NORTH DAKOTA LEGISLATIVE MANAGEMENT

Minutes of the

ENERGY DEVELOPMENT AND TRANSMISSION COMMITTEE

Tuesday, October 13, 2015 National Energy Center of Excellence, Bismarck State College, Bismarck, North Dakota Wednesday, October 14, 2015 Harvest Room, State Capitol, Bismarck, North Dakota

Senator Rich Wardner, Chairman, called the meeting to order at 8:00 a.m.

Members present: Senators Rich Wardner, Kelly M. Armstrong, Brad Bekkedahl, Bill L. Bowman, Philip M. Murphy, John M. Warner; Representatives Dick Anderson, Mike Brandenburg, Chuck Damschen, Ben Hanson, Corey Mock, Todd Porter

Others present: Representative Jim Schmidt, member of the Legislative Management, was also in attendance. See <u>Appendix A</u> for additional persons present.

It was moved by Representative Murphy, seconded by Representative Hanson, and carried on a voice vote that the minutes of the September 2-3, 2015, meeting be approved as distributed.

Chairman Wardner recessed the meeting at 8:05 a.m. for attendance at the 2015 Great Plains and EmPower ND Energy Conference.

Chairman Wardner reconvened the meeting at 3:30 p.m. He said the committee will meet at the State Capitol on Wednesday, October 14, 2015.

Chairman Wardner recessed the meeting at 3:35 p.m. and reconvened the meeting on Wednesday, October 14, 2015, at 8:00 a.m.

ELECTRICAL TRANSMISSION AND DISTRIBUTION UPDATES North Dakota Transmission Authority

Mr. Tyler Hamman, Director, North Dakota Transmission Authority, presented information (<u>Appendix B</u>) regarding the status of a report related to the activities of the authority pursuant to North Dakota Century Code Section 17-05-13. He said the annual report includes information related to various transmission projects. He said the transmission line from Fargo to Monticello, Minnesota was completed as part of the CapX2020 transmission line project with the remaining lines expected to be complete in 2017. He said the CapX2020 project is part of a regional effort to enhance electrical reliability and to provide access to renewable energy within the Midwest. He said a preliminary analysis of the impact of the federal Environmental Protection Agency's (EPA) clean power plan identified the loss of 14 gigawatts of coal electrical generation in the Midcontinent Independent System Operator region, which includes North Dakota, South Dakota, Nebraska, Minnesota, Iowa, Wisconsin, Illinois, Indiana, Michigan, Montana, Missouri, Kentucky, Arkansas, Texas, Louisiana, and Mississippi.

In response to a question from Chairman Wardner, Mr. Hamman said the loss of 14 gigawatts of coal electrical generation would be replaced by increased electrical generation from natural gas and renewables.

In response to a question from Senator Bekkedahl, Mr. Hamman said installed electrical generation capacity in North Dakota totals 7,001 megawatts, consisting of 4,184 megawatts from coal, 1,876 megawatts from wind, 583 megawatts from water, and 358 megawatts from natural gas.

Public Service Commission

Ms. Julie Fedorchak, Commissioner, Public Service Commission, presented information (<u>Appendix C</u>) regarding recent activities of the commission and the status of a report related to retail electricity sales meeting or exceeding the state renewable and recycled energy objective. She said more than 16 percent of retail electricity sales in North Dakota were from renewable energy in 2014 compared to 4 percent in 2008. She said most of the 16 percent reflects electrical generation from wind energy. She said North Dakota has approximately 1,800 megawatts of wind power generation in operation with an additional 800 megawatts of wind power generation under construction.

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Energy Development and Transmission Committee

Ms. Fedorchak provided comments regarding the committee's study of EPA regulations of power plant carbon dioxide emissions. She said the Public Service Commission is in the process of developing potential solutions to comply with EPA regulations. She said carbon dioxide emissions in North Dakota decreased from approximately 2,275 pounds per megawatt hour in 2005 to approximately 1,900 pounds per megawatt hour in 2014. She said preliminary analysis identified the need for approximately 4,800 megawatts of wind power, which would require approximately 1 million acres of land. She said challenges for future wind development include finding potential customers for the power and finding suitable locations for the wind turbines.

