



ENERGY DEVELOPMENT AND TRANSMISSION COMMITTEE

Monday, October 10, 2022

National Energy Center of Excellence, Bismarck State College, Bismarck, North Dakota

Tuesday, October 11, 2022

Roughrider Room, State Capitol, Bismarck, North Dakota

Senator Jessica Bell, Chairman, called the meeting to order at 7:55 a.m.

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

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

Others present: See [Appendix A](#)

**Attended remotely*

It was moved by Senator Bekkedahl, seconded by Senator Patten, and carried on a voice vote that the minutes of the July 26, 2022, meeting be approved as distributed.

The committee recessed to attend the 14th Annual Great Plains and EmPower ND Energy Conference to receive information regarding updates in the energy industry.

ELECTRIC GRID RESILIENCE

Mr. John Weeda, Director, North Dakota Transmission Authority, provided testimony ([Appendix B](#)) regarding the authority's activities and the status of the resilience of the electric grid in North Dakota. He noted:

- Grid operation is meeting the state's needs but limiting export. Additional lines for the Southwest Power Pool and Midcontinent Independent System Operator will enhance the grid for North Dakota and the ability to meet needs in the state.
- The large volume of generation in the queues is a concern for both congestion and weather dependency.
- North Dakota needs to continue to encourage development in a thoughtful manner with plans that do not exceed the time and ability to make a transition in an orderly manner.
- The greatest threat to the resiliency of the grid in North Dakota is from the rapid changes being pursued outside of the state.

HYDROGEN AND AMMONIA ENERGY

Mr. Jason LaPlante, Chief Executive Officer, and Mr. Brian LaPlante, Vice President of Research and Development, 4H2, Inc., provided testimony ([Appendix C](#)) regarding emerging trends in using hydrogen and ammonia for energy and ways North Dakota can attract and retain technology opportunities. They noted:

- Centralized power generation and distributed energy resources differ, but are complimentary.
- North Dakota has worked toward low carbon dioxide energy development best suited to centralized power generation.
- North Dakota has an opportunity to gain from developing distributed energy resources technology and companies in parallel with centralized power generation platforms.
- Funding is needed to bring new energy technologies from the emerging concept stage to proof-of-concept to supplement and stabilize the power grid.

REPORTS

Mr. Lynn Helms, Director, Department of Mineral Resources, provided testimony ([Appendix D](#)) regarding whether the amount in the carbon dioxide storage facility trust fund and fees being paid into the fund are sufficient to satisfy the fund's objectives, and the strategic importance of large-scale carbon dioxide projects.

Mr. Al Anderson, Director, Clean Sustainable Energy Authority, provided testimony ([Appendix E](#)) regarding the authority's activities and the program's financial impact on state revenues and the state's economy.

Mr. John Harju, Vice President for Strategic Partnerships, Energy and Environmental Research Center, provided testimony ([Appendix F](#)) regarding the results and recommendations of the underground energy storage study. He noted:

- Gas storage is a proven technology that began in 1915. Typically, gas storage is used to supplement energy demands associated with seasonal heating needs.
- The Dunham, Pine, and Opeche salt beds were identified as candidates for salt cavern development and product storage. Preliminary simulation results suggest the development of small caverns is achievable in North Dakota salt beds.
- Drilling was initiated on May 24, 2022, and was successful through the Inyan Kara. Drilling, coring, and logging were completed July 16, 2022. Site reclamation dirt work was completed September 2, 2022. Seeding is complete and awaiting approval from the Industrial Commission.

Mr. Harju provided testimony ([Appendix G](#)) regarding the development and implementation of hydrogen energy in the state. He noted:

- Hydrogen provides a tool for decarbonization, is an energy carrier without carbon or other greenhouse gas emissions, and causes minimal human health issues.
- A hydrogen economy is likely to evolve incrementally.
- Current infrastructure can accept the addition of hydrogen in a natural gas stream up to 10 percent with few issues, while distribution blending is more likely to be no more than 5 percent.
- North Dakota has abundant fossil and renewable energy resources, capacity for carbon storage enabling clean hydrogen from coal and natural gas, and regional demand for fertilizer and refined fuels.

FINAL MOTIONS

It was moved by Representative Vigesaa, seconded by Representative Anderson, and carried on a voice vote that the Chairman and the Legislative Council staff be requested to prepare a report and to present the report to the Legislative Management.

It was moved by Senator Patten, seconded by Senator Kreun, and carried on a voice vote that the committee be adjourned sine die.

No further business appearing, Chairman Bell adjourned the committee sine die at 1:05 p.m.

Christopher S. Joseph
Senior Counsel

ATTACH: 7