

NORTH DAKOTA LEGISLATIVE MANAGEMENT

Minutes of the

ENERGY DEVELOPMENT AND TRANSMISSION COMMITTEE

Tuesday, August 14, 2018
Roughrider 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, Brad Bekkedahl, Jim Dotzenrod, Merrill Piepkorn, David S. Rust; Representatives Mike Brandenburg, Corey Mock, Todd Porter, Gary R. Sukut

Members absent: Senator Jessica Unruh; Representatives Tracy Boe, Ben Koppelman

Others present: Senator Donald Schaible, Mott, member of the Legislative Management
See [Appendix A](#) for additional persons present.

It was moved by Representative Mock, seconded by Senator Rust, and carried on a voice vote that the minutes of the May 9-10, 2018, meeting be approved as distributed.

OIL AND GAS UPDATES

North Dakota Pipeline Authority

Mr. Justin Kringstad, Director, North Dakota Pipeline Authority, presented information ([Appendix B](#)) regarding an update on the status of the oil and gas industry. He said 72 percent of the oil produced in North Dakota is exported by pipeline as of May 2018. He said exports by rail have increased in recent months because the pricing premiums at coastal refineries offset the higher transportation costs. He said North Dakota's oil price discount related to transportation costs decreased after the Dakota Access Pipeline began operations, resulting in an additional \$3 of revenue per barrel of oil when sold by producers. He said the state collected approximately \$130 million more in oil and gas tax revenues between June 2017 and June 2018 because of the higher oil prices received by oil producers. He said natural gas production exceeds the processing capacity but new processing plants are anticipated to begin operations in the fourth quarter of 2018. He said the infrastructure constraints might require oil companies to limit oil and gas production, particularly when the Industrial Commission's natural gas capture requirements increase from 85 to 88 percent in November 2018. He said approximately 1,000 miles of new pipelines, including gathering lines and transmission lines, are constructed each year resulting in approximately 1 mile of new pipeline for each new oil well.

In response to a question from Representative Porter, Mr. Kringstad said no plans have been announced publicly for North Dakota oil to be transported on the Keystone Pipeline. He said additional pipelines would need to be constructed to bring large volumes of North Dakota oil to the Keystone Pipeline.

In response to a question from Senator Dotzenrod, Mr. Kringstad said natural gas can be stored during periods of low demand, such as the summer months, using refrigerated storage or natural underground storage. He said underground storage is the most cost-effective storage method. He said refrigerated storage requires significant energy to chill the natural gas whereas underground storage allows the natural gas to be injected underground into natural storage reservoirs and be pumped to the surface when needed. He said the largest natural underground storage site is located in eastern Montana.

In response to a question from Senator Piepkorn, Mr. Kringstad said the capacity of the Dakota Access Pipeline could be expanded by increasing the power of the pumping units along the pipeline and by using drag reducing agents to increase the flow rate.

Targa Resources

Mr. Danny Middlebrooks, Executive Vice President, Northern Field Gathering and Processing, Targa Resources, said Targa Resources provides gathering and processing services for natural gas and crude oil. He said Targa Resources spends approximately \$150 million per year on the maintenance and improvement of gathering and processing equipment in the Bakken.

Mr. David McQuade, Senior Director, Environmental Water, Waste, Remediation, and Pipeline Compliance, Targa Resources, presented information ([Appendix C](#)) regarding soil remediation using biological remediation methods. He said Targa Resources recently used biological remediation to restore soil contaminated by an oil spill near New Town. He said the remediation process involves spreading the contaminated soil in a containment area and applying enzymes to support the growth of bacteria that digest hydrocarbons. He said the soil conditions are monitored to maintain an optimal environment for the bacteria. He said the biological remediation process can be used in cold climates but the cold temperatures in winter slow the rate at which the bacteria digest the hydrocarbons. He said biological remediation removes the hydrocarbons from the soil allowing the soil to be reused. He said because the hydrocarbons are the food source for the bacteria, the bacteria die after all the hydrocarbons are removed from the soil. He said other soil remediation methods include soil washing and disposal in a specialized landfill. He said biological remediation can restore the soil more quickly than other remediation methods. He said to be economically feasible the remediation needs to be done at or near the spill site to avoid high costs associated with transporting the soil.

In response to a question from Senator Rust, Mr. McQuade said federal and state regulations allow biological remediation methods to be used for certain oil spills, but a streamlined regulatory process could reduce remediation costs increasing the feasibility of biological remediation.

