



Office of Energy Projects Energy Infrastructure Update For September 2020

Natural Gas Highlights

- Columbia Gas received authorization to place in service its Buckeye Xpress Project, which includes 66 miles of 36-inch replacement pipeline to modernize facilities and add 275 MMcf/d of additional transportation capacity in Vinton, Jackson, Gallia and Laurence Counties, OH and Wayne County, WV.
- Enable Gas received authorization for its Roland Interconnect Project, which includes the 1,080-foot Line OT-38 and the new Roland Interconnect in Sequoyah County, OK. The project will provide natural gas transportation service to the Roland Development Authority.
- Kinetica Express received authorization to abandon 66.8 miles of pipeline located onshore and in federal waters Offshore Louisiana. These pipelines have not been used since March 2017.
- National Fuel received authorization to remove the "spare" designation from 1,775 HP of compression at its Mercer Compressor Station in Mercer County, PA in order to re-direct a portion of a subscribing shipper's firm transportation capacity to a different primary delivery point.
- Kinder Morgan received authorization for its Acadiana Project, which includes construction of compression and meter station facilities in Acadia and Evangeline Parishes, LA. The project would provide an additional 894 MMcf/d of firm transportation service to the Sabine Pass LNG Export Terminal in Cameron Parish, LA.
- Columbia Gulf received authorization for its Louisiana XPress Project, which consists of three new compressor stations and modifications to an existing compressor station. The project would add 493 MMcf/d of incremental transportation capacity from Columbia Gulf's Mainline Pool to a delivery point with Kinder Morgan Louisiana Pipeline in Evangeline County, LA.
- National Fuel received authorization to use its Q 12-inch Pipeline at the Allegheny River Crossing in Warren County, PA as a FERC jurisdictional facility in the event that the 6-inch line at the same crossing needs to be taken out of service for maintenance.
- Texas Eastern received authorization to abandon 3.5 miles of its Line 40-G-1 located in federal waters Offshore Louisiana. The abandonment will eliminate maintenance expenses for facilities that are no longer required.
- Columbia Gas received 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 received authorization to abandon these assets by sale to Columbia.
- Texas Eastern received authorization for its Appalachia to Market Project, including .8 miles of new pipeline, two pipeline crossovers, and related appurtenances in Westmoreland, Berks, and Fayette counties, PA, in order to provide up to 18 MMcf/d of firm transportation service for UGI.
- Black Marlin Pipeline received authorization to abandon approximately 24 miles of 16-inch pipeline located in federal waters Offshore Texas. This line has not been used in over a year.
- National Fuel received 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.
- Saltville Gas Storage received authorization to reduce its certificated working gas capacity to 5.0 Bcf from 5.4 Bcf. The reduction in working gas capacity will not impact Saltville's ability to meet its existing contractual obligations.
- Columbia Gas received authorization to abandon four injection/withdrawal wells and associated pipelines and appurtenances at its Brinker, Donegal and Ripley storage fields in Columbiana County, OH, Washington County, PA, and Jackson County, WV, respectively. The abandonment would not impact customers or storage operations.
- National Fuel received authorization for its Boone Mountain Storage Field Well 4809 Abandonment Project, involving the abandonment of one storage well and an associated well line at its Boone Mountain Storage Field in Elk County, PA. The project would not affect service to customers.
- Bluewater Gas received authorization to construct a new horizontal well at the Kimball 27 storage facility in St. Clair County, MI. The project would enhance injection and deliverability and not affect the facility's certificated parameters.
- Northwest Pipeline requests authorization to increase the Maximum Allowable Operating Pressure of its Othello Lateral in Adams County, WA, in order to match the MAOP of its Othello Loop, allowing these lines to operate at a consistent pressure and provide greater operational flexibility. The change would not affect capacity or deliverability.
- Columbia Gas requests authorization for its East Lateral Express Project, including construction of 8-miles of pipeline, two new compressors with 46,940 HP of compression, a new meter station and related facilities in St. Mary, Lafourche, Jefferson, and Plaquemine parishes, LA. The project would create 183 MMcf/d of incremental transportation capacity from Columbia Gulf's East Lateral to a delivery point with Gator Express.



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- Stingray requests authorization to abandon by sale to Triton Gathering its WC 509 System in the Gulf of Mexico, Offshore Louisiana, and a determination that the acquired system would be non-jurisdictional gathering facilities.
- Stingray pipeline requests authorization to abandon by sale to Triton Gathering its Mainline Facilities, consisting of 103 miles of pipeline, related compression facilities, an offshore platform, and other facilities in Cameron Parish and Offshore Louisiana.
- Columbia Gas requests authorization for its Holmes and Wayne Wells Abandonment Project, including abandoning four injection/withdrawal wells and associated pipelines and appurtenances at its Holmes and Wayne Storage Fields in Holmes and Wayne counties, OH. The project would not impact customers or operations.
- Columbia Gas requests authorization for its Weaver 12611 New Well Project, including constructing and operating one new injection/withdrawal storage well and related pipelines and appurtenances in Richland County, OH. The Project would increase efficiency, safety, and long-term reliability of the storage system, and not change the field's certificated parameters.
- Columbia Gas requests authorization for its Lucas 12617 New Well Project, which includes a new injection/withdrawal storage well and related pipelines and appurtenances at its Lucas Storage Field in Richland County, OH.
- Equitrans requests authorization to sell base gas that is no longer needed at its Mobley Storage Field in Wetzel County, PA.
- Freeport LNG requests an amendment to its certificate to reflect the maximum production capacity on an annual rather than a daily basis for Trains 1-3 at its liquefaction project in Quintana Island, TX.



