



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

Natural Gas Highlights

- Elba Liquefaction and Southern LNG received authorization to place in service Unit 6 of the LNG liquefaction and export facility at Southern's existing LNG terminal on Elba Island in Chatham County, GA. When fully completed, the export terminal will consist of 10-units and 350 MMcf/d of liquefaction capacity.
- WBI Energy received authorization to abandon by sale to Scout Energy its gathering facilities in the Baker Field, located in Fallon County, MT and Bowman County, ND, which include 400 miles of pipeline, field compressor units, and other equipment.
- Rover Pipeline received authorization for its Wick Meter Station Project, which involves construction of a new meter station on Rover's Sherwood Lateral in Tyler County, WV. The new station would be able to receive up to 300 MMcf/d of natural gas from an interconnect with the Equitrans/Eureka Midstream gathering system.
- Texas-Kansas-Oklahoma Gas received a Determination of a Service Area within which it may own and operate facilities to transport natural gas into a limited area for the purposes of providing local distribution service in Northern Oklahoma, and a determination that it is an LDC for Section 311 purposes.
- Rover received 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 reflects operational experience and does not involve new infrastructure.
- Texas Eastern received authorization for its Marshall County Mine Panel 19E Project, including excavating, elevating, and replacing segments of four pipelines and appurtenant facilities in Marshall County, WV, in order to ensure safe operation of the line during planned longwall mining operations by Marshall Coal.
- Northwest Pipeline received authorization for its Walla Walla Compressor Station Project, including installing a 500 HP compressor and associated facilities to expand deliverability on its Walla Walla Lateral from 16.2 to 17.3 MMcf/d.
- Puget Sound Energy received authorization to recomplete Well SU-50 from Zone 2 to Zone 1 at its Jackson Prairie storage facility in Lewis County, WA. This will provide Jackson Prairie with a backup recycle well.
- National Fuel received authorization for its Line Q, QP, and Queen Storage Facility Project, which involves amending Commission authorizations associated with the abandonment and sale of these facilities located in Forest and Warren Counties, PA.
- Magnum Gas Storage received an order partially vacating its certificate approving the construction of four gas storage caverns in Millard, Juab, and Utah Counties, UT. The order vacates the authorizations for two of those caverns.
- Guardian Pipeline requests authorization for its Graymont Western Lime Interconnect Project, which consists of a new delivery point connecting Guardian to Graymont, an end-user in Fond du Lac County, WI. The interconnect will have a delivery capacity of 5 MMcf/d with an expansion potential of up to 13.2 MMcf/d.
- Dakota Natural Gas requests a service area determination within which DNG may, without further Commission authorization, enlarge or expand its natural gas distribution facilities and operations for the purpose of providing natural gas service to Traill County and the cities of Hillsboro and Mayville, ND.
- Gulf South requests authorization for its Valentine Chemicals Interconnect Project, including establishing a new delivery point to deliver up to 9 MMcf/d of natural gas to Valentine Chemicals in Lafourche Parish, LA. This delivery point will bypass the LDC, South Coast Gas.
- Kinetica Express requests authorization to abandon 66.8 miles of pipeline located onshore and in federal waters off the coast of Louisiana. The lines have not been used since March 2017.
- Equitrans requests authorization to abandon by sale or in place its 927 mile gathering system in PA and WV. Equitrans is looking for buyers of the system, as it wishes to exit the low pressure gathering business.
- Golden Pass LNG and Golden Pass Pipeline request to transfer the authorization to construct and operate certain facilities authorized under NGA Section 7 from Golden Pass Pipeline to Golden Pass LNG, which would then construct and operate those facilities under Section 3 as part of the authorized LNG export terminal.



