NORTH DAKOTA LEGISLATIVE MANAGEMENT

Minutes of the

ENERGY DEVELOPMENT AND TRANSMISSION COMMITTEE

Wednesday, August 14, 2019 Harvest Room, State Capitol Bismarck, North Dakota

Senator Rich Wardner, Chairman, called the meeting to order at 9:30 a.m.

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

Members absent: Representatives Tracy Boe, Mike Brandenburg, Todd Porter, Don Vigesaa

Others present: Adam Mathiak, Legislative Council See <u>Appendix A</u> for additional persons present.

Chairman Wardner reviewed the prospective investigative areas of energy policy (<u>Appendix B</u>) the committee may review as part of the study related to the impact of a comprehensive energy policy for the state.

In response to a question from Senator Piepkorn, Chairman Wardner said methane, which is the simplest carbon, is 1-carbon. He said ethane is 2-carbon, propane is 3-carbon, butane is 4-carbon, and pentane is 5-carbon. He said butane and pentane become the natural gas liquids the gas and petrochemical companies can sell.

Representative Anderson said the committee should review the extraction of rare minerals from the coal industry because China produces 90 percent of the rare minerals in the world. He said we should not depend upon China for anything.

Senator Hogan said it would be interesting and beneficial to inquire into what neighboring states are doing in the solar energy industry area. She said North Dakota has not done a lot in solar energy and it is something the committee may want to study.

Senator Bekkedahl said a start-up company in Williston is dealing with production water from the oil wells and is capturing Lithium from the production water. He said he would like to invite representatives from this company to present to the committee when the committee looks into the extraction of rare minerals.

At the request of Chairman Wardner, the Legislative Council staff reviewed the <u>Supplementary Rules of</u> <u>Operation and Procedure of the North Dakota Legislative Management</u> and presented a background memorandum entitled <u>Comprehensive Energy Policy Study - Background Memorandum</u>.

In response to a question from Senator Hogan, Chairman Wardner said the State Energy Research Center fund created by Senate Bill No 2249 (2019), is within the Energy and Environmental Research Center and establishes stable and ongoing funding for research.

Senator Piepkorn said the State Energy Research Center, a new department within the Energy and Environmental Research Center, is researching new and innovative transformational research that advances energy opportunities.

OIL AND GAS TAX REVENUE ALLOCATIONS

Chairman Wardner called on Mr. Adam Mathiak, Senior Fiscal Analyst, Legislative Council, for a presentation (<u>Appendix C</u>) regarding North Dakota's oil and gas tax revenue allocations for the 2019-21 biennium.

In response to a question from Senator Piepkorn, Mr. Mathiak said because there was a 34 percent variance for the biennium to date on the production side and a 14 percent variance on the price side, the actual collections are much higher than the forecast.

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Energy Development and Transmission Committee

In response to a question from Senator Bekkedahl, Mr. Mathiak said Senate Bill No. 2312 (2019) changed the allocation into an 80/20 split between the state and the Tribes. He said Senate Bill No. 2362 (2019) also would have affected some of those allocations with how the state share gets allocated on the oil extraction tax side but it would not have affected the political subdivisions. He said Senate Bill No. 2362 would have affected how much went to common schools, foundation aid, and the resources trust fund. He said the Legislative Council forecasts the amounts going to the Three Affiliated Tribes but last time the Legislative Council under-forecasted and the tribe received a lot more than anticipated.

NORTH DAKOTA PIPELINE AUTHORITY

Chairman Wardner called on Mr. Justin Kringstad, Director, North Dakota Pipeline Authority, for testimony (<u>Appendix D</u>) regarding oil and gas industry updates.

In response to a question from Senator Rust, Mr. Kringstad said the acronym "PADD" stands for Petroleum Administration Defense District--a relic from World War II related to wartime security of fuel movements.

In response to a question from Chairman Wardner, Mr. Kringstad said roughly 175,000 barrels of ethane travel down the northern border pipeline system daily. He said if one could extract even a portion of that ethane out of the flow, it would free up additional capacity for new dry gas on that system.

Chairman Wardner said North Dakota needs to encourage investment dollars from companies coming to North Dakota to develop infrastructure.

In response to a question from Representative Anderson, Mr. Kringstad said a large portion of the extracted natural gas is consumed in North America for traditional heating industries or for power generation.

In response to a question from Senator Bekkedahl, Mr. Kringstad said statewide the percentage of gas being flared from unconnected wells versus connected wells, is comparable on and off the reservation.

In response to a question from Senator Piepkorn, Mr. Kringstad said many companies rely on the data provided by the North Dakota Pipeline Authority. He said the data provided often is shared and used by most major companies and analyst firms in the United States. He said the Enbridge pipeline expansion is being used primarily for crude oil Canadian production from Alberta. He said if the pipeline expansion continues to move forward, it would allow flows to become less congested and keep the oil moving. He said if the pipeline expansion does not move forward, the flow in the Midwest would get congested which may have a negative price impact on North Dakota.

