December 2017 Cumulative	High Probability of Completion	All
	Line Length (miles)					
≤230	36.0	37.5	66.0	301.9	1,430.1	3,080.3
345	0.0	0.0	0.0	218.5	2,291.5	4,004.2
500	0.0	0.0	0.0	0.0	324.0	1,529.0
Total U.S.	36.0	37.5	66.0	520.4	4,045.6	8,613.5

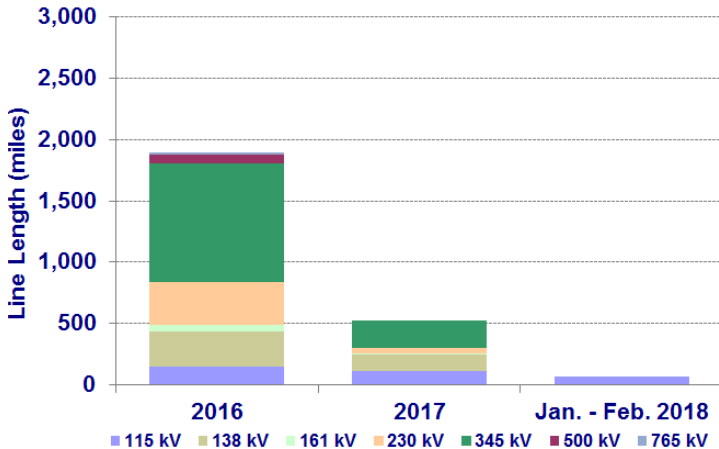
All Transmission Projects with a Proposed In-Service Date by February 2020



Transmission Projects with a High Probability of being completed by February 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.