

# NORTH DAKOTA LEGISLATIVE COUNCIL

## Minutes of the

### ENERGY DEVELOPMENT AND TRANSMISSION COMMITTEE

Tuesday, September 23, 2008  
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, Robert M. Horne, Ryan M. Taylor, Ben Tollefson, Herbert Urlacher; Representatives Wesley R. Belter, Scot Kelsh, Matthew M. Klein, Shirley Meyer, Todd Porter, Dave Weiler

**Member absent:** Senator John M. Andrist

**Others present:** See [Appendix A](#)

**It was moved by Representative Klein, seconded by Senator Horne, and carried on a voice vote that the minutes of the previous meeting be approved as distributed.**

#### TRANSMISSION

##### Electricity

Mr. Dennis Boyd, MDU Resources Group, introduced Mr. Karl Tammar, Manager, System Operation and Planning, Montana-Dakota Utilities Company (MDU), who made a presentation ([Appendix B](#)), entitled "A History of Upper Midwest Transmission System Development."

In response to a question from Representative Klein, Mr. Tammar said one of the most important issues in transmission is how to allocate costs, whether by a licensed plate or posted stamp system. He said Federal Energy Regulatory Commission Order No. 888 order provided open, fair, and equitable access to the transmission system.

In response to a question from Senator Taylor, Mr. Tammar said the license plate rate is a regional rate and a postage rate is a nationwide rate. He said if there are multiple license plate rates there may be pancaking of rates.

In response to a question from Representative Klein, Mr. Tammar said Great River Energy is the only cooperative in this region to have membership with the Midwest Independent Transmission Systems Operator (MISO). He said MISO has a full membership and a market participant membership. He said the full membership is voluntary. He said the market participant membership allows an entity to buy and sell in the market as a market participant, but the transmission is not under MISO's control.

In response to a question from Senator Wardner, Mr. Tammar said buying and selling excess electricity on the MISO market is mainly an automated function for MDU.

In response to a question from Senator Taylor, Mr. Tammar said all generation sources are available from the pool on the market. He said if Manitoba Hydro places low-cost energy on the market, that lowers the cost overall. He said entities may have a bilateral agreement, but the spot market is over the entire footprint.

In response to a question from Senator Wardner, Mr. Tammar said if MDU purchases higher priced energy on the spot market, that additional cost is passed through to the customer through the fuel cost adjustment clause.

In response to a question from Senator Tollefson, Mr. Tammar said there is a preference clause for energy produced at the dam at Lake Sakakawea. He said the allocation of energy from the Western Area Power Administration (WAPA) is predefined by statute. He said in terms of the market, all generation is not on the grid unless it is excess energy.

In response to a question from Representative Klein, Mr. Tammar said WAPA is more of a purchaser of energy than a provider of energy on the market due to low water levels.

In response to a question from Senator Horne, Mr. Tammar said North Dakota is generation rich because the state generates approximately 4,500 megawatts of energy and the peak demand of the state is 2,000 megawatts. He said the existing transmission lines are capable of transmitting the existing generation, but that may not be the case with new generation.

In response to a question from Senator Taylor, Mr. Tammar said there is a little bit of transmission left in excess of what is generated in this state.

In response to a question from Senator Wardner, Mr. Tammar said the Federal Energy Regulatory Commission has some authority to create transmission lines. He said the Department of Energy may identify national interest transmission corridors. He said the major issue with transmission lines is to find the beneficiaries and have them pay. He said if the Federal Energy Regulatory Commission required MDU to build a line, MDU's customers would have to pay for the line and would not need the line.

In response to a question from Senator Horne, Mr. Tammar said cost recovery issues are related to capital recovery. He said there needs to be a mechanism for recovery for there to be new transmission.

In response to a question from Senator Wardner, Mr. Tammar said MDU's business model does not include generating more electricity and selling more electricity on the open market.

In response to a question from Representative Meyer, Mr. Tammar said in MISO, the transmission providers have to make the system available, generally, on a first come first serve basis.

In response to a question from Representative Meyer, Mr. Tammar said there are 83,000 megawatts of power requesting service in all of the MISO areas. He said there are 64,000 megawatts of renewable energy in North Dakota and South Dakota.

In response to a question from Representative Kelsh, Mr. Tammar said the amount of energy lost in transmission is approximately 3 percent and the amount lost in distribution is about 4 percent. He said the total average loss of alternating current is 7 percent. He said there are very few direct current lines in existence and they use a very high voltage.

In response to a question from Senator Urlacher, Mr. Tammar said the projected growth in energy demand for MDU's customers is 1.4 percent. He said regionwide the projection is not much more than 1.5 percent. He said from the late 1930s to the 1970s the growth rate was around 10 percent per year.

