

NORTH DAKOTA LEGISLATIVE MANAGEMENT

Minutes of the

ENERGY DEVELOPMENT AND TRANSMISSION COMMITTEE

Thursday, August 18, 2011
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, John M. Andrist, Stanley W. Lyson, John Warner; Representatives Michael D. Brandenburg, Shirley Meyer, Mike Schatz, Gary R. Sukut

Members absent: Senators Lonnie J. Laffen, Ryan M. Taylor; Representatives Scot Kelsh, Todd Porter

Others present: See [Appendix A](#)

Representative Jerry Kelsh, member of the Legislative Management, was also in attendance.

At the request of Chairman Wardner, committee counsel reviewed the [Supplementary Rules of Operation and Procedure of the North Dakota Legislative Management](#).

ENERGY STUDY

Chairman Wardner said the committee will study the state of each form of energy and focus on workforce, housing, infrastructure, and federal regulation.

Mr. Tony Clark, Commissioner, Public Service Commission, provided written testimony ([Appendix B](#)) on recent activities in the energy sector from the perspective of the regulatory agency that oversees a large portion of its development. He said since 2005 the Public Service Commission has overseen and processed the following completed and pending siting cases:

- A letter of intent for a proposed \$2.2 billion coal-to-electricity plant at South Heart.
- Four cases related to new gas plants and expansions to existing gas plants.
- Forty pipeline cases that have been docketed by the Public Service Commission involving oil, gas, and carbon dioxide pipelines.
- Seventeen electrical transmission line cases. Approximately half of the pending investment is related to the proposed Minnkota 345-kilovolt line from Center to Grand Forks. The other half of that total is related to the Fargo to Monticello, Minnesota, CapX 2020 line.
- Twenty-three cases relating to wind farms. These cases total \$12.5 billion in investment.

Mr. Clark said since the recent energy boom began, the Public Service Commission has completed cases involving \$5.5 billion in investments in this state. He said there are an additional \$13 billion in

proposed projects that are in various stages of permitting. He said this state's siting Act is a sound one. He said project developers' siting fees are available to the Public Service Commission to process cases and to hire outside consultants and experts.

Mr. Clark focused on five energy-related issues:

1. Transmission development;
2. Gas pipeline safety;
3. Coal mine reclamation;
4. Economic regulation; and
5. Environmental compliance costs.

Mr. Clark said continued and even greater investments will be dependent upon additional transmission assets constructed throughout the region and the entire eastern interconnect. He said within our local Midwest independent system operator (MISO) region, recent proposals would provide for a new category of transmission projects--multivalued projects (MVP)--that could expand the available transmission assets that serve both reliability and generation needs within the Midwest. He said there are ongoing efforts among the 40 states of the eastern interconnect to plan for transmission on a forward-looking basis. He said the Federal Energy Regulatory Commission (FERC) has been actively promoting future grid planning through such things as planning through its recent Order No. 1000 that seeks to compel greater regional and interregional transmission planning.

Mr. Clark said several high-profile incidents have highlighted gas pipeline safety. He said the Public Service Commission has jurisdiction for intrastate gas transmission and distribution, and this may be an area in which the Public Service Commission eventually determines more resources are needed.

Mr. Clark said the Public Service Commission has become increasingly concerned with programmatic changes being implemented through the federal Office of Surface Mining (OSM). For example, he said, OSM has begun sending its own inspectors to duplicate the work of state inspectors. He said this only serves to unnecessarily increase regulatory confusion. Another example, he said, is OSM is in the process of developing a new nationwide rule to protect any stream that may be impacted by coal mining. He said while the primary purpose of the proposed rule relates to mountaintop mining and valley fill issues in Appalachia, it will add new regulations for coal mining in this area of the country. He said this process will add to the cost of mining. He said OSM has indicated

intent to cut federal funding to state programs and to require states to increase their own taxes on coal to fund the federal share of these programs. As an alternative to states increasing industry taxes or fees, he said, OSM is considering a new rule to assess fees on the coal industry that would be returned to the state to cover all or part of the federal share of the regulatory program.

