A number of gas-fired power projects make progress in the fall of 2016

Entergy Louisiana seeking approval of 994-MW plant

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A couple of nearly-completed gas-fired projects in Texas backed by Exelon Corp. (NYSE: EXC) highlight a round of recent developments for gas-fired power projects in the U.S. and Canada.

Here, based on Generation Hub reporting, are recent gas project highlights: The Michigan Department of Environmental Quality is taking comments until Dec. 7 on a proposed air permit for a new natural gas-fired combined-cycle electric power plant for Indeck Niles LLC. The 1,000-MW plant would be located at 2200 Progressive Drive in Niles, Michigan. The site is currently a vacant railroad yard. The plant will feature state of the art turbine models with the latest technologies (“H” and “J” classes), which utilize higher firing temperatures (up to 1,620 degrees F) to achieve optimal efficiency of the units. Each combustion turbine generator (CTG) is to be connected to a HRSG, creating a single emission unit, which is referred to as a CTG/HRSG train. Two combined-cycle natural gas-fired CTGs with HRSGs will be laid out in a 2x1 configuration with a steam turbine generator. Duke Energy (NYSE: DUK) reported in its Nov. 4 quarterly Form 10-Q statement that it plans to begin construction in early 2017 on its Western Carolinas Modernization Plan, which is a gas-fired replacement for the coal-fired Asheville power plant in western North Carolina. In November 2015, Duke Energy Progress announced a revised Western Carolinas Modernization Plan with an estimated cost of $1.1 billion. The revised plan includes retirement of the existing Asheville coal-fired plant, the construction of two 280-MW combined-cycle natural gas plants having dual fuel capability, with the option to build a third natural gas simple cycle unit in 2023 based upon the outcome of initiatives to reduce the region's power demand. Entergy Louisiana LLC applied Nov. 2 at the Louisiana Public Service Commission for approval of the Lake Charles Power Station (LCPS), a nominal 994-MW combined-cycle gas turbine facility in Westlake, Louisiana. The Entergy Corp. (NYSE: ETR) subsidiary is asking for certication that the public convenience and necessity would be served by construction and deployment of LCPS. Entergy Louisiana (ELL) said it has a substantial overall long-term need for base load and core load-following generation capacity. This need persists notwithstanding the completion of the Ninemile 6 CCGT facility, the acquisition of the gas-fired Union Power Station Power Blocks 3 and 4, and the anticipated construction of the proposed St. Charles Power Station. NRG NewGen LLC has proposed a natural gas-fired generating facility located in Hunterdon County, New Jersey, said a November 2016 study on the project from PJM Interconnection. The installed facilities will have a total capability of 1,092.2 MW with 1,028 MW of this output being recognized by PJM as capacity. The proposed in-service date for this project is in June 2020. This study does not imply a Jersey Central Power & Light commitment to this in-service date. Filed Nov. 1 at the Public Utility Commission of Texas was a Standard Generation Interconnection Agreement between Oncor Electric Delivery Co. LLC and the developer of the Van Alstyne Energy Center. The Van Alstyne Energy Center project would have a Point of Interconnection located in Grayson County, Texas, near Oncor's Ballard Road Switching Station in the Anna-Valley 345-kV transmission line section. The project will include three General Electric 186-MW, gas-fired combustion turbines, model 7FA.04. The project's scheduled commercial operation date under this agreement is June 1, 2018. Colorado Bend II Power LLC, an Exelon affiliate with a nearly-completed, 1,230-MW project in Texas, on Nov. 1 filed with the Federal Energy Regulatory Commission a notice of self-certification as an exempt wholesale generator. The Colorado Bend II project is located in Wharton County, Texas. The facility will be interconnected to the transmission system owned by Centerpoint Energy Houston Electric LLC and located within the footprint of the Electric Reliability Council of Texas. It is currently
anticipated that the production of test power will start in December 2016 and commercial operation is expected in the second quarter of 2017. Exelon’s Wolf Hollow II Power LLC, which is building a 1,231-MW project in Texas, on Nov. 1 filed with the Federal Energy Regulatory Commission a notice of self-certification as an exempt wholesale generator. The company will own and operate a facility located in Hood County, Texas. The facility will be interconnected to the transmission system owned by Oncor Electric Delivery Co. and will be located within the footprint of the Electric Reliability Council of Texas. It is currently anticipated that the production of test power will start in December 2016 and commercial operation is expected in the second quarter of 2017. Stanton Energy Reliability Center LLC applied Oct. 26 at the California Energy