



## Office of Energy Projects Energy Infrastructure Update For June 2020

### Natural Gas Highlights

- Guardian Pipeline received 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.
- Portland Natural Gas received authorization for Phases II and III of its Westbrook Xpress Project, including a new 15,900 HP compressor and other modifications at its Westbrook Compressor Station in Cumberland County, ME. The Project will increase the certificated transportation capacity by a total of 131 MMcf/d.
- ANR received authorization for its Grand Chenier Xpress Project, including equipment installation and modifications at three compressor stations and a meter station in Acadia, Jefferson Davis, and Cameron Parishes, LA. The project would add 38,840 HP of compression and provide 400 MMcf/d of firm transportation for Venture Global Calcasieu Pass LNG.
- Texas Eastern received authorization for its Cameron Extension Project, including a 30,000 HP compressor, metering and regulating stations, and related facilities in Calcasieu, Cameron, Beauregard, and Jefferson Davis Counties, LA, that would provide up to 750 MMcf/d of firm capacity for the Venture Global Calcasieu Pass LNG terminal.
- Gulf South received authorization for its Lamar County Expansion Project, including 3.4 miles of pipeline and a 5,000 HP compressor in Lamar and Forrest County, MS. The project would provide up to 200 MMcf/d of firm transportation service to a proposed 550 MW generation facility.
- Mountain Valley received authorization for its Southgate Project, including 73 miles of pipeline, a new compressor station, and other appurtenances that would provide 375 MMcf/d of firm transportation from Pittsylvania County, VA to Alamance County, NC.
- Golden Pass Pipeline withdrew its application for an amendment to its certificate in order to relocate an interconnect, 3-miles of pipeline looping, a compressor station, and add 15,910 HP of compression in Calcasieu Parish, LA.
- Gulf South received authorization for its Valentine Chemicals Interconnect Project, which includes a delivery point to supply up to 9 MMcf/d of natural gas to Valentine Chemicals in Lafourche Parish, LA. This delivery point would bypass the LDC, South Coast Gas.
- ANR received authorization for its Winfield Storage Field Lateral Abandonment Project, which involves removing or abandoning in place sections of lateral Line 9780 within the Winfield Storage Field in Mecosta and Montcalm counties, MI. These sections serve injection/withdrawal wells that were abandoned in 2018.
- Magnolia LNG received authorization to increase the previously authorized total LNG production capacity from 1.08 Bcf/d to 1.18 Bcf/d
- Texas Eastern requests authorization for its Bailey East Mine Panel 12J Project, which includes excavating and elevating segments of four different pipelines in Marshall County, WV, in order to maintain safe operations during planned longwall mining by CONSOL Energy.
- Columbia Gas requests authorization to purchase Central Kentucky Transmission's 25% interest in the KA-1 North Facilities, associated capacity and certain appurtenances, all located in Fayette and Madison Counties, KY. Central Kentucky requests authorization to abandon these assets by sale to Columbia.
- Eastern Shore requests authorization to replace two 1.6-mile pipeline segments in New Castle County, DE, with two larger diameter pipeline segments in order to accommodate a Delaware Department of Transportation project and provide 3.5 MMcf/d of additional firm transportation capacity for a customer.
- Northern Natural requests authorization for its 2021 Auburn A-line Abandonment and Capacity Replacement Project, which includes abandoning in place its Auburn A-line in Lancaster, Otoe, Johnson, and Nemaha counties, NE, replacing it with 4.3 miles of new pipeline, and building a launcher and regulating station. No additional transportation capacity will be created by the project.
- Dominion Energy requests authorization for its Leidy North Project, which would increase firm transportation capacity by 10 MMcf/d from Clinton County, PA to the interconnection with Iroquois in Montgomery, NY identified through updates to its hydraulic flow models at certain compressor stations.
- Rio Bravo Pipeline requests an amendment to its certificate authorizing it to modify the project, including reducing the number of compressor stations, eliminating some metering facilities, changing the maximum allowable pressure, and increasing the diameter of a pipeline. These modifications, in Kleberg, Kenedy, and Cameron Counties, TX, would not affect the overall transportation capacity of the project.
- Enable Gas requests authorization for its Merge Arkoma, SCOOP & STACK Project, including 1.5 miles of new pipeline, a new 11,110 HP compressor, and other appurtenances and modifications in Clark and Jackson Counties,



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AR, Richland Parish, LA, and Grady and McClain Counties, OK. The project would provide up to 100 MMcf/d of firm transportation capacity from OK and TX to points east.

