

NORTH DAKOTA LEGISLATIVE MANAGEMENT

Minutes of the

ENERGY DEVELOPMENT AND TRANSMISSION COMMITTEE

Monday, October 14, 2013

Roughrider Room, State Capitol

Bismarck, North Dakota

Tuesday, October 15, 2013

Room 335, National Energy Center of Excellence, Bismarck State College

Bismarck, North Dakota

Senator Rich Wardner, Chairman, called the meeting to order at 1:00 p.m.

Members present: Senators Rich Wardner, John Andrist, Kelly M. Armstrong, David Hogue, Philip M. Murphy, Connie Triplett; Representatives Chuck Damschen, Ben W. Hanson, Todd Porter, Mike Schatz, Peter F. Silbernagel

Member absent: Representative Tracy Boe

Others present: Representative Jim Schmidt, member of the Legislative Management, was also in attendance. See [Appendix A](#) for additional persons present.

It was moved by Representative Silbernagel, seconded by Representative Damschen, and carried on a voice vote that the minutes of the July 31, 2013, meeting be approved.

PUBLIC SERVICE COMMISSION UPDATE

Mr. Brian Kalk, Commissioner, Public Service Commission, provided written testimony ([Appendix B](#)) on an update of recent activities and a broad overview of the energy sector from the perspective of the Public Service Commission (PSC). He listed a number of key projects. He said Montana-Dakota Utilities Company has been issued a certificate of site compatibility for an 88-megawatt gas turbine electric generator at the Heskett Station in Mandan. He said Basin Electric Power Cooperative has been issued a certificate of site compatibility for two 45-megawatt gas turbine electric generators at its Pioneer Generation Station northwest of Williston. He said Basin Electric has also filed a letter of intent for two additional 45-megawatt gas turbine electric generators to be located at Basin Electric's Lonesome Creek Station west of Watford City. He said 3.5 miles of natural gas gathering pipeline have become subject to the PSC's pipeline safety jurisdiction. He said these gas lines are under the jurisdiction of the PSC because of the encroachment of public facilities being within 660 feet of a line. He said the PSC has docketed 28 electric transmission line cases. He said the Minnkota 345kV line from Center to Grand Forks and the NSP CapX 2020 line from Monticello to Fargo have been sited and are under construction. He said the PSC had a hearing on a proposed 345kV transmission line from Antelope Valley Station at Beulah to Tioga. He said the PSC has 31 docketed wind farm cases. He said last month, the PSC issued a certificate of site compatibility for the 150-megawatt Thunder Spirit Wind Project near Hettinger and the 204-megawatt Bison 4 Project near Center. He said the PSC has or is processing 14 electric service area agreements. He said these agreements encourage harmony and operational efficiency among electric providers.

In response to a question from Senator Wardner, Mr. Kalk said the three new gas plants will not significantly reduce flaring.

In response to a question from Senator Andrist, Mr. Kalk said the rate of drilling creates incredible growth and lots of opportunities for using gas. He said gas needs to be processed to remove the liquids for sale.

Mr. Kalk said the PSC may need legislation to go after the license of individuals violating the one-call system. He said the pipeline that spilled oil north of Tioga is inspected by the federal government, not the PSC. He said whether the state should have a larger role is a policy question open for discussion; however, there has not been a high incidence of leaks.

In response to a question from Representative Silbernagel, Mr. Kalk said the PSC does not have jurisdiction over fueling stations for vehicles using natural gas.

In response to a question from Senator Andrist, Mr. Kalk said the No. 1 cause of leaks is damage caused by a third party. He said corrosion is a major cause and a larger issue for natural gas than oil pipelines. He said the preliminary report on the spill near Tioga said it was caused by corrosion. He said if there is corrosion, it needs to be found and repaired. He said the initial report was issued by the federal Pipeline and Hazardous Materials Safety Administration (PHMSA).

In response to a question from Representative Hanson, Mr. Kalk said the PSC was notified last Thursday, October 10, of the oil spill near Tioga. He said usually PHMSA notifies the PSC right away. He said once the company was notified, the company told the State Department of Health right away. He said the PSC is not an action agency for this pipeline spill.

In response to a question from Senator Triplett, Mr. Kalk said the frequency of inspection for pipelines is governed by federal rules. He said the PSC would have had jurisdiction if there would have been a violation of the one-call notification system.

