



Office of Energy Projects Energy Infrastructure Update *For January 2020*

Natural Gas Highlights

- Freeport LNG received authorization to place in service Train 2 at its LNG terminal in Brazoria County, TX. Including Train 1, this brings the total liquefaction capacity at the terminal to 1.4 Bcf/d.
- Elba Liquefaction and Southern LNG received authorization to place in service Unit 2 of its LNG liquefaction facility at Southern LNG's existing LNG terminal on Elba Island in Chatham County, GA. When fully completed, the export facilities will consist of 10-units and 350 MMcf/d liquefaction capacity.
- Southern Star Central received authorization for its Midwest Market Access Project, which involves increasing throughput at its Grabham Compressor Station to add 40 MMcf/d of firm transportation capacity in Southern Star's market area.
- Columbia Gas received authorization to construct its Buckeye Xpress Project, including replacing 60.8 miles of 20 and 24-inch pipeline with 66.2 miles of 36-inch pipeline in order to modernize the facilities and add 275 MMcf/d of additional capacity in Vinton, Jackson, Gallia and Laurence Counties, OH and Wayne County, WV.
- Columbia Gas requests authorization for its Line D Launcher/Receiver Project, which includes installations and modifications in Licking, Knox, Morrow, and Crawford Counties, OH, to allow Line D to be pigged for integrity assessment.
- WBI Energy requests authorization to abandon by sale to Scout Energy, its gathering facilities in the Baker Field, located in Fallon County, MT and Bowman County, ND. The abandonment includes 400 miles of pipeline, field compressor units, and other equipment.
- Rover requests authorization to increase the mainline certificated capacity of its pipeline by 175 MMcf/d for a total of 3.425 Bcf/d, and corresponding increases to related laterals and market segments in OH and MI. The increase does not involve new infrastructure.
- Texas Eastern requests authorization for its Lilly Compressor Units Replacement Project in Cambria County, PA, including replacing the four compressor units at the station with two new gas turbines in order to comply with future air emission reduction requirements.
- Iroquois Gas Transmission requests an amendment to its certificate that would remove the annual Right of Way walkover requirement of its entire system.
- PennEast requests to amend its authorization to allow for the construction of the PennEast Pipeline project in two phases, Phase 1 being the facilities in Pennsylvania, and Phase 2 the facilities in New Jersey.
- Iroquois Gas requests authorization for its Enhancement by Compression Project, which includes new compressors and upgrades to existing compression stations in Athens and Dover, NY and Brookfield and Milford, CT. The project would deliver up to 125 MMcf/d of firm capacity to two LDC customers in New York.
- Transco requests authorization to amend its Northeast Supply Enhancement Project, to allow Transco to use an existing road to access Compressor Station 206 in Somerset County, NJ, in lieu of constructing a new access road.
- Dominion Energy requests authorization to replace 3.9 miles of pipeline located at its Oakford Storage Complex in Westmoreland County, PA. The project will not affect the certificated parameters of the storage facility.
- Saltville Gas Storage requests authorization to amend its certificated working gas capacity to 5.0 Bcf from 5.4 Bcf. The proposed amendment would not affect service under its existing firm storage contracts.



Office of Energy Projects Energy Infrastructure Update For January 2020

Natural Gas Activities in January 2020

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	2			315	66	0
Proposed	2			300	0	36,000
Storage						
Placed in Service	0	0.0	0.0			0
Certificated	0	0.0	0.0			0
Proposed	0	0.0	0.0			0
LNG (Import & Export)						
Placed in Service (Export)	2	0	748			0
Certificated (Import/Export)	0	0	0			0
Proposed (Import/Export)	0	0	0			0

Source: Staff Database

Natural Gas Activities through January 31, 2020 January through January 31, 2019

Status	No. of Projects	Storage Capacity (BCF)	Deliverability (MMcf/d)	Capacity (MMcf/d)	Miles of Pipeline	Compression (HP)
Pipeline						
Placed in Service through January 31, 2019	0 0			0.0 0	0.0 0	0 0
Certificated through January 31, 2019	2 2			315.0 75	66.2 0	0 4,760
Storage						
Placed in Service through January 31, 2019	0 0	0.0 0	0.0 0			0 0
Certificated through January 31, 2019	0 0	0.0 0	0.0 0			0 0
LNG (Import & Export)						
Placed in Service (Export) through January 31, 2019	2 0	0.0 0	748.0 0			0 0
Certificated (Import/Export) through January 31, 2019	0 0	0.0 0	0.0 0			0 0