In response to a question from Representative Mitskog, Mr. Kringstad said there is not one segment of North Dakota's pipeline infrastructure positioned to handle all the production. He said there needs to be expansion at every level for every commodity.

NORTH DAKOTA TRANSMISSION AUTHORITY

Chairman Wardner called on Mr. John Weeda, Director, North Dakota Transmission Authority, for testimony (<u>Appendix E</u>) regarding the Transmission Authority's activities and summary of Power Forecast 2019.

In response to a question from Senator Rust, Mr. Weeda said wind generation is the area for which the most growth is projected. He said renewables in North Dakota, like wind generation, are showing a 42 percent capacity factor. He said, for example, a 300-megawatt facility would generate the energy equivalent to 42 percent from the facility.

Chairman Wardner said because North Dakota has a mine-mouth operation with lignite coal, the state still is able to produce electricity very cheaply. He said North Dakota needs to ensure it continues to make energy cleaner and cleaner. He said if we find a place for the carbon dioxide, it can be part of the mix.

SKYSKOPES, INC., AND DRONE TECHNOLOGY

Chairman Wardner called on Mr. Matt Dunlevy, President and Chief Executive Officer, SkySkopes, Inc., for testimony (<u>Appendix F</u>) regarding the positive impact of drone technology on the power utility and oil and gas industries.

In response to a question from Representative Anderson, Mr. Dunlevy said regarding recovery and reclamation of land, saltwater spills are worse than oil spills because of the ionic bond formed with the saltwater and the soil. He said thermal sensors are able to differentiate between an oil spill and a saltwater spill. He said there are different types of technologies, such as side-looking airborne radar or ground penetrating radar, which may be able to detect

when a spill is creeping toward the surface. He said the potential factors to consider for evaluating whether a drone can detect below-ground spills are how close the spill is to the surface and how easy is it for the drone to differentiate between oil and saltwater.

Representative Anderson said it would be great if technology had the capability to detect an underground saltwater spill before the spill becomes a huge problem.

Chairman Wardner said within the area of agriculture, drone technology could be very useful for viewing the fields, looking at weeds, and being able to assess how much herbicide and insecticide an area needs.

In response to a question from Senator Hogan, Mr. Dunlevy said cybersecurity is the biggest weakness within commercial unmanned aircraft systems.

MINERAL LITIGATION UPDATE

Chairman Wardner called on Ms. Jodi A. Smith, Commissioner, Department of Trust Lands, for testimony (<u>Appendix G</u>) regarding background information and a status update on litigation related to underpaid mineral royalties.

In response to a question from Senator Hogan, Ms. Smith said if the Board of University and School Lands loses the *William S. Wilkinson v. N.D. Board of University & School Lands* case, the board would refund royalties. She said the board would refund the operators because there would be an acreage adjustment. She said after that, it would be up to the Wilkinsons to work with their operator to get the funds from them.

In response to a question from Chairman Wardner, Ms. Smith said the board is holding just under \$230 million aside. She said that amount is based on Senate Bill No. 2134 (2017) to refund any payments out of the strategic investment and improvements fund, if necessary.

In response to a question from Senator Piepkorn, Ms. Smith said the plaintiffs in *Sorum v. State of North Dakota* originally sought an award of approximately \$63 million but the court awarded \$850,000. She said out of the \$850,000 awarded, a \$69,050 service award was to be split among the five plaintiffs.

In response to a question from Chairman Wardner, Ms. Smith said the Wenck study was done to identify the historic channel of the Missouri River due to the inundation from the Garrison Dam project that caused the channel to be covered. She said the board's ownership shifts with the river. She said if you look at a map from 100 years ago, it shows dry land in that area. She said if this section of land, as it relates to Senate Bill No. 2134 (2017), becomes dry land again, it reverts back to the landowner.

Chairman Wardner said because of the shifting river, the state is constantly trading land with landowners.

COMMITTEE WORK

Representative Anderson said several companies within the energy industry are looking for workers who have attended a 2-year trade school. He said these companies are having a difficult time fulfilling employment needs. He said the committee should invite representatives from higher education and the energy industry to a committee meeting to get a better understanding of the educational needs of the energy industry.

Chairman Wardner said he also would like to hear from people in the energy industry to learn what educational and curriculum requirements the energy industry needs the workforce to have for successful employment. He said he also would like representatives from the Department of Public Instruction, Department of Career and Technical Education, and the University System to attend the meeting to hear about the educational, technical, and curriculum needs of the energy industry.

Chairman Wardner said he would like the committee's next meeting to be in October.

No further business appearing, Chairman Wardner adjourned the meeting at 2:30 p.m.

Christopher S. Joseph Counsel

ATTACH:7