In response to a question from Senator Bekkedahl, Ms. Fedorchak said potential litigation against the EPA related to the regulations of power plant carbon dioxide emissions focuses on the scope of policies authorized by Congress. She said the regulations may extend beyond the policies authorized by Congress and may limit the jurisdictional authority of the Public Service Commission.

In response to a question from Senator Armstrong, Ms. Fedorchak said economic development is a major influence on a community's decision to accept or reject wind turbine projects. She said communities with fewer economic development opportunities may be more willing to approve wind turbine projects.

In response to a question from Representative Brandenburg, Ms. Fedorchak said the Public Service Commission is reviewing letters of intent that are on file to prioritize permits for proposed wind turbine projects.

In response to a question from Senator Bowman, Ms. Fedorchak said wind turbine operators are required to submit wind turbine decommissioning plans to the Public Service Commission 10 years after completion. She said operators' plans must identify sufficient financial resources to decommission the wind turbines. She said wind turbines are anticipated to operate for 25 to 30 years.

Lignite Energy Council

Mr. Jason Bohrer, President & CEO, Lignite Energy Council, presented information (<u>Appendix D</u>) regarding the committee's study of EPA regulations of power plant carbon dioxide emissions. He said North Dakota is able to comply with the EPA regulations, but compliance has a cost. He suggested North Dakota continue to invest in research and development opportunities, such as the Allam Cycle, and enhanced oil recovery with carbon dioxide. He said options for compliance include the following:

- Replace 45 percent of the existing coal power generation with wind power generation;
- Capture carbon dioxide from coal power generation for use in enhanced oil recovery;
- Develop cofiring plants capable of burning coal and either natural gas or biomass;
- Construct a nuclear power plant; or
- Purchase renewable energy credits estimated at \$400 million to \$500 million per year.

In response to a question from Representative Hanson, Mr. Bohrer said the Legislative Assembly appropriated \$5 million from the general fund for research projects related to the Allam Cycle. He said the cost of developing the Allam Cycle could total \$300 million to \$400 million.

Mr. Dale Niezwaag, Senior Legislative Representative, Basin Electric Power Cooperative, provided comments regarding the committee's study of EPA regulations of power plant carbon dioxide emissions. He said Basin Electric Power Cooperative developed a three part strategy to address the EPA regulations in which the company plans to either defeat, meet, or modify the regulations. He said up to 34 states indicated they oppose the regulations. He said lawsuits may not be filed until the final regulations are published. He said Basin Electric Power Cooperative is concerned about the impact of the regulations on the company's ability to supply additional electricity for future demand growth.

In response to a question from Representative Hanson, Mr. Niezwaag said the publication date of the regulations is unknown. He said the regulations could be published as early as the end of October 2015 or as late as a few years.

In response to a question from Senator Warner, Mr. Niezwaag said the option to purchase renewable energy credits is not guaranteed. He said the renewable energy credit market is complex and may require regional trading programs.

Mr. David Straley, Manager, Government and Public Affairs, North American Coal, provided comments regarding the committee's study of EPA regulations of power plant carbon dioxide emissions. He said coal-powered electrical generation may not be an option in the future resulting in lost jobs and economic activity. He said the EPA regulations do not identify any specific benefits for the state of North Dakota.

