

## NORTH DAKOTA LEGISLATIVE MANAGEMENT

## Minutes of the

**ENERGY DEVELOPMENT AND TRANSMISSION COMMITTEE**

Tuesday, August 30, 2016  
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, Kelly M. Armstrong, Brad Bekkedahl, Bill L. Bowman, Philip M. Murphy, John M. Warner; Representatives Dick Anderson, Mike Brandenburg, Ben Hanson, Corey Mock, Todd Porter

**Member absent:** Representative Chuck Damschen

**Others present:** Senators Donald Schaible and Jessica Unruh, members of the Legislative Management, were also in attendance.

See [Appendix A](#) for additional persons present.

**It was moved by Representative Mock, seconded by Representative Hanson, and carried on a voice vote that the minutes of the May 11-12, 2016, meeting be approved as distributed.**

**OIL AND GAS UPDATES****Water Management in the Oil and Gas Industry**

Ms. Bethany Kurz, Principal Hydrogeologist, Energy and Environmental Research Center, presented information ([Appendix B](#)) regarding a report on water management in the oil and gas industry. She said approximately 150,000 barrels of water are used in the fracturing process for each well. She said oil producers also use water in the production phase as part of the well maintenance process. She said active wells use an average of 30 to 50 barrels of water per day for maintenance. She said as much as 584 million barrels of water per year may be needed by 2035 for well maintenance. She said 94 percent of produced water from oil wells is injected in the Dakota Formation through disposal wells. She said the estimated annual volume of produced water is anticipated to increase to 811 million barrels by 2025 and to 1.04 billion barrels by 2035. She said the estimated number of additional disposal wells that may be needed by 2025 totals 1,000 while the estimated number of additional disposal wells that may be needed by 2035 totals 1,500. She said the Energy and Environmental Research Center is in the process of modeling the Dakota Formation to determine the formation's capacity to handle produced water. She said the center is also researching the use of other formations for produced water disposal.

In response to a question from Senator Bekkedahl, Ms. Kurz said the primary reason produced water recycling is not actively utilized in North Dakota is the additional costs to implement the process. She said produced water recycling is more common in southern states because the fresh water supply is more limited.

In response to a question from Representative Mock, Ms. Kurz said one oil producer in North Dakota used recycled produced water in the fracturing process. She said the well's performance was comparable to wells that were fractured using fresh water but the use of recycled water resulted in an additional \$250,000 of costs for the oil producer.

In response to a question from Senator Warner, Ms. Kurz said concerns about injecting produced water into the Dakota Formation include reservoir pressure, the need to drill through the Dakota Formation to reach the Bakken Formation, and salt build up that hinders the injection of additional produced water.

In response to a question from Representative Anderson, Ms. Kurz said the average daily flow rate of the Missouri River provides enough water to fracture 4,000 oil wells. She said the average daily evaporation rate provides enough water to fracture 200 oil wells.

**Department of Mineral Resources**

Mr. Lynn Helms, Director, Department of Mineral Resources, presented information ([Appendix C](#)) regarding oil and gas updates. He said less than 10 fracturing crews were operating in the state in August 2016 compared to

50 crews during the peak of oil- and gas-development activity in 2014. He said gas production continues to increase, but flaring has decreased as processing capacity has grown to match the supply of gas. He said the abandoned oil and gas well plugging and site reclamation fund, with a current balance of approximately \$12.2 million, provides funding for well plugging, site reclamation, cleanup of illegal oil-field waste dumping, and qualifying legacy projects. He said \$1.5 million per biennium may be expended for qualifying legacy projects, but the department has identified \$3.8 million of eligible projects. He said the department spent approximately \$310,000 from the abandoned oil and gas well plugging and site reclamation fund on projects at three test sites to study options for reclaiming soils surrounding legacy brine pits pursuant to 2015 House Bill No. 1358. He said the core library expansion project is anticipated to be completed 1 month ahead of schedule and \$200,000 under budget. He said the dedication ceremony is scheduled for September 26, 2016. He said the department's proposed administrative rules for pipeline regulatory oversight are scheduled to become effective on October 1, 2017.