Commission for approval to construct, own, and operate a hybrid electrical generating and storage facility in Orange County, California. The Stanton Energy Reliability Center (SERC) will consist of two General Electric (GE) LM6000-based EGTs. This is the LM6000 PC Hybrid EGT jointly developed by General Electric International and Wellhead Power Solutions. The EGT combines a combustion gas turbine with an integrated battery storage component operated by a proprietary software system. Each EGT will consist of a GE LM6000 PC natural gas-fired, simple-cycle combustion turbine, a clutch to provide operational flexibility as a synchronous condenser, and an integrated 10-MW GE Battery Energy Storage System. In total, SERC will provide 98 MW (nominal) of EGT capacity. Officials from across Pennsylvania joined Panda Power Funds on Oct. 27 in commissioning the 829-MW Panda Liberty combined-cycle facility in Bradford County, Pennsylvania. The commissioning of the state-of-the-art plant is part of a national trend away from coal-fired to natural gas-fueled generation, said Panda. ATCO Power Canada Ltd. filed an Oct. 24 application at the Alberta Utilities Commission for a delay in the construction completion deadline, from the prior August 2017 to a new target in December 2022, for the 400-MW ATCO Heartland Generating Station project. "Current economic and electricity market conditions have altered the ATCO Heartland Generating Station construction schedule and the project's timing has been modified to reflect a later start date," said the company. It said site preparation and construction are now due to begin in December 2018, with commercial operation expected in December 2022. Oregon Clean Energy LLC on Oct. 21 won an approval from the Federal Energy Regulatory Commission for its market-based rate tariff for a 960-MW project in Ohio. The applicant said in the Aug. 22 application that it anticipates that the commencement of commercial wholesale power activities by early 2017, and that the facility will be energized for testing purposes by late December 2016. It owns and will operate an approximately 960-MW natural gas-fired combined cycle generator located in Oregon, Lucas County, Ohio. The facility will be interconnected with American Transmission Systems Inc. (ATSI), whose transmission system is operated by the PJM Interconnection. The facility includes two 313-MW gas combustion turbines and one 336-MW steam turbine. The Canadian Environmental Assessment Agency said Oct. 19 that it must decide whether a federal environmental assessment is required for Saskatchewan Power's proposed Chinook Power Station Project, to be located approximately 11 kilometers northwest of Swift Current, Saskatchewan. To help inform this decision, the agency was seeking comments until Nov. 8 from the public on the project and its potential effects on the environment. The proposed Chinook Power Station is a nominal 350-MW combined cycle natural gas-fired facility. The project also includes a new underground water pipeline from the South Hill Reservoir located within the city limits of Swift Current. The Virginia State Corporation Commission is in the early stages of processing a Sept. 14 application from C4GT LLC for a certificate of public convenience and necessity to construct and operate a combined-cycle station, with a net nominal generating capacity of 1,060 MW, in Charles City County, Virginia. C4GT was formed for the purpose of developing, constructing, owning, and operating the facility. C4GT has retained NOVI Energy LLC to support and manage all development actions for this project. On Oct. 14, the Minnesota Pollution Control Agency went out for comment until Nov. 14 on a draft air permit that would allow the Minnesota Municipal Power Agency to build the 47-MW Chaska Distributed Generation project, to be located in Chaska, Minnesota. The plant would be composed of five Wartsila 20V34SG spark ignition, 9,341-MW, natural gas-fueled, 4-stroke lean burn reciprocating internal combustion engines (RICE). CPV Fairview LLC has proposed a natural gas-fired facility located in Cambria County, Pa., with a total capability of 1,050 MW, with 1,000 MW of this output being recognized as capacity, said a PJM Interconnection study on the project dated October 2016. The proposed in-service date for this project is in March 2020. This study does not imply a Pennsylvania Electric Penelec) commitment to this in-service date. This project, under queue #AA1-076, will interconnect with the Penelec transmission system along the Hunterstown-Conemaugh 500-kV line, approximately 11 miles from the Conemaugh substation. This project is located in western Pennsylvania. AA1-076 is a combined-cycle facility that consists of one 401-MW steam turbine and two 337-MW combustion turbines. Competitive Power Ventures has a project website for CPV Fairview that says in part: "We focus on natural gas-powered electric generating facilities like the CPV Fairview Energy Center, and renewable energy facilities, as a means of achieving a cleaner energy future."
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