- El Paso Natural Gas requests authorization for its Carlsbad South Project, including 17.1 miles of looping pipeline in Eddy County, NM, and modifications at a compressor station in Lea County, NM. The project would provide 159 MMcf/d of firm transportation from the Permian Basin into the Keystone Pool in West Texas.
- ANR Pipeline requests authorization for its Alberta XPress Project, including a 15,900 HP greenfield compressor station that would add 165 MMcf/d of incremental mainline capacity on ANR's Southeast Mainline 501 and 501 Loop pipelines in Evangeline Parish, LA.
- Great Lakes Transmission requests authorization to abandon firm capacity by a lease agreement with ANR in points extending from Emerson, Manitoba to Fortune Lake, Wisconsin. This will allow ANR to implement the Alberta XPress Project and provide service without the need to install duplicate infrastructure.
- Tuscarora Gas requests authorization for its Tuscarora Xpress Project, including 780 HP of new compression and a 15 MMcf/d increase in the certificated capacity from Malin, OR to the Wadsworth Compressor Station in Washoe County, NV.
- Northern Natural requests authorization for its South Sioux City to Sioux Falls A-line Replacement Project, including abandoning in place 79 miles of pipeline and replacing it with 87 miles of pipeline in Dakota and Dixon Counties, NE, and Lincoln and Union Counties, SD. No additional capacity will be created by the project.
- Southern Star Central Gas requests authorization to abandon by sale to Fort Cobb Fuel Authority, 388 domestic meters in Oklahoma, as part of its effort to divest from farm tap meters in order to more effectively manage its system. There will be no change to Southern Star's certificated capacity and no impact on its firm transportation shippers.
- Columbia Gas requests authorization for its Mainline 300 Replacement Project, which consists of abandoning and replacing 760 feet of its Mainline 300 in Menifee and Montgomery Counties, KY in order to meet DOT requirements.
- Tennessee Gas requests authorization for its East 300 Upgrade Project, including 31,607 HP of new compression at existing compressor stations in Susquehanna County, PA and Sussex County, NJ, and a 19,000 HP compressor at a new compressor station in Passaic County, NJ. The project will allow Tennessee to provide up to 115 MMBtu/day of firm transportation service for Consolidated Edison.
- Spire Storage requests authorization for its Compression at Clear Creek Project, including installing a new compressor and related facilities. The project will have no impact on the certificated parameters of the Clear Creek Storage, located in Uinta County, WY.
- National Fuel requests authorization for its Bennington Storage Field Well 621-I Abandonment Project, which includes abandoning a storage well and associated well line at its Bennington Storage Field in Erie County, NY.



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### Natural Gas Activities in June 2020

Status	No. of Projects	Storage Capacity (Bcf)	Deliverability (MMcf/d)	Capacity (MMcf/d)	Miles of Pipeline	Compression (HP)
<b>Pipeline</b>						
Placed in Service	0			0	0	0
Certificated	5			1,856	413	118,655
Proposed	9			568	113	78,277
<b>Storage</b>						
Placed in Service	0	0	0			0
Certificated	0	0	0			0
Proposed	0	0	0			0
<b>LNG (Import &amp; Export)</b>						
Placed in Service (Export)	0	0	0			0
Certificated (Import/Export)	1	0	0			0
Proposed (Import/Export)	0	0	0			0

Source: Staff Database

### Natural Gas Activities through June 30, 2020 January through June 30, 2019

Status	No. of Projects	Storage Capacity (BCF)	Deliverability (MMcf/d)	Capacity (MMcf/d)	Miles of Pipeline	Compression (HP)
<b>Pipeline</b>						
Placed in Service	4			937.3	61.8	31,776
through June 30, 2019	5			4101.0	1.4	282,400
Certificated	24			4,887.1	772.3	288,812
through June 30, 2019	14			9988.4	393.6	584,535
<b>Storage</b>						
Placed in Service	0	0.0	0.0			0
through June 30, 2019	0	0.0	0.0			0
Certificated	2	81.0	2,836.0			11,150
through June 30, 2019	2	1.0	79.0			0
<b>LNG (Import &amp; Export)</b>						
Placed in Service (Export)	5	3.4	1,531.0			0
through June 30, 2019	2	10.1	1413.0			0
Certificated (Import/Export)	3	20.4	1,022.6			0
through June 30, 2019	4	33.6	8185.0			0

Source: Staff Database



## Office of Energy Projects Energy Infrastructure Update For June 2020

### Hydropower Highlights (nonfederal)

- East Texas Electric Cooperative, Inc. placed in service the 24.0 MW Lake Livingston Hydroelectric Project No. 12632. The project is located on the Trinity River, in San Jacinto, Polk, Trinity, and Walker Counties, TX.
- FFP Project 101, LLC filed a license application for the 1,200 MW Goldendale Pumped Storage Project No. 14861. The project would be located off-stream of the Columbia River in Klickitat County, WA and Sherman County, OR.
- Georgia Power Company filed an application to increase the capacity of its North Georgia Project No. 2354 from 168.400 to 173.200 MW. The project is located on Tallulah, Chattooga, and Tugaloo Rivers in Rabun, Habersham, and Stephens Counties, GA, and Oconee County, SC.
- Scott's Mill Hydro, LLC filed an exemption application for the 4.500 MW Scott's Mill Hydroelectric Project No. 14867. The project is located on the James River in Bedford and Amherst Counties, VA.