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Natural Gas Activities in September 2020

Status	No. of Projects	Storage Capacity (Bcf)	Deliverability (MMcf/d)	Capacity (MMcf/d)	Miles of Pipeline	Compression (HP)
Pipeline						
Placed in Service	1			275	66	0
Certificated	4			1,405	1	236,520
Proposed	1			183	8	46,940
Storage						
Placed in Service	0	0	0			0
Certificated	0	0	0			0
Proposed	1	0	8			0
LNG (Import & Export)						
Placed in Service (Export)	0	0	0			0
Certificated (Import/Export)	0	0	0			0
Proposed (Import/Export)	0	0	0			0

Source: Staff Database

Natural Gas Activities through September 30, 2020

January through September 30, 2019

Status	No. of Projects	Storage Capacity (BCF)	Deliverability (MMcf/d)	Capacity (MMcf/d)	Miles of Pipeline	Compression (HP)
Pipeline						
Placed in Service	5			1,212.3	128.0	31,776
through September 30, 2019	9			4,785.0	16.6	323,770
Certificated	36			7,596.6	838.2	703,399
through September 30, 2019	25			15,190.9	525.2	636,903
Storage						
Placed in Service	0	0.0	0.0			0
through September 30, 2019	0	0.0	0.0			0
Certificated	2	81.0	2,836.0			11,150
through September 30, 2019	3	1.0	429.0			10,000
LNG (Import & Export)						
Placed in Service (Export)	7	6.8	2,314.0			0
through September 30, 2019	5	23.7	2,874.0			0
Certificated (Import/Export)	3	20.4	1,022.6			0
through September 30, 2019	7	51.8	13,447.0			0

Source: Staff Database



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Hydropower Highlights (nonfederal)

- New England Hydropower Corporation, LLC, Rhode Island was issued an exemption for the 0.420 MW Albion Dam Hydroelectric Project No. 14633. The project is located on the Blackstone River, near the towns of Cumberland and Lincoln, Providence County, RI.
- Duke Energy Carolinas, LLC was issued an order increasing the capacity of its Catawba-Wataree Project No. 2232 from 805.302 to 810.252 MW. The project is located on the Catawba and Wataree Rivers in Burke, McDowell, Caldwell, Catawba, Alexander, Iredell, Mecklenburg, Lincoln, and Gaston Counties, NC, and York, Lancaster, Chester, Fairfield, and Kershaw Counties, SC.

Hydropower Project Activities in September 2020

Status	Conventional		Pumped Storage		Hydrokinetic		Total No. of Projects	Total Capacity (MW)
	No.	Capacity (MW)	No.	Capacity (MW)	No.	Capacity (MW)		
Filed								
License	1	0.140	0	0	0	0	1	0.140
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	1	0.420	0	0	0	0	1	0.420
Capacity Amendment	1	4.950	0	0	0	0	1	4.950
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 September 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	1	0.140	1	1,200.000	0	0	2	1,200.140
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
Issued								
License	0	0	0	0	0	0	0	0
10-MW Exemption	2	0.422	0	0	0	0	2	0.422
Capacity Amendment	6	15.431	0	0	0	0	6	15.431
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)		
Placed in Service								
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

- Bitter Ridge Wind Farm LLC's 146.6 MW Bitter Ridge Wind Farm in Jay County, IN is online. The power generated is sold to Constellation Energy Group under long-term contract.
- Fuerza Eolica de San Matias S de RL de CV's 30.0 MW San Matias Wind Farm in Baja CA is online.
- Dominion Virginia Power's 12.0 MW Coastal Virginia Offshore Wind is online.
- Monroe Solar Farm LLC's 13.1 MW Monroe Solar Farm in Middlesex County, NJ is online.
- Strata Solar Development LLC's 12.0 MW Danville Solar Farm in Pittsylvania County, VA is online.
- Allis Medina Solar LLC's 7.4 MW Allis Solar Facility in Orleans County, NY is online. The power generated is sold to National Grid USA under long-term contract.