INDUSTRIAL COMMISSION STUDIES

Fracturing Sand

Mr. Edward Murphy, State Geologist, Geological Survey, Department of Mineral Resources, presented information ([Appendix D](#)) regarding the results of a study related to potential sources of sand in North Dakota for use in fracturing. He said each oil well in the Bakken uses approximately 10 million pounds of sand in the fracturing process. He said Ottawa "Northern White" sand from western Wisconsin is most commonly used in the fracturing process because of its consistent roundness and strength. He said high transportation costs and supply limitations have caused oil companies to seek alternative sources of sand. He said the Industrial Commission collected samples in 2010 from various locations in North Dakota, but the sand did not meet the quality standards for the oil industry. He said the oil industry recently lowered standards to find lower cost alternatives from local sources. He said the department collected additional samples in the summer of 2018. He said the initial results from the samples indicate some sources of sand in North Dakota may meet the industry's new standards. He said additional testing is required to determine the feasibility of using North Dakota sand in the fracturing process.

Rare Earth Elements

Mr. Ned Kruger, Geologist, Geological Survey, Department of Mineral Resources, presented information ([Appendix E](#)) regarding the results of a study related to rare earth elements. He said rare earth elements are minerals with specialized properties. He said rare earth elements commonly are found in advanced technology products such as electric cars, computers, appliances, medical devices, and military equipment. He said rare earth elements are not found commonly in high concentrations limiting the places where the elements can be mined economically. He said the United States was the largest supplier of rare earth elements until 1985 when China surpassed the United States in production. He said concentrations of rare earth elements have been found along coal seams. He said the department sampled various locations in western North Dakota near coal-bearing rocks to determine the concentrations of rare earth elements. He said the department has analyzed 600 of the 895 samples collected. He said 54 of the analyzed samples had concentrations exceeding 300 parts per million, which is the minimum threshold needed to qualify for United States Department of Energy research funding. He said additional research is needed to better understand where rare earth elements can be found in high concentrations.

In response to a question from Senator Wardner, Mr. Kruger said rare earth elements can be mined in a variety of ways but the most cost-effective mining methods depend on the geology of the mine site. He said the Energy and Environmental Research Center is studying the effectiveness of various mining methods.

WIND ENERGY UPDATES

Wind Energy Taxation

The Legislative Council staff presented a memorandum entitled [Tax Revenue Collections and Allocations for Wind, Coal, and Oil and Gas](#), which includes flowcharts of the allocations for coal taxes and oil and gas taxes. He said the original estimates for energy tax collections for the 2017-19 biennium total \$8.4 million for wind, \$73.8 million for coal, and \$3,120.1 million for oil and gas. He said all the wind tax collections are distributed to local political subdivisions while coal taxes and oil and gas taxes are distributed to both the state and local political subdivisions.

Representative Brandenburg distributed a copy of a bill draft ([Appendix F](#)) regarding proposed changes to the allocation of wind generation tax revenue. He said the proposed changes provide for an allocation of 33 percent of

the wind generation tax revenue to the state resulting in a corresponding decrease in the allocations to political subdivisions. He said the proposed allocation change relates to the tax revenue collected from new wind turbines. He said older wind turbines are subject to property taxes, which would remain with local political subdivisions.

In response to a question from Representative Porter, Representative Brandenburg said the materials used in the construction of new wind turbine projects are subject to sales tax, which would provide additional revenue to the state.

Mitigation Payments

Mr. Michael Humann, Surface Division Manager, Department of Trust Lands, provided comments ([Appendix G](#)) regarding mitigation payments on trust lands for indirect environmental impacts. He said wind developers have constructed eight wind turbines on trust lands with at least three more planned for development in the near future. He said NextEra Energy Resources relocated some turbines initially planned for development on trust lands in Burke County because of environmental and cultural concerns. He said state trust funds receive lease payments from wind turbines developed on trust lands. He said the department has not received or paid any mitigation payments for direct or indirect environmental impacts associated with energy development projects.

Mr. Greg Link, Division Chief, Conservation and Communications, Game and Fish Department, provided comments ([Appendix H](#)) regarding mitigation payments for indirect environmental impacts. He said the Game and Fish Department is responsible for protecting all wildlife. He said the department developed a state wildlife action plan to identify potential environmental impacts related to energy development projects. He said the department coordinates with the Public Service Commission during the siting process for energy development projects to ensure projects minimize the impact on wildlife and native habitats.

Mr. Doug Goehring, Agriculture Commissioner, provided comments ([Appendix I](#)) regarding mitigation payments for indirect environmental impacts. He said the state wildlife action plan may impact agriculture lands, but the agriculture industry was not included in the process to develop the plan. He said farmers are concerned about how mitigation payments are valued and how the payments are used. He said the mitigation payments may have unintended consequences for the agriculture industry.