In response to a question from Senator Hogue, Mr. Kalk said the legislature has provided adequate guidance in relation to the siting of wind projects. He said the Thunder Spirit Wind Project had a 2 to 1 vote. He said the difference was on the component of need. He said courts have said that need is part of rates, not siting. Because there is a 10 percent goal for renewables, he said, the dissenting commissioner weighed need differently.

STATE DEPARTMENT OF HEALTH

Mr. David Glatt, Chief, Environmental Health Section, State Department of Health, provided written testimony ([Appendix C](#)) on the current status of carbon dioxide regulations being proposed by the United States Environmental Protection Agency (EPA) and an update on the evaluation of existing state regulation addressing technically enhanced naturally occurring radioactive materials. He said the EPA is establishing power sector carbon pollution standards for new and existing power generation facilities. He said in the first phase of the plan under Section 111(b) of the Clean Air Act, emphasis will be to establish carbon emission standards for new power generation facilities. He said the EPA believes the new natural gas-fired stationary combustion turbines can meet the proposed standard without the need for add-on control technology. He said fossil fuel-fired boilers will require the implementation of partial carbon capture and storage. He said the EPA believes that with current and planned technology implementation of carbon capture and storage projects, combined with the availability of geologic storage sites, the proposed standards may be met. He said the department's initial concern is the cost and long-term viability of some of the technologies being proposed.

Mr. Glatt said the second phase is for existing power generation facilities under Section 111(d) of the Clean Air Act. He said this is a state-based program for existing sources where the EPA establishes guidelines and states design programs to fit the unique circumstances of the state.

In response to a question from Senator Armstrong, Mr. Glatt said this state has good geology for carbon sequestration. He said the Oil and Gas Division has rules for Class VI injection wells for the sequestering of carbon dioxide.

In response to a question from Senator Wardner, Mr. Glatt said coal-fired electricity generation has become more efficient, and increased efficiency reduces the overall carbon dioxide released per unit of energy.

In response to a question from Senator Wardner, Mr. Glatt said coal-fired plants that have increased efficiency should be given credit for what they have already done.

In response to a question from Senator Wardner, Mr. Glatt said the proposed rules for Section 111(d) are intended to be final by June 2015. He said the EPA has not hit a target date lately, partly because of lawsuits. He said the EPA has said it will be flexible. He said the department will give input. He said this state needs more energy, and there needs to be a period of time for energy to transition to lower carbon dioxide emissions.

In response to a question from Senator Triplett, Mr. Glatt said one solution may be to look at the total number of renewables and oil and gas facilities for each company. He said total production of energy must be evaluated, not just one plant.

In response to a question from Representative Hanson, Mr. Glatt said the facilities we have today will not be built in the future due to carbon dioxide regulation. He said the jury is still out as to what will happen with existing plants. He said there may be a benefit to regional plans. He said states may need to adopt compacts.

In response to a question from Senator Wardner, Mr. Glatt said turning coal into gas creates the opportunity to capture carbon dioxide; however, the price of natural gas makes this economically difficult.

In response to a question from Representative Schmidt, Mr. Glatt said carbon credits are still an option; however, the focus is on physically putting carbon dioxide into the ground.

In response to a question from Senator Murphy, Mr. Glatt said the East Coast is using a regional approach and it has advantages. He said there is strength in numbers.

Mr. Glatt said radioactive material is generated from the physical process of concentrating materials during oilfield development. He said this radioactive material can be found in many areas, including filter socks, pipe scale, and sludge found in tank bottoms. He said this material necessitates special handling and disposal. He said in North Dakota this material is defined as radioactive if it exhibits a radioactive concentration of five picu/gram. He said this concentration is considered very conservative and may be close to background concentrations. He said pursuant to state rule, any material that exhibits a radioactive concentration above this level must be transported to a facility approved to handle this waste. He said the only facilities are located out of state. He said the department is studying this standard, and the study should be completed by next summer.

In response to a question from Senator Triplett, Mr. Glatt said the amount of radioactive waste is between 10,000 tons and 15,000 tons per year. He said most of this comes from filter socks at present but will come from sludge and scale in the future. He said the vast majority of the material goes to Colorado, but some goes to Montana and some goes to Texas. He said the department is looking at tracking the materials and using Louisiana's tracking system as a template. He said this state does not have a tracking process. He said good companies do keep records and track the waste.

