Exhibit L

NORTH DAKOTA LEGISLATIVE MANAGEMENT

Minutes of the

ENERGY DEVELOPMENT AND TRANSMISSION COMMITTEE

Thursday, November 14, 2019
Harvest Room, State Capitol
Bismarck, North Dakota

Senator Rich Wardner, Chairman, called the meeting to order at 9:00 a.m.

Members present: Senators Rich Wardner, Brad Bekkedahl, Kathy Hogan, Ray Holmberg, Merrill Piepkorn, David S. Rust; Representatives Dick Anderson, Mike Brandenburg, Alisa Mitskog, Todd Porter, Don Vigesaa

Member absent: Representative Tracy Boe

Others present: Senator Joan Heckaman, New Rockford, and Representative Karen M. Rohr, Mandan, members of the Legislative Management
Senator Dale Patten, Watford City
See Appendix A for additional persons present.

It was moved by Senator Rust, seconded by Senator Holmberg, and carried on a voice vote that the minutes of the October 23, 2019, meeting be approved as distributed.

NATURAL GAS DEVELOPMENT AND STATUS

Gas Capture and Transmission

Chairman Wardner called on Mr. Lynn Helms, Director, Department of Mineral Resources, for testimony (Appendix B) regarding a status update on gas capture.

In response to a question from Representative Porter, Mr. Helms said generation zero refracks are tracked. He said an operator has developed a technology that would go into the generation two and three wells, cement a liner in place, and apply generation four technology. He said refracking technology is developing as rapidly as the new completion technology. He said because the technology will be applied to the 5,000 to 6,000 wells drilled in 2009, 2010, 2011, and 2012, a production increase from those wells is expected, as well as to the new wells being added.

In response to a question from Chairman Wardner, Mr. Helms said the developing refracking technology will increase both oil and gas production from the refracked wells. He said because those wells are depleted the wells have a higher gas-oil ratio than the new wells. He said a two-to-four fold oil production increase can be expected along with a four-to-eight fold gas production increase.

In response to a question from Representative Porter, Mr. Helms said in August 2019, it was estimated 33,000 barrels a day were self-curtailed by operators to reach 81 percent capture. He said the number was zero in July but in June it was 88,000 barrels a day to get above that 80 percent number. He said the estimate is solely on a statewide basis. He said an operator-by-operator basis estimate cannot be made because there is no data for such an estimation.

In response to a question from Senator Piepkorn, Mr. Helms said the most common tax incentive used is a sales tax exemption. He said, for example, in 2019 the Legislative Assembly enacted a sales tax exemption for petrochemical type facilities. He said natural gas gathering pipelines, compressors, and gas plants do not pay any sales taxes on their investment, which is an enormous incentive. He said a state incentive for ethane collection may be needed in North Dakota. He said a state incentive system wherein ethane credits could be used was tried in Pennsylvania, enticing the Shell ethane cracker and ethylene processing plant to locate in Pennsylvania.

In response to a question from Senator Bekkedahl, Mr. Helms said the incentives in Pennsylvania and Alberta for ethane collection incentivized the capture, keeping, and adding value to ethane within Pennsylvania and Alberta. He said the incentive proved to be very successful for Pennsylvania and Alberta. He said the incentive also should incentivize the capture and exportation of ethane, with the market deciding whether exporting or keeping the ethane within state boundaries is more beneficial.

Representative Anderson said California has a huge demand for electricity but does not want to use fossil-based fuels. He said no one will invest in transmission lines or gas plants if they cannot sell the product. He said the federal government may have to rein in the states that do not allow electricity produced by fossil fuels.

Chairman Wardner called on Mr. Justin Kringstad, Director, North Dakota Pipeline Authority, for testimony (Appendix C) regarding an overview of natural gas gathering, processing, and transmission needs in North Dakota.

In response to a question from Representative Mitskog, Mr. Kringstad said the biggest hurdle for pipeline expansion is getting the shippers to commit to the projects. He said everyone understands an expansion needs to happen.