In response to a question from Senator Wardner, Mr. Tammar said load-serving entities must have generation to meet the load as part of reliability standards.

Ms. Sandi Tabor, North Dakota Transmission Authority, made a presentation based on a handout entitled *North Dakota Transmission Authority: Annual Report - July 1, 2007 to June 30, 2008* ([Appendix C](#)). She said MISO is studying queue reform. She said instead of first in, first out, which projects go to the front of the line would be project specific.

In response to a question from Senator Horne, Ms. Tabor said there have been high-level discussions with the legislative leaders in Minnesota, but she does not think it will be likely there will be legislation to change Minnesota's rules relating to the treatment of coal energy.

In response to a question from Senator Wardner, Ms. Tabor said some environmentalists only want wind energy on the CapX 2020 lines and some do not want any new transmission lines.

In response to a question from Representative Belter, Ms. Tabor said there is no new firm base load online and demand is growing.

### Pipelines

Mr. Justin J. Kringstad, Director, North Dakota Pipeline Authority, presented testimony based on a handout ([Appendix D](#)) on current activities of the North Dakota Pipeline Authority. He provided a copy of the first issue of a quarterly newsletter entitled *The Pipeline Publication* and the *North Dakota Pipeline Authority Annual Report April 11, 2007-June 30, 2008*. A copy of each handout is on file in the Legislative Council office. In addition, he provided a copy of an

editorial from *The Bismarck Tribune* entitled "Oil Pipeline Capacity Still Big N.D. Issue" ([Appendix E](#)). He said the North Dakota port services rail tank car loading facility near Minot is scheduled to begin accepting crude shipments on September 24, 2008, at an initial capacity of 30,000 barrels a day. He said this transportation will keep up with the production of crude oil until the Enbridge Phase VI expansion is complete which is scheduled to be in the first quarter of 2010.

In response to a question from Representative Meyer, Mr. Kringstad said a unit train has 90 cars to 100 cars and can carry 600 barrels per car.

In response to a question from Senator Horne, Mr. Kringstad said that the Enbridge pipeline is a common carrier, but due to the size of the pipeline, 100,000 barrel lots per day are needed to use the pipeline. In addition, he said, there is not a place in North Dakota to insert crude oil into the pipeline. He said there needs to be a tankfarm and a station built to do this.

In response to a question from Representative Porter, Mr. Kringstad said there is capacity of 25,000 barrels per day for oil to move on pipeline into Minot but that oil cannot move out of Minot on a pipeline. He said if this capacity could be used by the port services, there would be less truck traffic.

In response to a question from Representative Meyer, Mr. Kringstad said the option to place 100,000 barrels into the Enbridge pipeline may not be available in the future because of the closing date on contracts with the pipeline.

In response to a question from Senator Wardner, Mr. Kringstad said there is capacity to export natural gas on the Northern Border Pipeline.

In response to a question from Senator Wardner, Mr. Kringstad said after 2010 there will still be a need to transport oil by railroad or there will be a need to build a new pipeline.

In response to a question from Senator Wardner, Mr. Kringstad said there is not any indication that drilling is slowing down because of the limited pipeline capacity. He said there are approximately 90 rigs in this state and that number may reach 100. He said transporting oil by rail costs more than by pipeline but if there is enough oil, the economics dictate that a pipeline be built.

In response to a question from Senator Horne, Mr. Kringstad said generally there needs to be processing of natural gas before it is placed in a pipeline. He said one exception is the Alliance Pipeline that uses unprocessed gas that is processed in Chicago. He said there are valuable products refined in the processing of natural gas which include propane, butane, and pentane.

In response to a question from Senator Urlacher, Mr. Kringstad said the Enbridge Phase VI project is an update of pump facilities. He said this phase will reach the maximum capacity of the pipeline. He said the Butte Pipeline is using a drag reducing agent to increase capacity. He said these pipelines have been

in the ground for many years and the increased capacity is created by the modification of existing structures. He said there are no new pipelines being built in this state.

In response to a question from Senator Wardner, Mr. Kringstad said regulations allow 60 days of full open flaring of natural gas.

In response to a question from Senator Taylor, Mr. Kringstad said the hauling of oil is relatively easy for the railroad, as compared to commodities, because there is enough track space in Minot to assemble a unit train.

## WIND

Mr. Tony Clark, Commissioner, Public Service Commission, provided written testimony ([Appendix F](#)) on criteria for siting wind generation facilities in North Dakota.

In response to a question from Representative Meyer, Mr. Clark said national grasslands are exclusion areas for generation.