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Natural Gas Activities in April 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			176	0	500
Proposed	0			0	0	0
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)	1	0.0	35.0			0
Certificated (Import/Export)	0	0.0	0.0			0
Proposed (Import/Export)	0	0.0	0.0			0

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Source: Staff Database

Natural Gas Activities through April 30, 2020 January through April 30, 2019

Status	No. of Projects	Storage Capacity (BCF)	Deliverability (MMcf/d)	Capacity (MMcf/d)	Miles of Pipeline	Compression (HP)
Pipeline						
Placed in Service	1			323.0	0.0	15,900
through April 30, 2019	4			3943.5	1.4	282,400
Certificated	16			2921.1	357.7	165,307
through April 30, 2019	12			9565.9	336.9	530,633
Storage						
Placed in Service	0	0.0	0.0			0
through April 30, 2019	0	0.0	0.0			0
Certificated	1	81.0	2836.0			0
through April 30, 2019	1	0.0	79.0			0
LNG (Import & Export)						
Placed in Service (Export)	5	3.4	1531.0			0
through April 30, 2019	2	10.1	1413.0			0
Certificated (Import/Export)	1	10.0	1020.0			0
through April 30, 2019	3	33.6	7565.0			0

Source: Staff Database



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Hydropower Highlights (nonfederal)

- Duke Energy Carolinas, LLC was issued an order raising the capacity of its East Fork Project No. 2698 from 23.973 to 25.848 MW. The project is located on the East Fork Tuckasegee River and Tanasee and Wolf Creeks in Jackson County, NC..

Hydropower Project Activities in April 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	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	1	1.875	0	0	0	0	1	1.875
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

Hydropower Project Activities Year to Date (through April 30, 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	3	9.835	0	0	0	0	3	9.835
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	3	2.221	0	0	0	0	3	2.221
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



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Electric Generation Highlights

- Sage Draw Wind LLC's 338.4 MW Sage Draw Wind Project in Lynn County, TX is online.
- Xcel Energy Inc's 200.0 MW Blazing Star Wind Farm in Lincoln County, MN is online.
- East Fork Wind Project LLC's 196.0 MW East Fork Wind Farm in Thomas County, KS is online. The power generated is sold to Brown Forman Corp. under long-term contract.
- Polaris Wind Energy LLC's 168.0 MW Polaris Wind Park in Gratiot County, MI is online.
- Jumbo Hill Wind Project LLC's 160.0 MW Barrow Ranch in Andrews County, TX is online.
- South Peak Wind LLC's 80.0 MW South Peak Wind Farm in Judith Basin County, MT is online. The power generated is sold to NorthWestern Energy under long-term contract.
- Gulf Power Co's 74.5 MW Blue Indigo Solar Energy Center in Jackson County, FL is online.
- Juwi Inc's 60.0 MW Palmer Solar Project in El Paso County, CO is online. The power generated is sold to Colorado Springs Utilities under long-term contract.
- Johnson Corner Solar I LLC's 20.0 MW LightSource BP Solar Farm in Stanton County, KS is online. The power generated is sold to Mid Kansas Electric Co LLC under long-term contract.
- Scottsburg Solar Array LLC's 7.5 MW Scottsburg Solar Park in Scott County, IN is online.
- Eagle Creek Hydro Power LLC's 9.0 MW Swinging Bridge Unit 3 in Orange County, NY is online.

New Generation In-Service (New Build and Expansion)

Primary Fuel Type	April 2020		January – April 2020 Cumulative		January – April 2019 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	21	3,964	44	3,866
Nuclear	0	0	0	0	1	155
Oil	0	0	0	0	6	38
Water	1	9	6	25	8	51
Wind	7	1,154	32	3,104	18	1,544
Biomass	0	0	2	11	1	17
Geothermal Steam	0	0	0	0	0	0
Solar	5	165	110	1,973	156	1,633
Waste Heat	0	0	0	0	0	0
Other *	0	0	5	5	18	0
Total	13	1,328	176	9,082	252	7,304

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	244.99	20.32%
Natural Gas	538.05	44.64%
Nuclear	104.98	8.71%
Oil	39.69	3.29%
Water	100.74	8.36%
Wind	109.41	9.08%
Biomass	15.90	1.32%
Geothermal Steam	3.88	0.32%
Solar	45.74	3.79%
Waste Heat	1.28	0.11%
Other	0.78	0.06%
Total	1,205.44	100.00%

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

Generation Capacity Additions and Retirements (May 2020 – April 2023)

From ABB Velocity Suite's Generating Unit Capacity Dataset

Primary Fuel Type	All Additions		High Probability Additions		Retirements	
	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)
Coal	1	77	0	0	55	16,428
Natural Gas	225	61,192	88	27,643	76	6,986
Nuclear	6	4,460	4	2,560	3	2,558
Oil	12	684	2	4	27	3,116
Water	228	13,120	92	1,910	9	7
Wind	482	88,625	161	27,116	2	249
Biomass	49	261	22	190	44	171
Geothermal Steam	15	540	4	213	10	35
Solar	2,901	110,214	705	24,083	0	0
Waste Heat	3	49	2	29	0	0
Other *	239	480	61	20	1	2
Total	4,161	279,702	1,141	83,768	227	29,552

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.