Mr. Clark said there has been an increase in rate cases. He said the Public Service Commission recently approved new rates for Montana-Dakota Utilities Company and is in the midst of an Xcel Energy, Inc., electric rate case. He said the Public Service Commission has processed a number of advanced determinations of prudence cases.

Mr. Clark said the environmental compliance costs will be asked to be passed along to consumers. He said these costs may be significant. He said MISO estimates that environmental retrofit costs will total in the neighborhood of a 7 percent increase in customers' bills. Separately, he said, MISO estimates a \$50 per ton cost of carbon, if imposed by the federal government, would equate to an approximate 40 percent increase in electric rates.

In response to a question from Senator Warner, Mr. Clark said most fees the Public Service Commission receives from the federal government relate to reclamation. He said this money comes from a tax on coal companies and is off budget on a federal level. He said public utilities in this state are regulated from funds received from the state general fund.

In response to a question from Representative Brandenburg, Mr. Clark said the wind farm by Merricourt has been stopped due to a dispute between two utility companies. He said avian mitigation is an increasing concern but is not an insurmountable obstacle to development.

In response to a question from Representative Brandenburg, Mr. Clark said avian impacts need to be dealt with by a wind farm developer and create an open-ended liability for companies.

Senator Andrist said the state should challenge the federal government on jurisdictional issues instead of the rule changes. In response to a question from Senator Andrist, Mr. Clark said the jurisdiction of federal laws can be challenged successfully depending upon the specific law. He said it depends on the jurisdiction of the agency.

In response to a question from Representative Meyer, Mr. Clark said there is a formula in state law for fees paid by a wind farm project developer. He said these fees are based upon the value of a project with a maximum amount. He said if too much money is paid in fees, the money is returned to the project developer. He said the fees give flexibility to the Public Service Commission and are substantial enough to weed out speculative wind farms.

In response to a question from Representative Schatz, Mr. Clark said the regulation by the federal government over coal mines is completely duplicative. In the past, he said, the state program was audited by

the federal government, and the federal government funded the state program. He said if there was a deficiency in the programs, the federal government would run the inspection program. He said the federal government is now sending out inspectors to do the same inspections done by state inspectors. He said this creates more redtape.

In response to a question from Senator Wardner, Mr. Clark said the CapX 2020 line is a reliability line that helps the Red River Valley if a line goes down due to weather; however, anytime a line is added it helps export capabilities.

Mr. Alan Anderson, Commissioner, Department of Commerce, presented written testimony ([Appendix C](#)). He provided a handout on the EmPower ND Commission (on file in the Legislative Council office). He gave a brief overview of the EmPower ND Commission, also known as the Energy Policy Commission. He said the EmPower ND Commission follows six general principles:

1. Growing all energy industries;
2. Basing decisions on sound science and sound economics;
3. Research and development of new technologies;
4. Incentives preferred over mandates;
5. Building upon fair regulator and friendly business climate; and
6. Environmentally responsible manner.

Mr. Anderson said the EmPower ND Commission will focus on four topics as a result of its first meeting. He said these topics include:

- Workforce.
- Federal regulation.
- Infrastructure.
- Research and development.

In response to a question from Senator Warner, Mr. Anderson said the state provides funding for research and development in several areas in the Industrial Commission budget. He said these areas include the Lignite Energy Council, Oil and Gas Research Council, Renewable Energy Council, and Department of Commerce through the centers of research excellence.

In response to a question from Representative J. Kelsh, Mr. Anderson said the Department of Commerce is trying to bring the parties together that are in disagreement over the Merricourt wind farm. He said it is difficult to bring the parties together due to litigation.

Mr. Dale Niezwaag, Senior Legislative Representative, Basin Electric Power Cooperative, gave a presentation ([Appendix D](#)) on the Antelope Valley Station carbon dioxide project and an update on MISO issues. He said the goal of the Antelope Valley carbon dioxide project was to collect carbon dioxide. He said to do this Basin Electric needed the technology, an oil company to use the carbon dioxide for oil recovery, environmental approval, a feed study, and financing. He said the threshold for going forward was whether the project made business sense. He

said the Doosan Company investigated the project for Basin Electric and estimated \$282.5 million, plus or minus 15 percent and other costs, for a total of \$500 million. He said the project is on hold because of lack of regulatory certainty as to carbon dioxide. He said present economic conditions do not favor oil companies taking the risk of expense to put carbon dioxide into recovery efforts in oilfields. He said the full cost of the project was large, and there was not a revenue stream. He said the process did provide valuable knowledge.