In response to a question from Senator Taylor, Mr. Clark said strict setback requirements could prevent a viable wind farm, due to an area in which a wind farm is not viable. He said because of the prairie geology in this state, there could be a high point ideal for a wind tower within the setback of a low point that would not ever have a wind tower built on it. Mr. Clark said a strict setback requirement is not a good idea.

In response to a question from Representative Kelsh, Mr. Clark said the decommissioning rules are the same for every wind project.

In response to a question from Representative Belter, Mr. Clark said the Public Service Commission uses the definitions for prime farmland used by the Soil Conservation Service. He said although prime farmland is an exclusion area, this exclusion is modified if the land used is a de minimis amount.

In response to a question from Senator Horne, Mr. Clark said wind wake setbacks could arise in a siting case. He said the Public Service Commission requires property line setbacks in case a wind tower were to fall over.

In response to a question from Senator Wardner, Mr. Clark said for wind farms fewer than 100 megawatts, siting is done by local government. He said there is no secondary authority with the Public Service Commission for the siting of wind farms fewer than 100 megawatts. He said there could be the odd situation in which a wind farm fewer than 100 megawatts is built which expects to exceed 100 megawatts in the future.

## ENERGY CONSERVATION AND EFFICIENCY STANDARDS FOR BUILDINGS BILL DRAFTS

Committee counsel presented the third draft of a bill draft [\[90196.0300\]](#) that would require the International Energy Conservation Code Standards for energy conservation in any new commercial building

construction. In addition, he presented a bill draft [\[90123.0200\]](#) that would require the Division of Community Services to adopt construction standards that are consistent with the silver building rating of the leadership in energy and environmental design (LEED) rating system. He said these standards would apply to new public buildings in excess of \$2 million and to modifications in excess of \$500,000. He said the bill draft provides for an exemption if a written analysis is provided that proves the cost of compliance significantly outweighs the benefits.

In response to a question from Senator Tollefson, committee counsel said the energy conservation standards apply to home rule cities under the bill draft.

Ms. Doreen Riedman, Executive Officer, North Dakota Association of Builders, presented written testimony in favor of the International Energy Conservation Code bill draft ([Appendix G](#)).

In response to a question from Representative Porter, Ms. Riedman said the North Dakota Association of Builders represents residential builders. She said it is difficult to define the additional costs imposed by the bill draft.

In response to a question from Representative Weiler, Ms. Riedman said the code is written for engineers and architects and is difficult to understand by residential builders.

In response to a question from Representative Klein, Ms. Riedman said she has concerns with affordable housing, especially starter homes, and with enforcement in rural areas. She said the residential builders are addressing efficiency through education and special designations for green building.

In response to a question from Senator Urlacher, Ms. Riedman said one group that may be in favor of the code is businesses that want more green buildings.

Mr. Bill Huether, Manager, Office of Renewable Energy and Energy Efficiency, Department of Commerce, provided information to the committee. He said any additional cost will depend upon what builders are doing at present. He said there would not be additional costs for residential builders because homes are built to or exceeding the standards in the bill draft. He said some commercial buildings fall short of the standard in the bill draft. He said the main areas of deficiency are windows, walls, and controls. He said this is especially true with smaller commercial buildings. He said the additional costs typically are paid back through energy savings in three years to five years. He said a builder that does not follow the standards, sentences a building owner to higher energy costs.

In response to a question from Representative Porter, Mr. Huether said although new state buildings have glass outer walls, new technology in glass buildings makes these walls almost as good as blank insulated walls. He said the Bismarck State College building and the Bank of North Dakota building are energy star buildings that exceed the standards in the bill draft.

In response to a question from Representative Weiler, Mr. Huether said the standards in the bill draft would require that advanced controls, instead of a simple thermostat, be used to control heating and cooling. He said these controls adjust the temperature based upon when the room is used.

In response to a question from Senator Wardner, Mr. Huether said he had not visited with commercial contractors but had spoken with heating and refrigeration engineers and state building officials and they were in favor of the bill draft. He said enforcement could be achieved through joint powers agreements between larger and smaller cities.

Chairman Wardner read a correspondence from Ms. Bonnie Staiger, Executive Vice President, American Institute of Architects, stating she was okay with the standards in the bill draft.

In response to a question from Senator Taylor, Mr. Huether said he did not discuss the bill draft with the Association of General Contractors.

In response to a question from Senator Horne, Mr. Huether said this state is in violation of federal law for not having adopted efficiency standards for commercial buildings. He said there were no penalties in the federal law for not being in compliance.