In response to a question from Representative Brandenburg, Mr. Kringstad said conversations about gas-powered generation are happening. He said some in-state and out-of-state companies are looking at large-scale power generation as one of the solutions for adding generation to their future needs, in addition to potential export options on a traditional pipeline system.

Chairman Wardner called on Mr. Larry Oswald, Director of Business Development & Energy Services, Montana-Dakota Utilities Co., for testimony (Appendix D) regarding an overview of natural gas service in North Dakota and costs and other barriers to getting natural gas to communities.

In response to a question from Senator Rust, Mr. Oswald said the upfront cost for natural gas service connection for each residential customer in Gwinner and Milnor was $1,700. He said since the cities covered 25 percent of the connection cost, both cities paid $425 for each homeowner to be connected to natural gas service. He said the upfront connection costs for business owners was based on the size of the business or how much gas the business would use, but the city capped its contribution portion at $1,300 per business.

In response to a question from Representative Mitskog, Mr. Oswald said the 63-mile line serving Wahpeton was built in the 1960s and is a six-inch steel line. He said he is unsure how the new pipeline safety rule passed this year by the Pipeline and Hazardous Materials Safety Administration will impact the line. He said curtailments have happened mostly to grain dryers in the southwestern part of Minnesota. He said because of the recent cold snap, curtailments also have happened in northeastern parts of North Dakota. He said curtailments also have occurred in the Billings, Montana area.

In response to a question from Senator Bekkedahl, Mr. Oswald said service capacity to Wahpeton could come from the Alliance Pipeline and does not have to come from the Viking transmission line. He said the Alliance Pipeline is one of the options Montana-Dakota Utilities Co., (MDU) is considering for adding additional capacity in the Wahpeton area. He said MDU also is looking at the option of a 53-mile pipeline from Mapleton, North Dakota to Wahpeton. He said the 53-mile line would come from the WBI Energy, Inc., line that was put into service 2 years ago.

In response to a question from Chairman Wardner, Mr. Oswald said the Alliance Pipeline is the shortest connection for gas capacity, but it is very heavy in natural gas liquids. He said the Alliance Pipeline was built to take those liquids to the Aux Sable processing facility near Chicago, Illinois, to remove those liquids, and provide the 1,050 British thermal unit (Btu) natural gas to the existing pipeline market. He said because the line was built for the Aux Sable processing plant, any entity that taps the line before the liquids reach the Aux Sable processing facility has to pay an Aux Sable liquids charge because of the reduction of liquids Aux Sable receives in Illinois. He said the liquids charge adds to the total cost of natural gas for the Wahpeton community.

In response to a question from Representative Vigesaa, Mr. Oswald said the economic benefit of a potential project to a community includes consideration of the residential density and whether a big anchor industrial customer using natural gas 365 days a year is present. He said the more gas and more customers you can get, the more economical the extension. He said Rugby had a good-sized, natural gas-using manufacturer, but not enough of a user to get Rugby over the hump.

Representative Anderson said because Rugby Manufacturing Co., is planning to expand, deciding to get natural gas service to Rugby may be something MDU could consider at a later date.

Representative Mitskog said communities unserved or underserved with natural gas will not attract industrial users or new industry without having natural gas. She said it is difficult to understand how there are 366 communities in North Dakota unserved with natural gas considering the abundance of natural gas in western North Dakota.

Chairman Wardner called on Mr. Brent Lohnes, General Manager, North Dakota Operations, Hess Corporation, for testimony (Appendix E) regarding an overview of Hess infrastructure and investment for gas gathering, an update on current gas gathering, projected gas gathering demands, and gas challenges and policy issues.

In response to a question from Chairman Wardner, Mr. Lohnes said metering takes place after the heated separator.

In response to a question from Senator Holmberg, Mr. Lohnes said flaring can occur at the wellhead. He said it also can occur at the compressor station if there is a malfunction at the compressor station or there is a compressor trip.