Source: Staff Database



Office of Energy Projects Energy Infrastructure Update For January 2020

Hydropower Highlights (nonfederal)

- Duke Energy Carolinas, LLC filed an application to increase the capacity of its East Fork Project No. 2698 from 23.973 MW to 25.848 MW. The project is located on the East Fork Tuckasegee River and Wolf Creek in Jackson County, NC.
- Great River Hydro, LLC filed an application to increase the capacity of its Fifteen Mile Falls Project No. 2077 from 319.960 MW to 324.660 MW. The project is located on the Connecticut River in Coös and Grafton Counties NH, and Caledonia and Essex Counties VT.

Hydropower Project Activities in January 2020

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	2	6.575	0	0	0	0	2	6.575
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	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

Electric Generation Highlights

- Wright Solar Park LLC's 200.0 MW Wright Solar Park in Merced County, CA is online.
- FL Solar 4 LLC's 42.0 MW Tallahassee 2 Solar Project in Leon County, FL is online. The power generated is sold to Tallahassee FL (City of) under long-term contract.
- Citizens Solar Holding IX LLC's 6.0 MW Citizens Chenango Solar Project in Broome County, NY is online. The power generated is sold to New York State Electric & Gas Corp. under long-term contract.
- BWC Connecticut River LLC's 5.0 MW solar powered BWC Connecticut River LLC in Bristol County, MA is online.
- Antrim Wind Energy LLC's 28.8 MW Antrim Wind Energy Project in Hillsborough County, NH is online. The power generated is sold to New Hampshire Electric Cooperative Inc. and Partners Healthcare under long-term contract.



Office of Energy Projects Energy Infrastructure Update For January 2020

New Generation In-Service (New Build and Expansion)

Primary Fuel Type	January 2020		January 2019	
	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)
Coal	0	0	0	0
Natural Gas	0	0	6	242
Nuclear	0	0	0	0
Oil	0	0	1	2
Water	0	0	5	13
Wind	1	29	10	406
Biomass	0	0	1	17
Geothermal Steam	0	0	0	0
Solar	14	273	51	820
Waste Heat	0	0	0	0
Other *	0	0	3	0
Total	15	302	77	1,500

Total Available Installed Generating Capacity

	Installed Capacity (GW)	% of Total Capacity
Coal	248.31	20.66%
Natural Gas	534.48	44.48%
Nuclear	106.33	8.85%
Oil	39.74	3.31%
Water	100.75	8.38%
Wind	106.36	8.85%
Biomass	16.05	1.34%
Geothermal Steam	3.85	0.32%
Solar	43.70	3.64%
Waste Heat	1.32	0.11%
Other*	0.77	0.06%
Total	1,201.66	100.00%

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.



Office of Energy Projects Energy Infrastructure Update For January 2020

Generation Capacity Additions and Retirements (February 2020 – January 2023) From ABB Velocity Suite's Generating Unit Capacity Dataset

Primary Fuel Type	All Proposed Additions		Proposed Additions Under Construction**		Proposed Retirements	
	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)
Coal	1	77	0	0	59	18,020
Natural Gas	229	63,009	97	29,698	72	7,962
Nuclear	6	4,460	4	2,560	6	5,951
Oil	11	682	1	2	22	3,062
Water	236	13,163	92	1,920	9	7
Wind	480	90,022	167	26,704	2	249
Biomass	50	267	23	202	24	84
Geothermal Steam	13	478	4	213	10	35
Solar	2,804	104,520	698	22,424	0	0
Waste Heat	3	49	2	29	0	0
Other *	224	480	51	20	1	2
Total	4,057	277,207	1,139	83,772	205	35,372

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.

** Under Constructions includes units that have started site preparation or construction. It also includes units that are in the testing phase.

Electric Transmission Highlights

- Omaha Public Power District has completed the 5.3 mile, 161 kV S1255 – S1260 Transmission Project in NE.
- Texas North Company has completed the 5.0 mile, 138 kV Cryo – Saragosa Transmission Project in TX.
- Commonwealth Edison has completed the 3.5 mile, 138 kV Waterman – Customer Substation Transmission Project in IL.