#### Hydropower Project Activities in June 2020

Status	Conventional		Pumped Storage		Hydrokinetic		Total No. of Projects	Total Capacity (MW)
	No.	Capacity (MW)	No.	Capacity (MW)	No.	Capacity (MW)		
<b>Filed</b>								
License	0	0	1	1,200.000	0	0	1	1,200.000
10-MW Exemption	1	4.500	0	0	0	0	1	4.500
Capacity Amendment	1	4.800	0	0	0	0	1	4.800
Conduit Exemption	0	0	0	0	0	0	0	0
<b>Issued</b>								
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
<b>Placed in Service</b>								
License	1	24.0000	0	0	0	0	1	24.000
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 June 30, 2020)

Status	Conventional		Pumped Storage		Hydrokinetic		Total No. of Projects	Total Capacity (MW)
	No.	Capacity (MW)	No.	Capacity (MW)	No.	Capacity (MW)		
<b>Filed</b>								
License	0	0	1	1,200.000	0	0	1	1,200.000
10-MW Exemption	1	4.500	0	0	0	0	1	4.500
Capacity Amendment	5	19.585	0	0	0	0	5	19.585
Conduit Exemption	0	0	0	0	0	0	0	0



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Status	Conventional		Pumped Storage		Hydrokinetic		Total No. of Projects	Total Capacity (MW)
	No.	Capacity (MW)	No.	Capacity (MW)	No.	Capacity (MW)		
<b>Issued</b>								
License	0	0	0	0	0	0	0	0
10-MW Exemption	1	0.002	0	0	0	0	1	0.002
Capacity Amendment	5	10.481	0	0	0	0	5	10.481
Conduit Exemption	0	0	0	0	0	0	0	0
<b>Placed in Service</b>								
License	1	24.000	0	0	0	0	1	24.000
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

- Southern Power Co's 200.1 MW Reading Wind Project in Lyon County, KS is online.
- Heart of Texas Wind LLC's 179.8 MW RTS 2 Wind Project in McCulloch County, TX is online.
- Prospero Energy Project LLC's 300.0 MW Prospero Solar Project in Andrews County, TX is online. The power generated is sold to Shell Energy North America US LP under long-term contract.
- Wagyu Solar LLC's 121.9 MW Wagyu Solar Project in Brazoria County, TX is online.
- Harmony Florida Solar LLC's 74.5 MW Harmony Florida Solar Project in Osceola County, FL is online.
- Taylor Creek Solar LLC's 74.5 MW Taylor Creek Solar Project in Orange County, FL is online.
- CS Energy LLC's 14.5 MW Brooks County Solar Project in Brooks County, TX is online.
- CS Energy LLC's 10.9 MW Menard County Solar Project in Menard County, TX is online.
- CS Energy LLC's 7.3 MW McLennan County Solar Project in McLennan County, TX is online.

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

Primary Fuel Type	June 2020		January – June 2020 Cumulative		January – June 2019 Cumulative	
	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)
Coal	0	0	3	20	2	45
Natural Gas	0	0	28	5,869	80	7,510
Nuclear	0	0	0	0	1	155
Oil	0	0	0	0	22	83
Water	3	24	9	49	16	123
Wind	2	380	40	4,040	26	2,265
Biomass	0	0	2	11	4	60
Geothermal Steam	0	0	0	0	0	0
Solar	10	609	177	3,759	270	2,197
Waste Heat	0	0	0	0	0	0
Other *	1	0	9	5	25	0
<b>Total</b>	<b>16</b>	<b>1,013</b>	<b>268</b>	<b>13,753</b>	<b>446</b>	<b>12,438</b>

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	244.13	20.19%
Natural Gas	539.71	44.63%
Nuclear	104.98	8.68%
Oil	39.73	3.29%
Water	100.77	8.33%
Wind	110.35	9.13%
Biomass	15.89	1.31%
Geothermal Steam	3.88	0.32%
Solar	47.75	3.95%
Waste Heat	1.28	0.11%
Other	0.78	0.06%
<b>Total</b>	<b>1,209.25</b>	<b>100.00%</b>