In response to question from Chairman Wardner, Mr. Lohnes said building gathering lines and getting easements can be very time-consuming and costly, but expanded lines, trunk lines, and additional gathering lines are needed throughout the state.

In response to a question from Senator Bekkedahl, Mr. Lohnes said property tax incentives may be a good method to incentivize easements but when that idea was discussed, the response was property taxes are so low the idea would not be much of an incentive. He said another possible incentive is opening a utility corridor for trunk lines, utilizing a section line when the section line will not be used as a road.

Chairman Wardner called on Mr. Dick Vande Bossche, Vice President, Commercial Gas Supply, ONEOK Rockies Midstream, for testimony (Appendix F) regarding a general overview of ONEOK investments, assets, and growth in North Dakota; industry challenges that lead to gas capture delays and ways those challenges are being addressed; and industry integration, capacities, and announced growth projects.

In response to a question from Chairman Wardner, Mr. Vande Bossche said a significant capital investment would be needed to be able to remove the ethane from the Y-grade liquids. He said ethane resides either in the residue or in the Y-grade liquids stream. He said as currently configured, their facilities allow them either to put the ethane molecule in residue or in Y-grade liquids, depending on pipeline takeaways and the value. He said they have to invest capital and add a process to an existing facility to send pure ethane to Canada.

Pore Space

Chairman Wardner called on Mr. Reice Haase, Policy Advisor, Governor's office, for testimony (Appendix G) regarding pore space updates and policies, and the current status of pore space in North Dakota.

In response to a question from Senator Rust, Mr. Haase said the Environmental Protection Agency (EPA) grants aquifer exemptions for underground injection. He said the EPA granted an aquifer exemption for the Dakota Aquifer in North Dakota in 1983. He said the EPA requires an aquifer to be a saline aquifer that can never be used as an underground source of drinking water before the EPA will grant an exemption allowing injection into the aquifer.

Natural Gas Usage

Chairman Wardner called on Mr. Mark Kornhaus, Executive Director, Development, NextEra Energy Resources, LLC, for testimony (Appendix H) regarding natural gas usage.

Gas Innovations

Chairman Wardner called on Mr. Cully Cavness, President and Co-Founder, Crusoe Energy Systems Inc., for testimony (Appendix I) regarding digital flare mitigation.

In response to a question from Senator Bekkedahl, Mr. Cavness said Crusoe Energy Systems Inc., provides high-speed WiFi at every location at which it operates. He said if a site does not have cellular service, that pumper can make a call using Facetime or Skype. He said Crusoe also provides high-quality video monitoring to every location it operates to allow an operator to access a real-time video stream of the production site. He said Crusoe has been thoughtful on how it includes all the stakeholders, including the state, the royalty-interest owners, and the operator. He said Crusoe, in some cases, purchases the gas and in other cases it is deemed onsite use. He said Crusoe is experimenting with the right business model and is attempting to find the right mixture of economical variables. He said Crusoe pays income taxes in North Dakota, and pays other payroll-related tax benefits to the state.

In response to a question from Senator Patten, Mr. Cavness said Crusoe has made proposals of up to 6.4 million cubic feet per day at a specific site. He said above that level creates air permitting issues that are not impossible to resolve but require a longer permit application process. He said the 6.4 million cubic feet per day is enough for most multiwell pads. He said in aggregate that amount is not limited because there is more demand in the world for electricity for computing than the company reasonably expects to be generated any time soon.

In response to a question from Chairman Wardner, Mr. Cavness said Crusoe takes raw gas after the separator. He said the company is working with 1,600 Btu gas in the majority of its projects. He said the company has implemented rich burn engines specifically designed for untreated gas other than just not having free liquids to prevent water from entering the generator.

In response to a question from Representative Anderson, Mr. Cavness said Crusoe has had a conversation with an entity doing methane capture from coal mines in Colorado. He said that project has not advanced but that might be an opportunity to be pursued.

In response to a question from Senator Hogan, Mr. Cavness said Crusoe has not provided its computing support services to any governmental organization but would be happy to have that discussion.