In response to a question from Representative Klein, Mr. Huether said any time there is new regulation, there is additional costs for enforcement. He said the costs of enforcement have to be weighed against the positives. He said a small town would have to enter an agreement with another city or an engineer to enforce the standards in the bill draft. He said his office was comfortable with the bill draft.

Representative Klein said the idea for efficiency standards started in the committee with applying the standards to public buildings. He said the enforcement and inspection issues raised could be a major problem.

**It was moved by Senator Horne, seconded by Representative Kelsh, and failed on a roll call vote that the bill draft relating to energy conservation standards in commercial buildings be approved and recommended to the Legislative Council.** Senator Horne and Representative Kelsh voted "aye." Senators Wardner, Taylor, Tollefson, and Urlacher and Representatives Belter, Klein, Meyer, Porter, and Weiler voted "nay."

Representative Porter said the threshold levels may not be needed because every public building that is constructed or remodeled should be reviewed for efficiency.

Representative Klein said this bill draft is an initial start and only applies to public buildings.

In response to a question from Representative Porter, Mr. Huether said there are two parts to the cost of a LEED-certified building. He said there is the documentation cost, which is a fixed cost that is the same for all buildings. He said there is the actual cost of updating for which he gave estimates in his previous testimony.

In response to a question from Senator Horne, Mr. Huether said under the bill draft, the written analysis that the cost of compliance significantly outweighs the benefits would be provided to the Office of Renewable Energy and Energy Efficiency.

In response to a question from Senator Wardner, Representative Klein said the architect most likely would submit the analysis to the Office of Renewable Energy and Energy Efficiency.

In response to a question from Representative Weiler, Mr. Huether said there would not need to be formal enforcement because this is a mandate on public facilities.

In response to a question from Representative Meyer, Mr. Huether said the LEED system has four ratings--rated, silver, gold, and platinum.

Senator Urlacher said approving the bill draft is telling local government that the state does not trust local government to make reasonable decisions.

**It was moved by Representative Klein, seconded by Senator Tollefson, and failed on a roll call vote that the bill draft to require the Division of Community Services to adopt construction standards that are consistent with the silver building rating of the leadership in energy and environmental design rating system be approved and recommended to the Legislative Council.** Senator Tollefson and Representatives Kelsh and Klein vote "aye." Senators Wardner, Horne, Taylor, and Urlacher and Representatives Belter, Meyer, Porter, and Weiler voted "nay."

### **INCOME TAX CREDIT FOR RENEWABLE ENERGY EXTENDED UNTIL 2015 BILL DRAFT**

Committee counsel presented a bill draft [\[90190.0100\]](#) that would extend the income tax credit for the installation of geothermal, solar, wind, or biomass energy devices from an end date of January 1, 2011, to an end date of January 1, 2015, allow a credit carryover of 10 years and limit the sale of unused credits to those credits earned before January 1, 2011.

Ms. Kathy Strombeck, Research Analyst, Tax Department, presented information to the committee. She said the fiscal impact of this bill draft is beyond this biennium. She said the fiscal impact for the 2009-11 biennium is zero. She said under Tax Department rules there needs to be at least five corporations taking advantage of this tax credit for the department to discuss the fiscal impact. She said there were not five corporations that took advantage of the tax credit in 2006.

In response to a question from Senator Tollefson, Ms. Strombeck said the tax credit does not apply to homeowners.

Mr. Loren Laugtug, Otter Tail Power Company, presented information to the committee, he said Otter Tail Power Company is involved with the Ashtabula wind project in Barnes County. He said the project

will be completed before December 31, 2008, so that Otter Tail Power Company is assured of the federal production tax credit. He said any reduction in the price of wind is passed on to the customer.

In response to a question from Senator Wardner, Mr. Laugtug said if Otter Tail Power Company used the law as it is now, Otter Tail Power Company would have a 5-year carryforward, but if the date is changed there would be a 10-year carryforward.

**It was moved by Representative Klein, seconded by Representative Porter, and carried on a roll call vote that the bill draft be amended on page 1, line 20, to replace "December 31" with "September 30".** Senators Wardner, Horne, Taylor, Tollefson, and Urlacher and Representatives Belter, Kelsh, Klein, Meyer, Porter, and Weiler voted "aye." No negative votes were cast.

**It was moved by Representative Klein, seconded by Senator Horne, and carried on a roll call vote that the bill draft, as amended, to extend the income tax credit for renewable energy be approved and recommended to the Legislative Council.** Senators Wardner, Horne, Taylor, Tollefson, and Urlacher and Representatives Belter, Kelsh, Klein, Meyer, Porter, and Weiler voted "aye." No negative votes were cast.