New Generation In-Service (New Build and Expansion)

Primary Fuel Type	September 2020		January – September 2020 Cumulative		January – September 2019 Cumulative	
	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)
Coal	0	0	5	20	3	62
Natural Gas	0	0	35	6039	99	7832
Nuclear	0	0	0	0	1	155
Oil	0	0	1	0	25	88
Water	0	0	12	68	27	143
Wind	2	159	56	5411	32	3865
Biomass	0	0	3	13	17	68
Geothermal Steam	0	0	0	0	0	0
Solar	5	36	270	5330	408	3254
Waste Heat	0	0	0	0	1	58
Other *	0	0	20	5	46	0
Total	7	195	402	16,886	659	15,525

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	242.04	20.03%
Natural Gas	538.37	44.54%
Nuclear	104.98	8.69%
Oil	39.74	3.29%
Water	100.89	8.35%
Wind	111.68	9.24%
Biomass	15.64	1.29%
Geothermal Steam	3.88	0.32%
Solar	49.35	4.08%
Waste Heat	1.29	0.11%
Other	0.78	0.06%
Total	1,208.62	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 (October 2020 – September 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	67	22,346
Natural Gas	218	54,502	94	26,288	74	5,416
Nuclear	4	4,100	2	2,200	7	7,190
Oil	16	683	7	6	44	5,029
Water	217	12,127	94	1,039	10	9
Wind	441	86,705	155	27,616	9	292
Biomass	42	252	22	189	14	73
Geothermal Steam	14	512	4	213	10	35
Solar	3,048	127,244	762	32,801	0	0
Waste Heat	3	49	2	29	0	0
Other *	346	478	85	11	1	2
Total	4,350	286,729	1,227	90,392	236	40,392

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

- Entergy Louisiana has completed the 5.5-mile, 230 kV Nelson – Menena Transmission Project in LA.

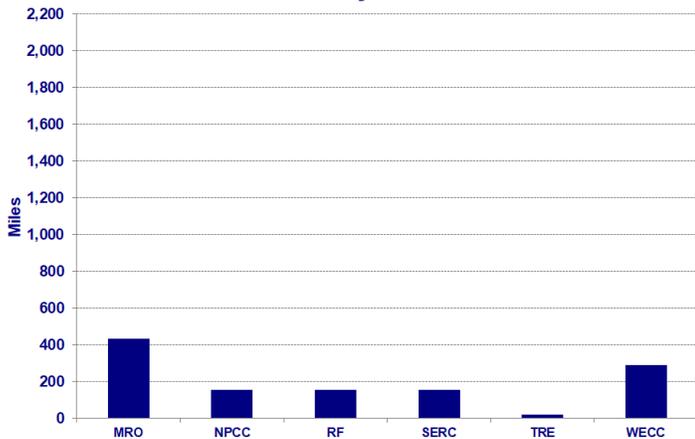


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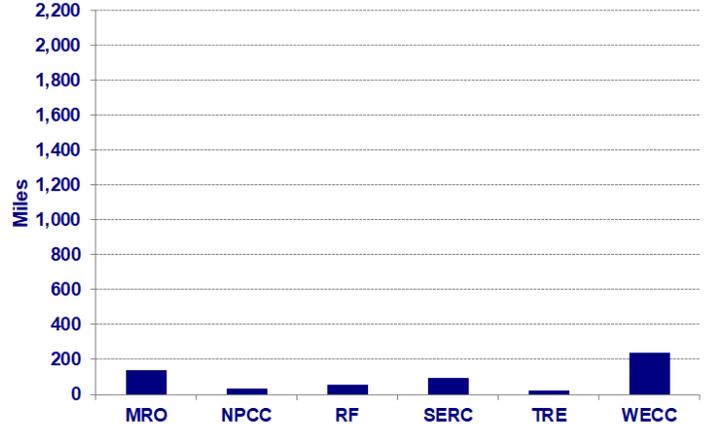
Voltage (kV)	Transmission Projects Completed				Proposed Transmission Projects In-Service by October 2022	
	September 2020	September 2019	January – September 2020 Cumulative	January – December 2019 Cumulative	High Probability of Completion	All
	Line Length (miles)					
≤230	5.5	0.0	57.5	303.4	271.2	454.2
345	0.0	0.0	152.6	604.5	117.0	560.4
500	0.0	0.0	60.0	7.7	191.4	191.4
Total U.S.	5.5	0.0	270.1	915.6	579.6	1,206.0

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

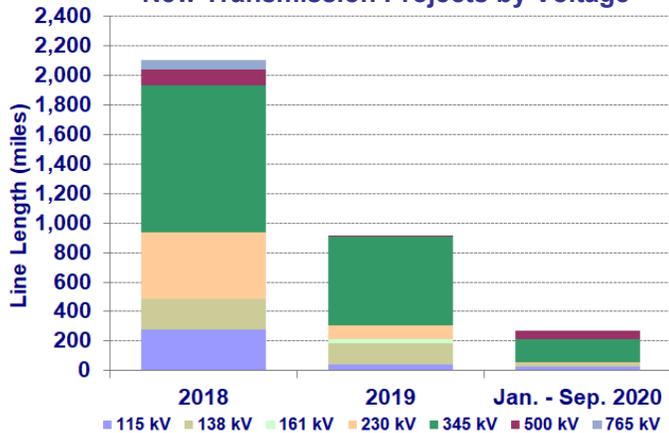
All Transmission Projects with a Proposed In-Service Date by October 2022



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



New Transmission Projects by Voltage



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