Mr. Glatt said the department was notified on the evening of Sunday, September 29, after 10:00 p.m., of the pipeline leak near Tioga. He said the leak must be reported by the company within 24 hours, and the company reported the leak to State Radio. He said the department was at the leak the next morning. He said the department was told 750 barrels had been spilled. He said the department asked for more assessment, and the company did more assessment. He said on Tuesday, October 8, after 4:00 p.m., the field staff was told the estimated leak was 20,000 barrels. He said the department went to the site again the next morning. He said where the leak occurred, there was no ground water and a clay barrier at 10 feet to 14 feet with a slight rise. He said the next steps are to determine a remediation plan and to determine how the leak occurred.

In response to a question from Senator Wardner, Mr. Glatt said the leak was immediately bermed, diked, trenched, and contained. He said a 50-barrel spill could be worse if it got into a water system. He said the department followed the law, and the department protects the public health and environment. He said the local emergency managers were notified. He said the information needs to get up the ladder and to the public more quickly.

In response to a question from Representative Schatz, Mr. Glatt said the pipeline was over 20 years old.

In response to a question from Senator Andrist, Mr. Glatt said the prevention of leaks in a pipeline comes down to design, construction, and maintenance.

In response to a question from Senator Triplett, Mr. Glatt said part of the investigation will be how long it took the company to find the problem and how the monitoring systems worked.

In response to a question from Senator Andrist, Mr. Glatt said there is significant pressure in the pipeline, and it may have not been leaking for that long.

NORTH DAKOTA PIPELINE AUTHORITY

Mr. Justin Kringstad, Director, North Dakota Pipeline Authority, gave a presentation ([Appendix D](#)) on crude oil transportation inside and out of the Bakken and flaring. He said it is estimated that 64 percent of the oil leaving the Williston Basin leaves on a train. He said 28 percent is exported by pipeline. He said within the Williston Basin 64 percent is trucked, and 36 percent is moved by pipeline. He said recent high prices on the East Coast have made rail an economically sensible choice for the transport of oil out of the Bakken. He said it takes time for infrastructure for transporting and processing natural gas. He said reducing flaring is dependent on capturing the right wells at the right time. He said 19 wells produce 3 percent of the flared gas. He said 3 percent of the economic value of the wellhead recovery is wasted due to natural gas flaring. He said 7 percent of the energy at the wellhead is flared.

In response to a question from Representative Silbernagel, Mr. Kringstad said there are 22 rail loading facilities and a few in the works. He said all of the new ones will be unit train and the older ones will get bigger. He said 650,000 barrels of oil are transported per day which equates to 10 unit trains in and out each day.

In response to a question from Senator Murphy, Mr. Kringstad said the Pipeline Authority is not a regulatory agency. He said corrosion on the pipe that leaked may happen from the inside out or the outside in.

OIL AND GAS

Mr. Lynn D. Helms, Director, Department of Mineral Resources, gave a presentation ([Appendix E](#)) on a global perspective of oil and gas and recent activities in oil and gas development. He said the Export Administration Act of 1979 prohibits export of crude oil except for the United States military or in an exchange process with North American Free Trade Agreement (NAFTA) countries. He said the development of the Monterey shale could wipe out the need for Canadian and Mexican crude oil. He said this would soften the market and disconnect the United States from the world market.

Mr. Helms said the main crude oil users in 2040 will be China and India. He said this state is disadvantaged as to transport for natural gas and will be squeezed for price. He said natural gas production is stable and will be at a low price which makes it attractive for use for generating electricity. He said the United States will be exporting natural gas in the future. He said the main users of natural gas in 2040 will be the European Union, India, and China. He said the Bakken and Three Forks Formations could produce over 1.5 million barrels of oil per day. He said things that could prohibit this are if the world economy would stall or light sweet refinery capacity is maxed out. He said the Bureau of Land Management hydraulic fracturing rule could more than double permit approval time. He said the current Administration budget changes could reduce drilling capacity 35 to 50 percent. He said the EPA guidance on diesel fuel in hydraulic fracturing could more than triple permit approval time. He said enhanced oil recovery is the next phase. He said an increase in production of 1 percent would provide 3 billion to 5 billion barrels of oil.