### **OIL EXTRACTION TAX EXEMPTION FOR TERTIARY RECOVERY PROJECTS USING CARBON DIOXIDE EXTENDED FROM 10 YEARS TO UNLIMITED DURATION BILL DRAFT**

Committee counsel presented a second draft of a bill draft [90191.0200] that would extend the oil extraction tax exemption for tertiary recovery projects that use carbon dioxide from 10 years from the date the incremental production begins to an unlimited duration.

Mr. Lynn Helms, Director, Department of Mineral Resources, presented information in support of the bill draft. He said the use of carbon dioxide for tertiary recovery is not happening in this state. He said carbon dioxide is being used for tertiary recovery in Canada. He said the bill draft would extend the lives of carbon dioxide projects and reassure carbon dioxide suppliers when determining whether to make capital investments. He said there will be a carbon dioxide sequestration bill in the next legislative session that relates to turning a carbon dioxide recovery project into a sequestration project.

In response to a question from Representative Klein, Mr. Helms said there are discussions with ethanol plants and the Antelope Valley Station for a carbon dioxide tertiary recovery project.

In response to a question from Representative Klein, Mr. Helms said water is used as a secondary recovery project. He said there are 360 wells in this state using water to maintain pressure. He said tertiary recovery may use natural gas or high-pressure air. He said there are projects that use these two

methods but they have been developed without the incentive and the purpose of the bill draft is to incentivize carbon dioxide.

In response to a question from Representative Klein, Mr. Helms said there is no excess carbon dioxide because all available carbon dioxide is being shipped to Canada.

Mr. Cory Fong, Commissioner, Tax Department, presented information to the committee. He said the carbon dioxide tertiary recovery bill draft was in the Empower North Dakota Commission recommendations relating to the lignite sector. He said the main goal of the bill draft is to incentivize the capture of carbon dioxide from coal-powered generation.

**It was moved by Representative Porter, seconded by Representative Klein, and carried on a roll call vote that the bill draft to create an unlimited duration for the exemption from the oil extraction tax for incremental production from a tertiary recovery project that uses carbon dioxide be approved and recommended to the Legislative Council.** Senators Wardner, Horne, Taylor, Tollefson, and Urlacher and Representatives Belter, Kelsh, Klein, Meyer, Porter, and Weiler voted "aye." No negative votes were cast.

### **DEFINITIONS OF CONSTRUCTION AND GATHERING PIPELINES FOR PUBLIC SERVICE COMMISSION SITING JURISDICTION BILL DRAFT**

Committee counsel presented a bill draft [90294.0100] to change the definition of construction to exclude from the siting jurisdiction of the Public Service Commission construction conducted wholly within land for which a utility has previously obtained a certificate of site compatibility or a route permit from the commission and to exclude actions conducted wholly within land on which is located an energy conversion facility or transmission facility that was constructed before April 9, 1975. In addition, the bill draft changes the definition of certain pipelines to exclude from the siting jurisdiction of the Public Service Commission pipelines with an inside diameter of four inches or less or a length of one mile or less or gathering pipelines as defined by federal law.

Mr. Ron Ness, President, North Dakota Petroleum Council, presented information to the committee. He said this bill draft was identified as an area for legislative change by the Empower North Dakota Commission, the pipeline industry, and the North Dakota Pipeline Authority. He said the bill draft mirrors Bureau of Land Management regulations. He said the bill draft makes an exemption from siting jurisdiction for additions to a previously approved footprint. He says this saves the state and the industry resources in siting something that has already been sited. He said the small or short pipelines do not move much liquid and are into or

around facilities. He said these pipelines are not for the "transmission" of liquids.

**It was moved by Representative Klein, seconded by Senator Urlacher, and carried on a roll call vote that the bill draft to change the definitions of construction and gathering pipelines to provide an exemption from the siting jurisdiction of the Public Service Commission be approved and recommended to the Legislative Council.** Senators Wardner, Horne, Taylor, Tollefson, and Urlacher and Representatives Belter, Kelsh, Klein, Meyer, Porter, and Weiler voted "aye." No negative votes were cast.

**It was moved by Representative Klein, seconded by Representative Weiler, and carried on a voice vote that the chairman and the staff of the Legislative Council be requested to prepare a**

**report and the bill drafts recommended by the committee and to present the report and the recommended bill drafts to the Legislative Council.**

**It was moved by Representative Weiler, seconded by Senator Klein, and carried on a voice vote that the committee be adjourned sine die.**

Chairman Wardner adjourned the committee sine die at 1:45 p.m.

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Timothy J. Dawson  
Committee Counsel

ATTACH:7