Senator Armstrong requested the Department of Mineral Resources provide information to the committee regarding drilling rig count estimates and oil well count estimates based on an extended period of low oil prices.

Representative Hanson requested the Department of Mineral Resources provide information to the committee regarding the estimated break-even oil prices by county.

Representative Porter requested the Department of Mineral Resources provide information to the committee regarding a long-term budget for the abandoned oil and gas well plugging and site reclamation fund and an analysis of owner reimbursement responsibility for legacy brine pit reclamation.

### Legacy Brine Pits

Ms. Kurz presented information ([Appendix D](#)) regarding the Energy and Environmental Research Center's work on legacy brine pits. She said the original goal of the project was to identify best practices for remediating legacy brine pits. She said the focus of the project changed when the size and characteristics of the impacted area at the project site could not be accurately identified from existing estimates. She said the research team drilled test wells, conducted soil samples, and mapped the project site to more accurately determine the size and characteristics of the impacted area at the project site. She said accurate size and characteristic data is important for determining the best methods of remediation and for estimating the cost of remediation.

In response to a question from Senator Murphy, Ms. Kurz said the Energy and Environmental Research Center collaborated with North Dakota State University on the legacy brine pit reclamation research project.

### BILL DRAFT RELATED TO WIND TURBINES

At the request of Chairman Wardner, the Legislative Council staff presented a bill draft [[17.0273.01000](#)] relating to a sales and use tax exemption for materials used in the construction of wind turbines. The bill draft removes the expiration dates for the sales tax exemption and the use tax exemption. The bill draft includes a retroactive application to provide continuity between the existing expiration date and the effective date of the proposed changes.

Mr. Justin Dever, Co-Deputy Commissioner, Department of Commerce, provided comments ([Appendix E](#)) on the bill draft. He said the EmPower North Dakota Commission supports the bill draft. He said the sales tax exemption related to wind turbines will provide tax parity with other resources used to generate electricity.

In response to a question from Senator Bowman, Mr. Dever said the department has been asked by the interim Political Subdivision Taxation Committee to prepare a cost-benefit analysis of the sales and use tax exemption for that committee's next meeting and would also provide the information to the Energy Development and Transmission Committee.

Mr. Jason Bohrer, President and Chief Executive Officer, Lignite Energy Council, said the Lignite Energy Council supports the bill draft. He said the state may need additional wind turbine projects to comply with proposed federal Environmental Protection Agency regulations.

Ms. Carlee McLeod, President, Utility Shareholders of North Dakota, provided comments ([Appendix F](#)) in support of the bill draft. She said the Utility Shareholders of North Dakota support the bill draft. She said wind turbine projects provide an economic benefit through jobs, property tax revenues, and landowner payments. She said Border Winds Farm in Rolette County provides approximately \$605,000 in annual property tax revenue while the wind project under construction near Courtenay is anticipated to provide \$850,000 in annual property tax revenue. She said the Border Winds Farm in Rolette County is anticipated to provide \$13.3 million in landowner payments over a 20-year period.

Chairman Wardner requested the Legislative Council staff to provide information at the next meeting regarding property taxes on wind turbines.

Ms. Julie Voeck, Director, Regulatory Affairs, NextEra Energy Resources, Milwaukee, Wisconsin, provided comments ([Appendix G](#)) on the bill draft. She said NextEra Energy Resources supports the bill draft. She said the sales tax exemption may encourage future development of wind turbine projects in North Dakota. She said NextEra Energy Resources owns and operates 11 wind farms in North Dakota reflecting \$1.8 billion of capital investments, \$6 million of annual payroll, \$2.2 million of annual property tax revenue, and \$5 million of annual landowner payments. She said consumers would experience higher utility costs without the sales tax exemption.

