

ENERGY DEVELOPMENT AND TRANSMISSION COMMITTEE

Wednesday, August 4, 2021 Discovery Hall, Energy and Environmental Research Center, 15 North 23rd Street, Grand Forks, North Dakota Thursday, August 5, 2021 Humboldt Room, Energy and Environmental Research Center, 15 North 23rd Street, Grand Forks, North Dakota

Senator Jessica Bell, Chairman, called the meeting to order at 9:00 a.m.

Members present: Senators Jessica Bell, Brad Bekkedahl*, Kathy Hogan, Curt Kreun, Dale Patten, Merrill Piepkorn; Representatives Dick Anderson, Tracy Boe, Alisa Mitskog, Don Vigesaa

Members absent: Representatives Mike Brandenburg, Todd Porter

Others present: Senator Ray Holmberg, Grand Forks, member of the Legislative Management Representative Mark Sanford, Grand Forks Adam Mathiak, Legislative Council, Bismarck See <u>Appendix A</u> for additional persons present. *Attended remotely

COMMITTEE RESPONSIBILITIES

Mr. Christopher S. Joseph, Counsel, Legislative Council, presented a memorandum entitled <u>Comprehensive</u> <u>Energy Policy Study - Background Memorandum</u>. The memorandum sets forth the background for the committee's statutory study of a comprehensive energy policy for the state and the development of each facet of the energy industry. He noted three studies were assigned to the committee for the 2021-22 interim relating to natural gas and propane infrastructure development, coal conversion facility bonding and reclamation, and oil and gas lease postproduction deductions. He also noted interim committee rules are set forth in a memorandum entitled <u>Supplementary Rules of Operation and Procedure of the North Dakota Legislative Management</u>, which was distributed to the committee members.

OIL AND GAS TAX REVENUES

Mr. Adam Mathiak, Senior Fiscal Analyst, Legislative Council, presented memorandums entitled:

- Oil and Gas Tax Revenues Monthly Update
- Oil and Gas Tax Revenue Allocation Flowchart 2021-23 Biennium
- Estimated Revenue Sources and Distributions for Major State Funds for the 2021-23 Biennium

ENERGY AND ENVIRONMENTAL RESEARCH CENTER

Mr. Tom Erickson, Director, State Energy Research Center, presented testimony (<u>Appendix B</u>) regarding the State Energy Research Center's research activities and accomplishments. He noted:

- Fifty-nine innovative research concepts were brought forward for potential funding from the State Energy Research Center in three rounds of internal solicitation. Through significant vetting of the proposed concepts via a peer-led review process, 25 new research projects were selected. The selected projects focused on coal, oil and gas, and renewable energy, and included methods of optimized extraction and utilization, critical element extraction, new materials, and environmental protection.
- The State Energy Research Center receives \$5 million per biennium to conduct exploratory, transformational, and innovative research that advances future energy opportunities to benefit North Dakota's economy and environment.

• The State Energy Research Center has eight new invention disclosures, including methods of production of graphene and its derivatives from coal intermediates, methods of upgrading coal to produce enhanced graphene precursors, and automatic detection of buried pipelines and spills.

Mr. Edward Steadman, Vice President for Research, Energy and Environmental Research Center, presented testimony (<u>Appendix C</u>) regarding the center's research projects and activities.

Mr. John Harju, Vice President for Strategic Partnerships, Energy and Environmental Research Center, presented testimony (<u>Appendix D</u>) regarding hydrogen opportunities in North Dakota.

Mr. Jason Laumb, Director of Advanced Energy Systems Initiatives, Energy and Environmental Research Center, and Mr. Josh Stanislowski, Director of Energy Systems Development, Energy and Environmental Research Center, led the committee on a tour of the Energy and Environmental Research Center to observe some of the center's current research projects.

EMPOWER ND COMMISSION

Mr. James Leiman, Commissioner, Department of Commerce, presented testimony (<u>Appendix E</u>) regarding the activities of the EmPower ND Commission and the EmPower ND Commission's energy policy recommendations.

GRID IMPACTS EXPERIENCED DURING WINTER STORM URI

Mr. Michael Nasi, Senior Advisor, Life:Powered, and Partner, Jackson Walker LLP, presented testimony (<u>Appendix F</u>) regarding the 2021 Electric Reliability Council of Texas, Midcontinent Independent System Operator, and Southwest Power Pool power outages.

Committee members asked questions regarding the lessons learned by the grid impacts experienced during winter storm Uri. Mr. Nasi noted after the power outages, Texas streamlined incentives within the Electric Reliability Council of Texas market to foster the development and maintenance of adequate and reliable sources of power, like natural gas, coal, and nuclear power. He noted the Texas Legislature's goal was to ensure Texas has additional and more reliable power generation capacity by implementing incentives directed toward the types of electric generators needed for reliability purposes.

REPORTS

Mr. John Weeda, Director, North Dakota Transmission Authority, presented testimony (<u>Appendix G</u>) regarding the authority's activities. He noted:

- The Midcontinent Independent System Operator queue contains 10 projects for a total of 2,390 megawatts (MW). This queue is reduced from 2,700 MW last year.
- The Minnkota queue contains six projects for a total of 350 MW. This queue remains the same as last year.
- The Southwest Power Pool queue contains 26 projects for a total of 5,045 MW. This queue has increased from 2,902 MW a year ago.
- Portions of North Dakota served by Southwest Power Pool experienced short rolling blackouts on 2 days during the February 2021 power outages experienced during winter storm Uri. Even though state generating resources operated well, North Dakota was affected because North Dakota is part of the power pool.
- Additional wind generation is one of North Dakota's easiest opportunities. Added transmission also brings
 opportunities, especially for construction.
- The North Dakota Transmission Authority will continue to engage potential transmission owners, encourage Midcontinent Independent System Operator and Southwest Power Pool to identify lines needed to serve additional generation, and continue to be a voice for reliable and resilient solutions as the grid evolves.

Mr. Justin Kringstad, Director, North Dakota Pipeline Authority, presented testimony (<u>Appendix H</u>) regarding the authority's activities and an oil and gas industry update. He noted:

- As of May 2021, 75 percent of the oil produced in North Dakota is exported out of the state by pipeline, while 2 percent is exported to Canada by truck or rail.
- The North Bakken Expansion Project would provide 250 million cubic feet of natural gas transportation capacity per day. In addition, the project would provide approximately 60 miles of new pipeline construction, compression, and ancillary facilities to transport natural gas from core Bakken production areas in western North Dakota to an interconnection point with Northern Border Pipeline. The project is expected to be completed in Q4 of 2021 and cost \$260+ million.

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• As of May 2021, 93 percent of gas is captured and sold, while 2 percent of gas is flared from zero sales wells because of the lack of pipelines. The remaining 5 percent is flared from wells with at least 1,000 cubic feet (Mcf) sold because of challenges on existing infrastructure.

OTHER

Chairman Bell recessed the meeting at 4:15 p.m. and reconvened the meeting on Thursday, May 5, 2021, at 7:30 a.m. She said the committee will attend an energy summit to receive information about updates in the energy industry.

Chairman Bell recessed the meeting at 7:35 a.m. for attendance at the Energizing North Dakota's Future Partnership Summit.

Chairman Bell reconvened the meeting at 11:55 a.m. She said a date for the next meeting has not yet been determined.

No further business appearing, Chairman Bell adjourned the meeting at 12:00 noon.

Christopher S. Joseph Counsel

ATTACH:8