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 (July 2020 – June 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	66	22,398
Natural Gas	223	57,430	87	26,913	76	7,016
Nuclear	6	4,460	4	2,560	3	2,558
Oil	15	685	2	4	37	4,363
Water	224	13,161	99	2,063	9	7
Wind	456	87,819	154	27,518	9	292
Biomass	44	257	23	191	17	78
Geothermal Steam	14	512	4	213	10	35
Solar	2,982	118,262	733	26,748	0	0
Waste Heat	3	49	2	29	0	0
Other *	288	475	73	15	1	2
<b>Total</b>	<b>4,256</b>	<b>283,187</b>	<b>1,181</b>	<b>86,254</b>	<b>228</b>	<b>36,749</b>

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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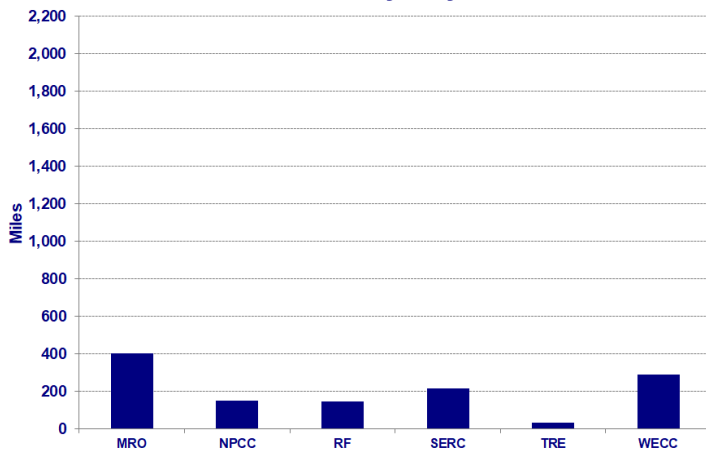
## Electric Transmission Highlights

- Xcel Energy has completed 107.0 mile, 345 kV TUCO - Yoakum Transmission Project in TX. It is part of the TUCO - China Draw Interstate project connecting TX to NM.

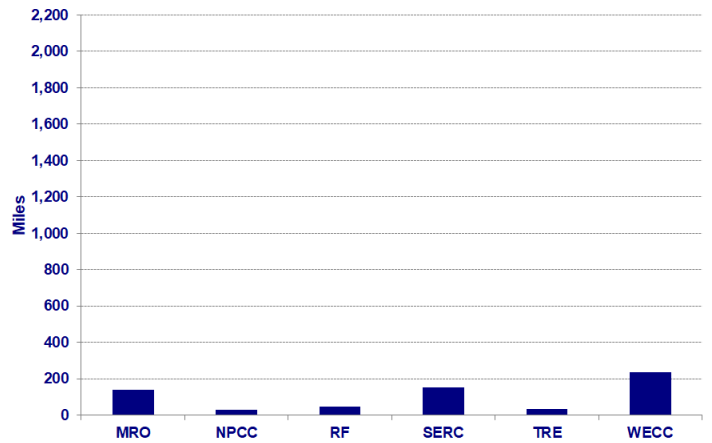
Voltage (kV)	Transmission Projects Completed				Proposed Transmission Projects In-Service by July 2022	
	June 2020	June 2019	January – June 2020 Cumulative	January – December 2019 Cumulative	High Probability of Completion	All
	Line Length (miles)					
≤230	0.0	4.7	39.0	299.0	335.7	487.5
345	107.0	125.0	121.6	604.5	117.0	560.4
500	0.0	0.0	0.0	7.7	191.4	191.4
<b>Total U.S.</b>	<b>0.0</b>	<b>129.7</b>	<b>160.6</b>	<b>911.2</b>	<b>644.1</b>	<b>1,239.3</b>

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

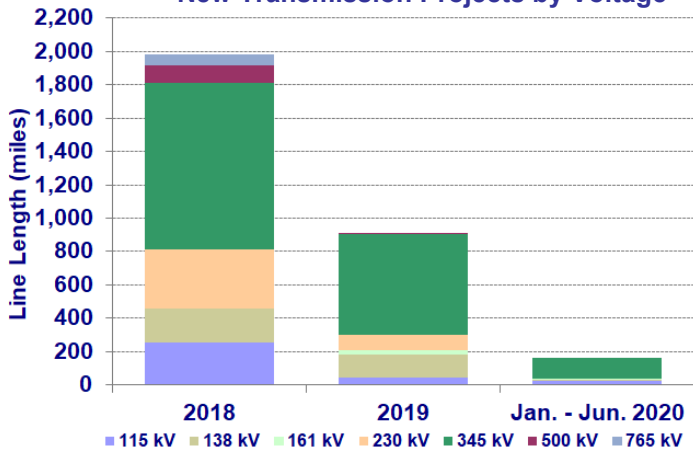
**All Transmission Projects with a Proposed In-Service Date by July 2022**



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