In response to a question from Senator Andrist, Mr. Helms said natural gas and electricity may be exported. He said liquefied natural gas may be liquefied with 5 percent of the gas.

In response to a question from Representative Silbernagel, Mr. Helms said the railroad is looking at conversion to liquid natural gas for engine fuel. He said the oil industry has frac fleets and rigs that operate on compressed natural gas. He said the state should support the use of natural gas for a transportation fuel because it would reduce flaring.

In response to a question from Senator Andrist, Mr. Helms said most of the liquid natural gas is used for industrial use. He said Alaska began shipping liquid natural gas to Japan in the late 1970s when the Japanese economy was booming. He said in Europe, most countries have sworn off the use of nuclear and coal forms of energy. He says this leaves gas and wind.

Mr. Helms said the state has hit a plateau and will stay at this level for 20 years for permits and rigs. He said the average monthly rig count is around 185.

In response to a question from Senator Murphy, Mr. Helms said around 5 to 6 percent of oil is recovered from the Bakken.

In response to a question from Senator Wardner, Mr. Helms said carbon dioxide is the leader for enhanced oil recovery. He said carbon dioxide mollifies Bakken oil very well in a test tube. He said nitrogen was in the lead for a few years but has been found to be not compatible with Bakken oil. He said there are pilot projects in the Parshall field using water.

In response to a question from Senator Wardner, Mr. Helms said there is a proposed 25,000-acre unit and another for 40,000 acres.

WIND AND RENEWABLES

Ms. Patrice Lahlum, Program Consultant, Great Plains Institute, gave a presentation ([Appendix F](#)) on wind energy and other renewable energy policies and developments. She said traditional energy production will be a primary driver toward energy independence. She said biofuel production and vehicle fuel energy efficiency are the two other legs of the energy independence stool if the United States is to become energy sufficient by 2035. She said the construction expenditures in 2002 through 2011 for renewable energy projects were \$2.7 billion. She said there is 1,672 megawatts of installed capacity for wind.

In response to a question from Senator Wardner, Ms. Lahlum said the future of federal wind policy is the replacement of the tax credits with master limited partnerships through congressional adoption of the Master Limited Partnerships Parity Act and to allow the expansion of real estate investment trust to renewable energies.

TRANSFER OF MAINTENANCE OF COUNTY ROADS TO DEPARTMENT OF TRANSPORTATION BILL DRAFT

At the request of Chairman Wardner, Committee Counsel presented a bill draft [[15.0022.01000](#)] to allow the transfer of maintenance of a county road to the Department of Transportation.

Senator Wardner said the transfer could place a great burden on the state.

Senator Andrist said the bill draft is a good idea in that it allows, not mandates, the transfer.

Senator Wardner said the bill draft may change the Department of Transportation's view of being reluctant to take over the maintenance of county roads. He said the Upper Great Plains Transportation Institute is doing studies across the state, and this has provided a better view of what is needed for the maintenance of roads. He said the state has resources to maintain roads, and if the road is mainly for commerce, the state may be the proper entity to maintain the road.

Chairman Wardner recessed the meeting at 3:55 p.m. and reconvened the meeting on Tuesday, October 15, 2013, at 7:55 a.m. He said the committee will next meet on Thursday, October 31, 2013, at 10:00 a.m. to discuss the proposals received for the study for the future of oil and gas development in the state.

Chairman Wardner recessed the meeting at 7:58 a.m. for attendance at the 2013 Great Plains EmPower ND Energy Conference.

Chairman Wardner reconvened the meeting at 3:30 p.m. Senator Triplett said the study requiring the consultants came from Senator Cook during the legislative session after being proposed to him by her. She said any coupling or decoupling or adjustment of oil and gas taxes should be based on good information. She said the issue will continue to return. Chairman Wardner said the consultant will need to order the information and put it in perspective.

Chairman Wardner said good information is needed to determine whether the rate should be lowered or exemptions adjusted. He said the committee could accept a proposal, amend the proposals to get what the committee wants, or may reject both proposals. He said there is \$300,000 in the budget for consultants and three committees with the power to hire consultants. He said some of the money has been used. He said he was hoping the study would cost no more than \$150,000.

No further business appearing, Chairman Wardner adjourned the meeting at 3:40 p.m.

Timothy J. Dawson
Committee Counsel

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