Great Plains Institute

Ms. Patrice Lahlum, Program Consultant, Great Plains Institute, West Fargo, presented information (Appendix E) regarding wind energy and other renewable energy policies and developments. She said global investment in clean energy increased from \$60 billion in 2004 to \$310 billion in 2014. She said approximately 25 percent of the \$310 billion was spent in the Americas. She said improvements in battery storage systems are providing increased reliability in clean energy such as wind and solar power. She said renewable energy generates \$1.2 billion of economic activity per year in North Dakota. She said the ethanol industry in North Dakota provides more than 200 jobs and contributes to rural economic development. She said the results of a survey conducted by the North Dakota Alliance for Renewable Energy revealed a majority of North Dakotans support renewable energy and energy efficiency.

In response to a question from Representative Anderson, Ms. Lahlum said wind turbine operators budget for 8 to 12 years of operating at 45 percent efficiency to recover the cost of installing a wind turbine.

In response to a question from Representative Porter, Ms. Lahlum suggested the Legislative Assembly regularly review the tax credits for wind turbines to determine the appropriate level of support for future development of wind energy in the state.

OIL AND GAS UPDATES

Department of Mineral Resources

Mr. Lynn Helms, Director, Department of Mineral Resources, presented information (<u>Appendix F</u>) regarding the department's recent activities and the status of oil and gas development activity. He said the drilling rig count is at 68 rigs, which is approximately the same as the 2009 level. He said drilling rig efficiency increased from less than one well drilled per month in 2009 to almost two wells drilled per month in 2015. He said drilling activity outside of the core Bakken area is not anticipated to increase until West Texas Intermediate oil prices increase to \$70 per barrel. He said 50 percent of all fracking operations are considered "super fracks," which require 7 to 10 million gallons of water and 6 to 8 million pounds of sand. He said "super fracks" require more water and sand than regular fracks, but result in higher oil production rates. He said the top 10 operators in the state have reduced operating costs by 25 percent and well completion costs by 26 percent to compensate for the 50 percent decrease in oil prices.

In response to a question from Senator Bekkedahl, Mr. Helms said estimated ultimate recovery increased from 450,000 barrels per well to 750,000 barrels per well for wells in the core Bakken area. He said improvements in fracking have allowed operators to recover more oil.

Mr. Helms said the department is in the process of hiring pipeline field inspectors for the pipeline inspection program authorized in 2015 House Bill No. 1358. He said the Energy and Environmental Research Center is in the final stages of studying pipelines pursuant to the bill and will report the results by December 2015. He said the Industrial Commission revised the gas capture rules to provide a target of 80 percent capture by April 2016 compared to the original target of 85 percent by January 2016. He said operators expressed concern about the burden of oil conditioning, while processing facilities expressed appreciation for a more consistent product.

In response to a question from Representative Porter, Mr. Helms said the number of sites eligible for remediation under House Bill No. 1358 is unknown. He said the department has identified seven sites and has prioritized the sites for remediation.

Mr. Helms said challenges for the oil and gas industry include endangered species and federal regulation. He said the department is considering or pursuing legal action related to various federal regulations including chemical disclosure, methane emissions, waste disposal, and carbon dioxide emissions.

North Dakota Petroleum Council

Ms. Kari Cutting, Vice President, North Dakota Petroleum Council, presented information (<u>Appendix G</u>) regarding oil and gas development challenges. She said a major challenge for the oil and gas industry is the federal regulatory environment. She said the EPA's clean power plan, the EPA's methane emission standards, the federal Bureau of Land Management's hydraulic fracturing rules, and the United States Fish and Wildlife Service's endangered species candidates may have a significant impact on oil and gas development activity in North Dakota. She said some of the federal regulations remove the state's primacy to regulate the standards. She said the

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industry supports the Federal Environmental Law Impact Review Committee that was approved by the Legislative Assembly in 2015 House Bill No. 1432.

Representative Porter suggested the committee receive information from the State Department of Health regarding primacy issues.

State Department of Health

Mr. Dave Glatt, Chief, Environmental Health Section, State Department of Health, commented regarding the state's primacy related to the EPA's methane emission standards. He said the department reviewed the standards a number of years ago and determined the department did not have sufficient resources to regulate the standards. He said the department will review the standards and identify any potential needs of the department for the possibility of maintaining state primacy.