In response to a question from Senator Warner, Mr. Niezwaag said in carbon dioxide sequestration, the carbon dioxide stays in the ground for thousands of years. He said current law says leases may not exceed 99 years. He said current law says the surface owner owns the pore space. He said these laws create some confusion.

In response to a question from Representative Meyer, Mr. Niezwaag said Basin Electric has worked with the company in Halliday that is planning to store carbon dioxide until there is a market for it.

Mr. Niezwaag provided a transmission update. He said 72 percent of the lines used by Basin Electric are owned by the integrated system, which includes the Western Area Power Association and Basin Electric. He said Basin Electric is not a member of MISO; however, Basin Electric cooperates with MISO. He said Basin Electric cooperates with MISO when Basin Electric needs to sell surplus energy or needs additional energy at certain times. He said Basin Electric filed a protest with FERC over the MISO tariff as to cost allocation. He said the tariff would allow MISO to use the Basin Electric system. He said Basin Electric lost the challenge and is evaluating options.

Mr. Niezwaag reviewed recent construction projects, including wind projects, gas generation projects for peaking and intermediate needs, a coal generation plant in Wyoming, and transmission lines including the Belfield to Rhame terrain line, Williston to Tioga line, and the Charlie Creek to Williston Uprate. He said Basin Electric is working on building transmission in oil country.

In response to a question from Representative Brandenburg, Mr. Niezwaag said Basin Electric finished a wind farm project this spring and is done with wind projects at the current time.

In response to a question from Senator Wardner, Mr. Niezwaag said Basin Electric builds transmission to meet the member load. He said there was load growth in ethanol, and now there is load growth in oil.

In response to a question from Senator Wardner, Mr. Niezwaag said Basin Electric has a seams agreement to sell extra power in MISO.

Mr. Lynn Helms, Director, Department of Mineral Resources, made a presentation ([Appendix E](#)) on oil and gas development. He said in 2010 there were over 2,000 wells in the Bakken Formation. He said in 2011 there will exceed 2,600 wells in the Bakken. He said 1,700 well permits were issued in 2010, and 1,213 wells were drilled. He said there were

1,750 permits issued in 2011, and almost 500 permits left from 2010. He said the number of rigs will fluctuate between 100 rigs and 250 rigs per year. He said it is estimated 33,000 new wells will be drilled in the Bakken and Three Forks Formations. He said the drilling activity now supports 35,000 jobs. He said there were 193 rigs in the state as of today. He said a drilling rig costs approximately \$20 million, and he expects 220 rigs in the state at the end of the year. He expects 250 rigs in the state next year. He said the play is expanding south of Interstate 94 and to the Canadian border. He said wells are at idle because there is a 120-day wait for a frac job. He said this is the largest constraint on production. He said stripper well status will be reached after 13 years to 14 years for a typical Bakken well under current law. He said the Legislative Assembly will need to review taxes on stripper wells.

Mr. Helms said the average Bakken well generates over \$20 million in net profit. He said it costs \$6.6 million to drill and complete a well. He said there is no gas drilling in this state that is not associated with the drilling of oil. He said flaring is increasing, and research is being conducted by the Oil and Gas Research Council to compare the 32 percent rate in this state with other mature areas in this country. He said the areas of mature development in five years in this state have reduced from 80 percent to 20 percent of flared gas. He said the risks involved with oil development include cap and trade proposals, tax rule changes, oil price below \$50 a barrel, Environmental Protection Agency (EPA) regulation of hydraulic fracturing, and federal minor source air permits requiring 6 months to 12 months for approval.

In response to a question from Senator Wardner, Mr. Helms said even though there is a wait for frac jobs, it does not result in drilling slowing down because it is better to wait than to lose a lease. He said most leases need to be secured within 2.5 years to 4 years, and the cost of a lost lease is around \$2 million.