Mr. Chris Kunkle, Regional Policy Manager, Wind on the Wires, St. Paul, Minnesota, was not able to attend the meeting, but provided written testimony ([Appendix H](#)) regarding the bill draft. The written testimony states the members of Wind on the Wires support the bill draft.

Representative Brandenburg suggested the committee receive information at the next meeting regarding purchased power agreements.

Representative Porter suggested the committee receive information from the Tax Department regarding a comparison of the federal and state tax incentives for electrical generation units, including coal-powered facilities and wind-powered facilities.

Chairman Wardner requested the Tax Department provide information at the next meeting regarding the estimated fiscal impact of the bill draft.

### **ONE-CALL EXCAVATION NOTICE SYSTEM**

Ms. McLeod presented information ([Appendix I](#)) regarding the one-call excavation notice system. She said the interim Economic Impact Committee recommended a bill draft to the Legislative Management regarding changes to the one-call excavation notice system. She said the changes were based on 11 recommended changes by a stakeholder group. She said the primary reasons for the recommendations are to maintain safety, to prevent damage to underground utilities, and to improve the efficiency and effectiveness of the one-call process.

### **BILL DRAFT RELATED TO COAL CONVERSION TAX REVENUE ALLOCATIONS**

At the request of Chairman Wardner, the Legislative Council staff presented a bill draft [[17.0271.01000](#)] relating to the allocation of coal conversion tax revenue. The bill draft removes an expiration date to continue allocating 5 percent of the general fund share of coal conversion tax revenue collections to the lignite research fund. The removal of the expiration date is estimated to decrease general fund revenues by \$1 million in the second year of the 2017-19 biennium and by \$2 million in each biennium thereafter.

Mr. Bohrer said the Lignite Energy Council supports the bill draft. He said the lignite industry is facing challenges with proposed federal Environmental Protection Agency regulations and needs funding to research solutions for compliance.

In response to a question from Chairman Wardner, Mr. Bohrer said the lignite research fund currently receives approximately \$4 million per year from various sources, including the coal conversion tax allocation.

### **BILL DRAFT RELATED TO AN OIL EXTRACTION TAX CREDIT FOR ENHANCED OIL RECOVERY WITH CARBON DIOXIDE**

At the request of Chairman Wardner, Ms. Emily Thompson, Counsel, Legislative Council, presented a bill draft [[17.0272.01000](#)] relating to an oil extraction tax credit for enhanced oil recovery with carbon dioxide. She said the bill draft provides a \$10 credit against oil extraction taxes for each ton of carbon dioxide purchased or acquired for use in enhanced oil recovery in the state. She said oil producers would be required to report to the Industrial Commission regarding the amount of carbon dioxide initially injected into an oil reservoir.

In response to a question from Senator Bekkedahl, Ms. Thompson said the \$10 value was based on the recommendations in a report from IHS Energy to the interim Taxation Committee regarding enhanced oil recovery.

Mr. Bohrer said the Lignite Energy Council supports the bill draft. He said oil producers may choose to purchase carbon dioxide from North Dakota power plants due to the tax credit, which would assist the state in reaching compliance with proposed federal Environmental Protection Agency regulations.

## OIL AND GAS TAX ALLOCATIONS

### Oil and Gas Impact Grants

Mr. Gerry Fisher, Administrator, Energy Infrastructure and Impact Office, Department of Trust Lands, presented information ([Appendix J](#)) regarding oil and gas impact grants, including the amount of grants that have been awarded, the amount of grants anticipated to be awarded, and any issues related to the availability of funds. He said the Legislative Assembly appropriated \$139.3 million from the oil and gas impact grant fund for grants, including \$132.5 million of designations for specific grant categories. He said \$42 million of grants have been awarded with an additional \$6 million of grants that are required to be awarded in January 2017. He said approximately \$26 million may be available for future grant awards based on the Office of Management and Budget's July 2016 revised revenue forecast. He said future grant awards will not be scheduled until the fund receives sufficient allocations to provide for the existing obligations. He said the Department of Trust Lands received guidance from the Attorney General's office suggesting the department seek legislative guidance regarding the intent any grant designations that are unable to be awarded during the 2015-17 biennium to due to revenue collections being less than anticipated.