Mr. Randy Christmann, Chairman, Public Service Commission, provided comments ([Appendix J](#)) regarding mitigation payments for indirect environmental impacts. He said state law requires the Public Service Commission to evaluate and consider the direct and indirect environmental impacts when siting energy development projects. He said the siting process allows the Public Service Commission to evaluate the proposed energy development projects and allows companies the opportunity to dispute the commission's findings. He said the commission recently determined a company had addressed indirect environmental impacts for a project after making mitigation payments to an environmental organization. He said the commission is reviewing alternative methods of addressing indirect environmental impacts because of concerns about how the environmental organization might use the mitigation payments.

In response to a question from Representative Porter, Mr. Christmann said the Public Service Commission has the final authority to determine the value of mitigation payments pursuant to the siting process.

In response to a question from Senator Wardner, Mr. Christmann said one of the reasons environmental impacts were added to the evaluations in the siting process was to ensure the projects were adequately reviewed. He said the federal government could be forced to intervene in the siting process if the commission does not properly evaluate the projects.

Wind Project Siting Process

Dr. Kimberly Suedkamp Wells, Manager, Environmental Services, Mid Continent Region, NextEra Energy Resources, presented information ([Appendix K](#)) regarding the siting process for wind energy projects. She said the siting process includes a formal application, public hearings, and the final order from the Public Service Commission. She said site selection for wind turbines is a complex process for wind developers. She said wind developers evaluate areas based on wind speed and landowner willingness. She said setback areas are removed leaving the remaining areas as potential turbine sites. She said landowners may be willing to allow wind turbine development on their land but the development may be limited by wind availability, setbacks, or other factors. She said developers comply with state and federal guidelines to address wildlife and other environmental impacts. She said wind developers coordinate with tribal leaders when planning projects that may impact culturally sensitive areas.

In response to a question from Senator Piepkorn, Dr. Suedkamp Wells said NextEra Energy Resources has one project approved on tribal lands with plans for another project in the future.

Public Comments

Mr. Dan Wogsland, Executive Director, North Dakota Grain Growers Association, said the members of the North Dakota Grain Growers Association support the comments of the Agriculture Commissioner.

Electrical Generation Tax Collections

Mr. Ryan Rauschenberger, Tax Commissioner, presented information ([Appendix L](#)) regarding electrical generation tax collections. He said coal conversion tax collections averaged approximately \$26 million per year between 2008 and 2017. He said wind tax collections increased from \$5.7 million in 2013 to \$8.7 million in 2017. He said natural gas electrical generation units generally are used to provide power only during periods of peak demand resulting in tax collections of \$1.3 million in 2017. He said the state's share of electrical generation tax collections would decrease if wind turbines replaced coal power plants because the state receives allocations from the coal taxes but not the wind taxes under current law.

OIL AND GAS VALUATION STUDY

Mr. Rauschenberger presented information ([Appendix M](#)) regarding the results of an oil and gas valuation study related to mineral royalty payments and tax liability. He said the Tax Department held three meetings to gather information regarding natural gas processing, royalty agreements, and royalty owners' concerns about deductions from their royalty payments. He said the state's royalty agreements do not allow for any deductions while individual's royalty agreements can be based on different calculation methods. He said the department did not have any recommended statutory changes because the royalty payments are subject to the terms of the agreements negotiated between the oil producers and the mineral owners. He said the Industrial Commission recently changed its administrative rules requiring any deductions from the royalty payments to be disclosed on the royalty statement. He said the rule change may help to resolve the concerns from mineral owners.

Senator Bekkedahl said he has seen examples on royalty statements from different oil companies in which one company decreased the oil royalties related to natural gas deductions but another company did not. He said the oil companies appear to be using different methods for calculating deductions although the leases in the examples were based on similar agreements.

OTHER

Chairman Wardner presented information ([Appendix N](#)) regarding proposed changes to the oil and gas tax revenue allocation formulas. He said the proposed changes to the formulas primarily relate to the hub cities and the state's share. He said the allocations to hub cities are based on mining employment, but the proposed changes would base the allocations on multiple factors including population, mining establishments, and mining employment. He said the proposed changes to the state's share of oil and gas tax allocations include allocations to two new state funds designated for infrastructure projects in non-oil-producing counties. He said the estimated allocations based on the proposed changes reflect oil production remaining at 1.2 million barrels per day for the entire 2019-21 biennium and North Dakota oil prices remaining at \$52.50 per barrel.

In response to a question from Representative Mock, Chairman Wardner said the infrastructure funding for non-oil-producing counties included in the formula is intended to address critical needs and is not intended to be a tax relief program.

Chairman Wardner said the committee's last meeting of the interim will be in Bismarck in early October 2018. He said the committee will conclude its discussions at the next meeting regarding the oil and gas tax revenue allocations to the hub cities and the wind tax revenue allocations. He said he does not anticipate the committee will recommend any bill drafts.

No further business appearing, Chairman Wardner adjourned the meeting at 4:20 p.m.

Adam Mathiak
Senior Fiscal Analyst

ATTACH:14