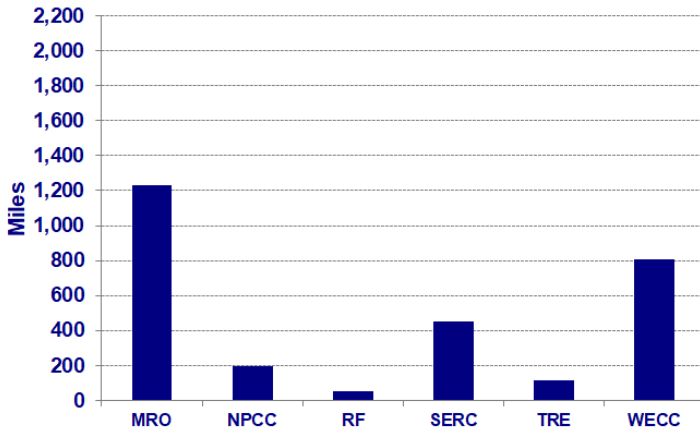
Voltage (kV)	Transmission Projects Completed			Proposed Transmission Projects In-Service by February 2022	
	January 2020	January 2019	January -December 2019 Cumulative	Planned and Under Construction	All
	Line Length (miles)				
≤230	13.8	4.5	296.5	413.7	761.4
345	0.0	0.0	479.5	466.8	1,246.2
500	0.0	0.0	7.7	251.4	841.4
Total U.S.	13.8	4.5	783.7	1,131.9	2,849.0

Sources: Data derived from North American Electric Reliability Corporation (NERC) Electricity Supply and Demand (ES&D) and U.S. Electric Transmission Projects ©The C Three Group, LLC.

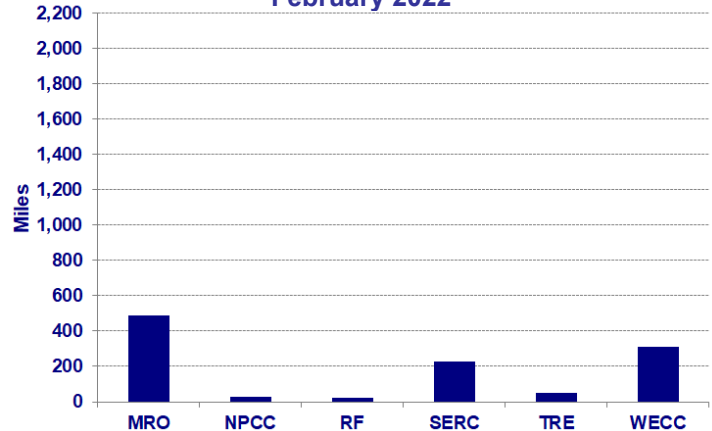


Office of Energy Projects Energy Infrastructure Update For January 2020

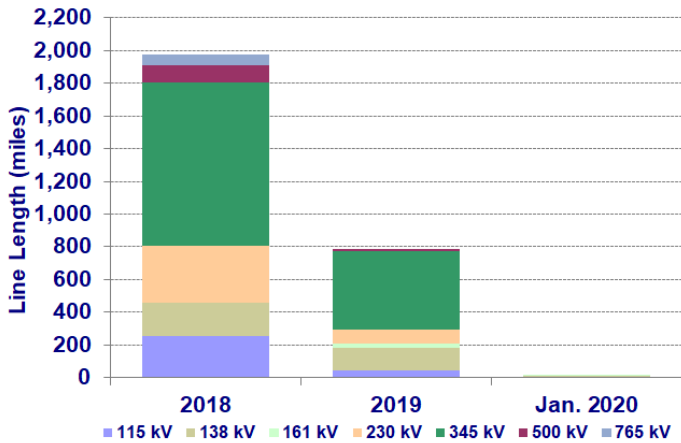
All Transmission Projects with a Proposed In-Service Date by February 2022



Planned and Under Construction Transmission Projects with a Proposed In-Service Date by February 2022



New Transmission Projects by Voltage



Sources: Data derived from North American Electric Reliability Corporation (NERC) Electricity Supply and Demand (ES&D) and U.S. Electric Transmission Projects ©The C Three Group, LLC.

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