### Oil and Gas Tax Allocation Formulas

Chairman Wardner distributed information ([Appendix K](#)) regarding the oil and gas tax allocation formulas. He said one of the concerns for the 2017-19 biennium is providing an adequate level of funding for hub cities to continue servicing their debt payments. He said the state will also need an adequate level of funding from the oil and gas tax allocation formula to maintain funding for state programs. He said possible changes to the oil and gas tax allocation formulas include:

- Adjusting the amounts allocated to hub cities from the 1 percent of the 5 percent oil and gas gross production tax.
- Adjusting the amounts allocated to hub city school districts from the 1 percent of the 5 percent oil and gas gross production tax.
- Maintaining funding levels for school districts.
- Addressing concerns related to the allocations to the oil and gas impact grant fund and the designation of grants from the fund.
- Adjusting the funding level for political subdivisions.
- Changing the allocations to the strategic investment and improvements fund and the political subdivision allocation fund.
- Adding an allocation to the budget stabilization fund.

In response to a question from Chairman Wardner, Senator Bekkedahl said the Williston airport will need funds in calendar year 2017 to continue the work on the new airport. He said the lack of funding or the delay in funding of oil and gas impact grants that were designated for the Williston airport could create a funding challenge for the airport project.

In response to a question from Chairman Wardner, Senator Bekkedahl said the City of Williston has approximately \$320 million of debt, most of which requires repayment within 5 to 7 years.

In response to a question from Chairman Wardner, Representative Hanson said the funding for hub cities not located in oil-producing counties may not be necessary because it appears the funding allocations may not be at a consistent level to effectively budget and plan for projects and programs.

Senator Bowman said funding will be required each biennium to continue the maintenance on the roads that were built during the peak of oil- and gas-related development in the 2013-15 biennium.

The Legislative Council staff distributed a memorandum entitled [Hub City Allocations and Employment Data](#). The memorandum provides information on the hub city allocation formulas related to the 1 percent of the 5 percent oil and gas gross production tax and provides a comparison of oil- and gas-related employment data and mining employment data related to the hub city allocation formulas.

At the request of Chairman Wardner, the Legislative Council staff distributed information ([Appendix L](#)) from the State Treasurer's office regarding the allocations to hub cities and hub city school districts for the 2015-17 biennium.

The Legislative Council staff distributed a memorandum entitled [Oil and Gas Tax Allocation Formula Changes - 2015-17 Biennium and 2017-19 Biennium](#). The memorandum provides information regarding the changes to the oil and gas tax allocation formulas between the 2015-17 biennium and the 2017-19 biennium based on current statutory provisions.

The Legislative Council staff presented a memorandum entitled [2017-19 Biennium Estimated Oil and Gas Tax Allocations - Various Price, Production, and Allocation Scenarios](#). The memorandum provides information on three oil production scenarios ranging from 900,000 barrels per day to 1 million barrels per day, four price scenarios ranging from \$36 per barrel to \$51 per barrel, and three county allocation scenarios ranging from 30 percent of the oil and gas gross production taxes over \$5 million to 40 percent of the oil and gas gross production taxes over \$5 million. The Legislative Council staff said current law provides for an allocation of 30 percent of the oil and gas gross production tax collections to the county related to the 4 percent of the 5 percent oil and gas gross production tax. The Legislative Council staff said the allocations to the political subdivisions range from \$410.7 million under the lowest price, production, and allocation scenario to \$688.28 million under the highest price, production, and allocation scenario.

Chairman Wardner said the next meeting will be in Bismarck on October 10-11, 2016. He said the committee will review and discuss the oil and gas tax allocation formulas at the next meeting. He said the committee will attend the Great Plains and EmPower Energy Conference on October 11, 2016.

No further business appearing, Chairman Wardner adjourned the meeting at 3:30 p.m.

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Adam Mathiak  
Fiscal Analyst

ATTACH:12