Representative Porter suggested the Energy Development and Transmission Committee consider a bill draft to provide a procedure between legislative sessions for state agencies to obtain funding and staff to maintain regulatory primacy.

State Treasurer's Office

Mr. Ryan Skor, Director of Finance, State Treasurer's office, presented information (Appendix H) regarding the 2015-17 biennium oil and gas tax allocation formulas, an overview of the oil and gas tax revenue allocation process, and the balances of funds that receive oil and gas tax revenue allocations. He said the oil extraction tax allocation formulas are based on percentage allocations to five funds including the common schools trust fund, the foundation aid stabilization fund, the resources trust fund, the legacy fund, and the general fund. He said 20 percent of oil and gas gross production tax allocations are distributed to hub cities, hub city school districts, and selected state funds based on specified amounts and percentages. He said the remaining 80 percent of oil and gas gross production tax allocated to counties and the state based on percentages. He said the strategic investment and improvements fund received over \$1 billion of oil and gas tax allocations in the 2013-15 biennium. He said if oil and gas gross production tax collections are not sufficient to provide for the specified dollar amounts included in the formula, some allocation amounts may be less than anticipated by the Legislative Assembly for the 2015-17 biennium.

In response to a question from Representative Brandenburg, Mr. Skor said the oil and gas tax revenue allocation formula statutory provisions allow the State Treasurer's office to transfer oil extraction tax collections to the oil and gas gross production tax formula in the event oil and gas gross production tax collections are not sufficient to provide for the 30 percent allocation to the legacy fund.

In response to a question from Senator Bekkedahl, Mr. Skor said the changes in the political subdivision allocation formulas became effective one month after the changes in the state fund allocation formulas. He said new political subdivision allocation formulas became effective in September 2015, while state fund allocation formulas generally become effective in August.

Job Service North Dakota

Mr. Michael Ziesch, Manager, Labor Market Information Center, Job Service North Dakota, presented information (<u>Appendix I</u>) regarding the process for compiling oil- and gas-related employment data related to hub cities and anticipated changes to future oil- and gas-related employment percentages. He said the agency identifies jobs by worksite to provide greater accuracy. He said the agency monitors company operations and business models to determine if jobs are related to the oil and gas industry. He said calendar year 2014 had the highest employment in the oil and gas industry. He said oil- and gas-related employment began decreasing in the second quarter of calendar year 2015. He said the oil- and gas-related employment percentages are anticipated to decrease for calendar year 2015, but the amount of change cannot yet be determined. He said the decrease in employment is related to the decrease in oil price as well as operational efficiencies in the oil industry.

North Dakota Pipeline Authority

Mr. Justin Kringstad, Director, North Dakota Pipeline Authority, presented information (<u>Appendix J</u>) regarding recent activities related to oil and gas pipelines in the state. He said state oil exports by rail continue to decrease while exports by pipeline increase. He said oil exports by rail were 47 percent of the total in August 2015 compared to exports by pipeline of 45 percent. He said exports by rail are primarily destined for the east and west coasts because of higher oil prices in those regions. He said the Sandpiper pipeline project is anticipated to begin service in 2017 pending regulatory approval in Minnesota. He said initial oil production generally begins six months after a well is drilled resulting in a six-month delay between lower rig counts and lower oil production levels. He said oil production may remain low for a few years if oil prices do not increase.

In response to a question from Representative Porter, Mr. Kringstad said even with lower oil prices he does not anticipate oil production in North Dakota to decrease below 1 million barrels per day.