In response to a question from Senator Patten, Mr. Cavness said Crusoe intentionally has been going after public data or processing data that is inherently public, and therefore does not have any privacy or security risks associated with it. He said if private data processing occurs in the future, it would have to be addressed with procedures and rules to ensure a breach of the data does not become an issue.

In response to a question from Representative Anderson, Mr. Cavness said recruiting employees is a challenge in the technology world. He said there is an abundance of opportunities for individuals with an educational background in science, technology, engineering, or mathematics but there is a shortage of such individuals.

Chairman Wardner called on Mr. Ed Woods, Vice President, Business Development, Alkane Midstream LLC., for testimony (Appendix J) regarding gas innovations and usage.

In response to a question from Representative Anderson, Mr. Woods said Alkane Midstream LLC., is considering projects on the eastern side of the state. He said the company has transported liquefied natural gas about 300 miles to Wahpeton cost-effectively.

In response to a question from Chairman Wardner, Mr. Woods said liquefied natural gas can be used when a gas pipe goes out. He said the facility in Wahpeton with liquefied natural gas storage tanks anticipates calls from customers who want to be set up for curtailment season.

Petrochemical Industry

Chairman Wardner called on Mr. Shawn Kessel, Deputy Commissioner, Department of Commerce, for testimony (Appendix K) regarding the historical background and a status update on the petrochemical industry in North Dakota, including potential challenges and issues to the petrochemical industry and petrochemical industry projections.

Comments

Mr. Jonathan Razink, Facility Manager, Cargill, Inc., provided testimony (Appendix L) regarding natural gas service curtailments in Wahpeton and the benefits of supplying Wahpeton with additional natural gas services.

Mr. Steve Dale, Mayor, City of Wahpeton, provided testimony (Appendix M) regarding the natural gas distribution system serving Wahpeton and the curtailment of natural gas services. He said Wahpeton has had a shortage of natural gas for at least 4 years. He said there was a soybean crushing operation that was considering operating in either Wahpeton or Aberdeen, South Dakota. He said the operation chose to operate in Aberdeen primarily because of the lack of natural gas in Wahpeton. He said that decision to operate in Aberdeen was a big loss to not only Wahpeton, but to North Dakota.

Mr. Scott Stofferahn, Executive Vice President, Golden Growers Cooperative, said the cooperative has 1,550 members, of which 600 members are in North Dakota. He said the lease agreement with Cargill, Inc., to operate its Wahpeton plant includes an option for Cargill to purchase a 50 percent interest in the plant and become a co-owner with Golden Growers Cooperative. He said a main reason for the co-ownership option to be exercised is the option potentially would bring additional developments and resources to that plant. He said Cargill is facing the problem of not being able to move forward with exercising the co-ownership option when it knows it is energy deficient. He said there is great growth potential but very limited ability to accomplish the potential.

In response to a question from Senator Patten, Mr. Stofferahn said Cargill and Minn-Dak Farmers Cooperative have used liquefied natural gas, but it is a very expensive charge and must be trucked from Tioga. He said it is an economic decision whether to temporarily curtail production or to transport natural gas by truck. He said compressed natural gas is difficult because of the number of trucks needed for delivery on a daily basis.

Ms. Carlee McLeod, President, Utility Shareholders of North Dakota, said Xcel Energy Inc., determined it was cost-prohibitive to expand operations.

In response to a question from Representative Brandenburg, Ms. McLeod said for the utilities it is the costs that are impeding expansion. She said Mr. Oswald explained the balancing of what must be considered, such as community size, number of costumers, and the ability to carry surcharges for a certain period of time.

Representative Anderson said he knows of an elevator that depleted its supply of 12,000 gallons of propane in 48 hours. He said that limits the elevator's drying to 2 days a week. He said there is a huge need for natural gas or propane now.

No further business appearing, Chairman Wardner adjourned the meeting at 3:00 p.m.

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Christopher S. Joseph
Counsel

ATTACH:13