In response to a question from Senator Warner, Mr. Helms said the issue of loss in lease money to mineral owners because of the rush by oil companies to secure the lease is an issue of concern with the Industrial Commission.

In response to a question from Senator Andrisc, Mr. Helms said the first successful Bakken well was in April 2006. Mr. Helms said in the fifth year, the well is producing 75 barrels to 100 barrels per day. He said the rate of decline is 10 percent per year after the fifth year. He said there is some reworking being done in the first wells that were not stage fractured.

In response to a question from Senator Warner, Mr. Helms said using carbon dioxide for secondary or tertiary recovery is driven by reservoir pressure. He said the carbon dioxide needs to be added to the reservoir before the carbon dioxide mixes with oil. He said there is a window between the 10th year and 15th year where there will be at least minimum pressure.

In response to a question from Representative Meyer, Mr. Helms said there is a great deal of controversy on what actuates a lease. He said this issue is not within the jurisdiction of the Industrial Commission. He said there is a federal case on the issue. He said the court has allowed a two-week break, but plowing snow is not enough of an action for continuous activity.

In response to a question from Senator Wardner, Mr. Helms said 1.5 percent to 2 percent of the oil is recovered from each well. He said there are seven wells for each spacing unit, so 14 percent is recovered.

In response to a question from Senator Wardner, Mr. Helms said if oil fell below \$50 per barrel, the state would take a bigger hit than the industry. He said the industry would stay in the state but would stop adding wells and would idle up to 30 rigs. He said the state would still be at historically high levels of activity.

In response to a question from Senator Andrist, Mr. Helms said 45 drilling rigs are new development. He said 25 percent of the wells are new development.

In response to a question from Senator Wardner, Mr. Helms said the surface owner is compensated by the oil company when there is an accident. He said his division addresses cleanup measures but does not address compensation. He said the court and the Agricultural Mediation Service can be used to determine damages.

Ms. Sandi Tabor, Director, North Dakota Transmission Authority, presented information on the annual report of the Transmission Authority (on file in the Legislative Council office). She said the regional generation outlet study goal was to transmit wind energy across the MISO footprint. She said any transmission moving energy out of this state is good for North Dakota. She said the final report of the regional generation outlet study had three build out options. She the study looked at the lines that were in common to all three build out options as part of an MVP task force. She said the study consisted of the detailed studies on reliability and how the line would affect the system. She said the study showed these lines would not harm the system and would take away constraint issues in the MISO footprint. She said the importance of the determination of an MVP line is MISO has filed a tariff with FERC as to cost allocation, and cost allocation for an MVP line is across the 14-state area of MISO.

In addition, Ms. Tabor provided an update on projects that will affect the movement of power, including the CapX 2020 and the Monticello to Fargo line. She said a capacity increase is expected of 600 megawatts to 1,000 megawatts. She said the number is most likely closer to 600 megawatts. She said the Basin Electric project of the Williston to Tioga line will help meet the demand in oil country.

In response to a question from Representative J. Kelsh, Ms. Tabor said transmission is one of the top five issues affecting wind power. She said there is an issue with demand because of the slowing economy.

In response to a question from Representative J. Kelsh, Ms. Tabor said the Transmission Authority was created at the request of the lignite industry.

In response to a question from Senator Andrist, Ms. Tabor said there is concern with brownouts in the northeast portion of the country, but the recession has removed the impending nature of that concern. She said urgency may help in the construction of transmission lines; however, it takes time and money to plan and build transmission lines, regardless of urgency.

In response to a question from Representative Brandenburg, Ms. Tabor said an MVP line cost allocation is broken down between transmission owners in the MISO footprint. She said the cost is broken down pro rata as to load.

In response to a question from Senator Warner, Ms. Tabor said the Transmission Authority has the authority to issue \$800 million in bonds--\$30 million with the moral obligation of the state. She said the Transmission Authority most likely will not be involved with any MVP lines because there are transmission owners that will build these lines. She said the Transmission Authority is more likely to get involved with the interconnect substations involved with the Ellendale line.

In response to a question from Representative Warner, Ms. Tabor said security as to cyber attacks is a concern with regional transmission owners.