BEHAVIORAL HEALTH SERVICES UPDATES Department of Human Services

Ms. Laurie Gotvaslee, Regional Director, Northwest Human Service Center in Williston and the North Central Human Service Center in Minot, Department of Human Services, presented information (<u>Appendix K</u>) regarding behavioral health services. She said all eight human service centers have been providing open access for addiction evaluations since the fall of 2014. She said the availability of open access varies among service centers because of staffing availability and the number of scheduled appointments. She said Williston and Dickinson do not have inpatient behavioral health services available locally so clients require transportation to Bismarck, Minot, or to the State Hospital. She said Minot is in the process of procuring a 10-bed crisis residential facility that was authorized by the 2015 Legislative Assembly. She said Bismarck is adding four beds to an existing crisis residential facility. She said the additional beds are anticipated to be available by January 2016. She said vacant positions and high turnover rates have negatively impacted the ability of the human service centers to provide evaluations and treatment for behavioral health services. She said staff from larger centers in Bismarck and Minot travel to Dickinson and Williston or use telehealth services as a cooperative arrangement to address the needs in western North Dakota.

In response to a question from Senator Bowman, Ms. Gotvaslee said community coordinating committee meetings are open to law enforcement allowing the human service centers to coordinate with law enforcement. She said limited staff resources may prevent law enforcement from participating more frequently in the meetings.

In response to a question from Representative Porter, Dr. Rosalie Etherington, Superintendent, State Hospital, said the department is attempting to form partnerships with the hospitals in Williston and Watford City to coordinate the behavioral health evaluations and treatment services.

In response to a question from Representative Anderson, Dr. Etherington said the department maintains data on clients served. She said the department does not collect data on the number of individuals who need behavioral health services and have not received services. She said the state would need to conduct a comprehensive needs assessment to gather information from hospitals, law enforcement, and employers to identify the number of individuals that need behavioral health services.

In response to a question from Senator Warner, Dr. Etherington said she would research the cost of developing a satellite location for the State Hospital in western North Dakota. She said the cost would be high but could be reduced through a partnership with a hospital.

Department of Corrections and Rehabilitation

Dr. Lisa Peterson, Clinical Director, Department of Corrections and Rehabilitation, presented information (<u>Appendix L</u>) regarding behavioral health services. She said 75 percent of individuals admitted into prison in North Dakota have an active substance abuse disorder. She said 647 people completed substance abuse treatment in prison or transitional facilities in 2014, excluding individuals referred by parole and probation.

In response to a question from Chairman Wardner, Dr. Peterson said some individuals on parole or probation may receive treatment services from the Department of Human Services or private providers. She said many individuals on parole or probation receive treatment services from a Department of Corrections and Rehabilitation transitional facility.

In response to a question from Senator Armstrong, Ms. Leann Bertsch, Director, Department of Corrections and Rehabilitation, said the Tompkins Rehabilitation and Corrections Center in Jamestown no longer provides services to individuals on parole or probation because of the growing need to serve inmates.

Dr. Peterson said the Department of Corrections and Rehabilitation serves approximately 450 individuals with varying levels of psychiatric treatment needs. She said the department assists offenders with access to behavioral health services upon releases. She said a number of individuals with behavioral health treatment needs are in jails or prison because of a lack of behavioral treatment services, facilities, and licensed addiction counselors in the state. She said possible solutions include the following:

- Expanding the types of behavioral health practitioners that can provide treatment services;
- Changing the delivery method for treatment services to reduce recidivism;
- Expanding the availability of behavioral health services;

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- Using programs that are designed to address criminal thinking; and
- Linking offenders to community service providers prior to release from jail or prison.

In response to a question from Representative Damschen, Dr. Peterson said the department has transitional programs to help offenders receive behavioral health treatment services before and after release from prison. She said offenders are assigned a case manager that has experience working with behavioral health services. She said some jails may offer transitional programs.

OTHER

Chairman Wardner said the next committee meeting will be in Stanley on Thursday, October 29, 2015. He said the committee will also meet in Bismarck on Tuesday, November 24, 2015.

No further business appearing, Chairman Wardner adjourned the meeting at 3:05 p.m.

Adam Mathiak Fiscal Analyst

ATTACH:12