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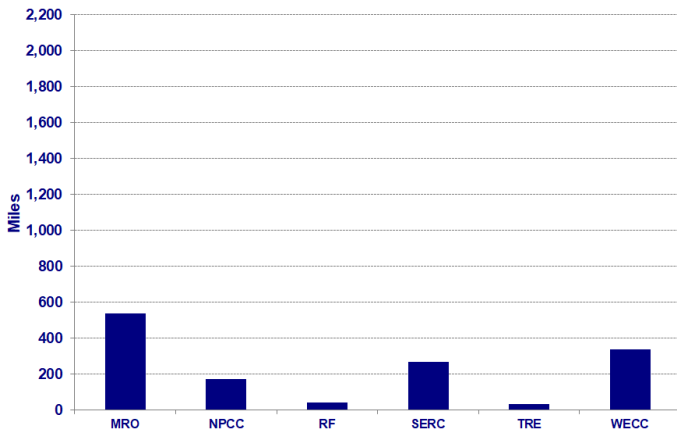
Electric Transmission Highlights

- Advanced Power has completed 14.6 mile, 345 kV Pleasant Valley - Long Mountain Transmission Project in NY.

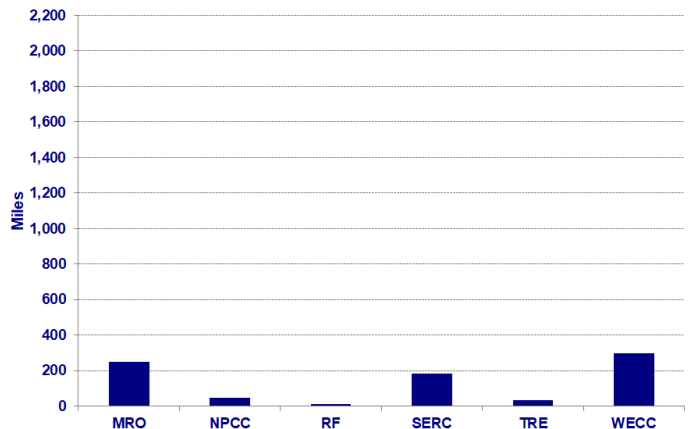
Voltage (kV)	Transmission Projects Completed				Proposed Transmission Projects In-Service by May 2022	
	April 2020	April 2019	January – April 2020 Cumulative	January – December 2019 Cumulative	High Probability of Completion	All
	Line Length (miles)					
≤230	0.0	71.0	37.6	296.5	347.7	546.1
345	14.6	0.0	14.6	604.5	224.0	594.4
500	0.0	0.0	0.0	7.7	251.4	251.4
Total U.S.	14.6	71.0	52.2	908.7	823.1	1,391.9

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

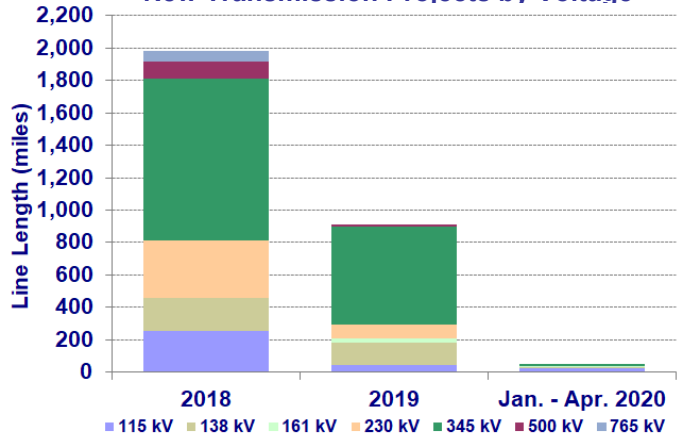
All Transmission Projects with a Proposed In-Service Date by May 2022



Transmission Projects with a High Probability of being completed by May 2022



New Transmission Projects by Voltage



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

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