In addition to the Transmission Authority annual report, Ms. Tabor gave a presentation ([Appendix F](#)) on EPA regulations. She said the main problem with EPA regulations is they are made on a one size fits all level. She said new rules on greenhouse gases are coming. She said the technology for capturing greenhouse gases has not been commercially demonstrated, especially as to lignite coal. She said the industry is unsure as to what to do with carbon dioxide. She said there needs to be a law on long-term liability. She said there are new rules on mercury, ozone, and coal combustion residuals. She said MISO is concerned with the reliability of the system in response to the rules on mercury and the use of cooling water. She said the response by industry may include the potential retirement of 15,000 megawatts of coal combustion plants because of retrofit costs. She said it will cost approximately \$31 billion to replace the old plants, and there will be additional costs of transmission. She said the ozone rule has to do with smog, and the final rule will be out this fall. She said she does not think the industry in North Dakota can meet the sulfur dioxide standard if compliance is based on modeling instead of monitoring. She said modeling overestimates the amount of sulfur dioxide by up to 25 percent. She said if modeling is used, then there could be nonattainment issues. She said North Dakota has filed a lawsuit regarding the use of modeling instead of monitoring. She said as to mercury rules, the industry can meet the subcategory requirements for lignite, but cannot meet the beyond-the-floor

standards. She said MISO reported these mercury standards placed the most coal-fired units at risk for compliance.

Ms. Tabor said the Army Corps of Engineers is considering the nationwide permit for surface mining and to review each permit on a mine-by-mine basis. She said this is duplicative of what the state does for regulation. She said the Waters of the United States Rules are confusing and may result in every wetland in North Dakota being a water of the United States. She said the stream protection rule of the Office of Surface Mining is meant to apply to mountaintop mining in Appalachia. She said the EPA is trying to enforce standards that do not apply to mining west of the Mississippi.

In response to a question from Representative Brandenburg, Ms. Tabor said the state may protect itself by filing comments and communicating with the Congressional Delegation and Congress. She said Congress can have an impact on regulation before it is finalized through colleague letters to the EPA. She said Congress may pass laws; however, the current environment is of gridlock. She said the lawsuit by the state on regional haze is important because Congress is unable to take action.

In response to a question from Senator Andrist, Ms. Tabor said Congress can restrict the use of federal funding as a way to restrict federal agencies.

Mr. David Glatt, Chief, Environmental Health Section, State Department of Health, provided written testimony ([Appendix G](#)) on the department's legal challenge to the proposed regional haze program implementation decisions by the EPA. He said the state is primary for most environmental action in this state. He said the department is taking two actions. The first action is on nitrous oxide emissions, and the second action is on regional haze. He said North Dakota has a state implementation plan that specifically outlines how the state and industry will comply with the goals of the regional haze program. He said the EPA has objected to the portion of the state implementation plan which outlines how the state proposes to control nitrous oxide emissions from specific electric generation facilities that use coal. He said the department has chosen a particular technology as a control alternative for nitrous oxide and the EPA has indicated another technology is appropriate and has threatened to force that technology on the state through a federally promulgated and enforced federal implementation plan. He said the state has attempted to settle the disagreement with the EPA and is pursuing other avenues of settlement besides legal action. He said the intent of Congress and the best practice is for the state to make environmental decisions regarding the state.

In response to a question from Representative Brandenburg, Mr. Glatt said the EPA has started to disinvest in this state because of the budget but is proposing more regulation. He said people from large population areas do not know what goes on in North

Dakota, and the regulations may be good for those people but not for North Dakota. He said regulation needs to be science-based. He said laws should be based on science, and consistency is important.

Mr. Justin Kringstad, Director, North Dakota Pipeline Authority, provided a copy of the annual report of the Pipeline Authority (on file in the Legislative Council office) and gave a presentation ([Appendix H](#)) on pipeline, rail, and truck capacity for the transportation of oil and natural gas projects. He said oil production has blown by past previous projections. He said there are two challenges--getting oil out of the state and moving oil within the state. He said although natural gas is at a historically low price, natural gas liquids have a great value.

In response to a question from Representative Warner, Mr. Kringstad said there has not been a development in internal markets for petroleum chemicals in this state because Alberta, Canada, has attractive markets for petroleum chemicals. He said the Pipeline Authority is not looking to bring natural gas to cities throughout the state. He said the Pipeline Authority supports serving smaller communities with natural gas. He said until natural gas is processed at a plant, it is worthless. He said he has not heard any conversation regarding the building of an anhydrous ammonia plant in this state.

In response to a question from Representative Meyer, Mr. Kringstad said there is capacity for 100,000 barrels per day on the Trans-America Pipeline. He said 65,000 barrels per day were committed in the open season. He said the difference will be filled on a spot price basis.

Mr. Francis Ziegler, Director, Department of Transportation, presented written testimony ([Appendix I](#)) on road projects in oil-producing counties, oil impact funding, the emergency relief program, and Highway 22 repair plans.

In response to a question from Representative Meyer, Mr. Ziegler said if the work is not completed within two years, the Legislative Assembly must reallocate the funds.

In response to a question from Senator Lyson, Mr. Ziegler said the department is frustrated with the accidents that are occurring on the bypass in Williston. He said the department has committed \$1 million for the environmental document. He said an impediment is that the city and county control land use, and there are three buildings in the way of the proposed bypass. He said the bypass is not in this budget for this biennium.

In response to a question from Senator Wardner, Mr. Ziegler said the environmental assessment takes time to weigh the options, but most time is spent with the public meetings. He said the right of way may take a long time because of court challenges to the state acquisition of land. He said it takes approximately three years. He said it takes funding, and the federal highway bill and gas tax die soon. He said if this occurs, the state will be \$215 million short.

He said the federal component of funding will lapse on October 1 unless Congress takes action.

In response to a question from Senator Warner, Mr. Ziegler said Highway 22 will be more stable than the two previous repairs, because the project will move the hill instead of going around it.

In response to a question from Senator Wardner, Mr. Ziegler said the department will finish the super two between Watford City and Alexander.

In response to a question from Senator Andrist, Mr. Ziegler said the department owes \$40 million on the four-laning of Highway 2. He said that super two can be turned into four lanes.

In response to a question from Representative Schatz, Mr. Ziegler said the first priority in Dickinson is the bypass and the second priority is the underpass. He said the department works with the city and the city's priorities.

In response to a question from Senator Wardner, Mr. Ziegler said the bypass in Williston uses a county road which is a half mile away from the bypass. He said there is a disaster with roads around the state.

At the request of Chairman Wardner, committee counsel presented a background memorandum entitled [Comprehensive Energy Policy Study - Background Memorandum](#).

COMMITTEE DIRECTIVES

Representative Meyer said the committee should look at carbon dioxide sequestration in Halliday. She said the committee may wish to review easements as to underground storage and state law limitations on these easements. She said the committee may wish to review oil and gas discounts.

Representative Brandenburg said the committee should review conservation groups that require payment to remove objection to energy projects.

Senator Warner said the committee should review the capacity of railroads to handle oil and existing agricultural products. He said the committee should

be informed on the effect of flooding on capacity and the possible expansion of railroad facilities. He said the committee may wish to have a report on the state of the railroads in this state.

Representative J. Kelsh said although there has been criticism of the EPA, there has been a decrease in pollutants that would not have occurred except for the regulation. He said companies would not reduce pollutants without regulation. He said there needs to be a balance of regulation and energy production. He said one state's air quality can affect another state's air quality, and regulation may be necessary.

Senator Wardner said the concern is the EPA is overstepping its authority at the present time.

Senator Andrist said the coal industry was building plants with scrubbers and reclaiming land before the EPA was created.

Representative Schatz said the committee should review the cost of duplication of regulation and when the federal government creates a law that forces the state to enforce the federal law.

Representative Sukut said the committee should review the reclamation process for oil well sites and wind tower sites.

Representative Meyer said the oil companies have formed a group to respond to spills around Lake Sakakawea. She said the committee should receive a report from this group on their plan for spills.

Representative Brandenburg said the committee should receive more information on the modeling process for determining air pollution.

No further business appearing, Chairman Wardner adjourned the meeting at 2:30 p.m.

Timothy J. Dawson
Committee Counsel

ATTACH:9