

NORTH DAKOTA LEGISLATIVE MANAGEMENT

Minutes of the

ENERGY DEVELOPMENT AND TRANSMISSION COMMITTEE

Wednesday, July 31, 2013
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, John Andrist, Kelly M. Armstrong, David Hogue, Philip M. Murphy, Connie Triplett; Representatives Tracy Boe, Chuck Damschen, Ben W. Hanson, Todd Porter, Mike Schatz, Peter F. Silbernagel

Others present: See [Appendix A](#)

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 changes in oil country, including energy corridors, environmental concerns, infrastructure, new technologies, and federal regulation.

Mr. Grant Levi, Director, Department of Transportation, gave a presentation ([Appendix B](#)) on funding, transportation projects, energy corridors, and safety. He said the Legislative Assembly appropriated approximately \$2.3 billion for highways with approximately \$1.64 billion for highways on the state highway system and \$617 million for highways in cities, counties, and townships. He said there will be over \$878 million in projects during 2013 by the state and political subdivisions. He said the funding from the federal highway trust fund will not provide enough money as compared to the past. He said projects are averaging 4.6 bidders per project, but costs are up because of the shortage of employees and the high cost of raw materials.

In response to a question from Senator Triplett, Mr. Levi said the \$878 million is money being spent, not money appropriated. He said the increased spending in 2011 was a result of emergency funding and some stimulus funding. He said most stimulus funding occurred in 2009 and 2010.

Mr. Levi provided information on 2013 construction projects and in particular on projects in western North Dakota. He said funds will be spent on United States Highway 2 because vehicle counts have increased from 2,600 vehicles per day to 12,000 vehicles per day at certain points on United States Highway 2.

In response to a question from Senator Triplett, Mr. Levi said the department is having contractors provide two sets of plans--one using asphalt and one using concrete. He said concrete is becoming more competitive because there is less aggregate base needed as compared to asphalt. He said the department accepts the lowest bid.

In response to a question from Senator Triplett, Mr. Levi said both concrete and asphalt may be built to have a 20-year life. He said usually asphalt requires repairs after 10 years of use, and concrete needs repairs in the 12-year to 15-year range.

Mr. Levi said for the United States Highway 85 from Watford City to Williston project, the major concern is environmental challenges. He said because the new bridge near the old Lewis and Clark Bridge affects pallid sturgeon, there needs to be a very indepth biological assessment. He said the road will affect wildlife, and wildlife crossings will be required. He said the cost is \$4.5 million to \$5 million for one crossing.

In response to a question from Representative Schatz, Mr. Levi said there are not any wildlife crossings on the interstate system. He said the situation on United States Highway 85 south of Williston is the Game and Fish Department is leasing land from the federal government for two wildlife management areas. He said the road bisects these areas. He said a wider road will further separate these two areas. He said the wildlife crossing is

one structure that will allow large game under the road and will also include a fence system. He said the Game and Fish Department will maintain the fence.

In response to a question from Senator Wardner, Mr. Levi said the bridge crossing near the Lewis and Clark Bridge by Williston requires a separate federal environmental determination by the United States Fish and Wildlife Service, the Federal Highway Administration, the United States Army Corps of Engineers, and the Coast Guard.

Mr. Levi said the project between Watford City and Williston on United States Highway 85 will include large rumble strips across the median area, edge line rumble strips, and left and right turn lanes at various access points. He said there will be a 20-foot paved median with rumble strips or turn lanes that have been made longer to accommodate trucks. He said the rumble strips save lives, but there has been some breakdown of the pavement by the center rumble strips at certain places in eastern North Dakota.

In response to a question from Senator Triplett, Mr. Levi said there is not a great local road system to connect to the access points. He said local governments have control of land use, not the department. He said the design of the highway will not have a passing lane and a left turn lane in the same lane.

In response to a question from Senator Murphy, Mr. Levi said the degradation of the center rumble strips in eastern North Dakota is part of the freeze/thaw cycle. He said the rapid deterioration at certain areas is where there have been strips of asphalt used to cover the road in the past. He said the strips are peeling off.

In response to a question from Senator Triplett, Mr. Levi said the department has worked with counties to limit access for bypasses. He said the department wants to limit access to no more than one every mile on a bypass. He said proper setbacks are important to avoid multiple stoplights.

In response to a question from Senator Triplett, Mr. Levi said the department will notify the committee if there are any concerns with land use planning, but the present system of local control has worked well.

Mr. Levi said the first phase of the construction of the Williston Bypass was bid today. He said the intersection right of way cost \$165,000 per acre, and it cost \$25,000 to \$40,000 an acre down the corridor. He said the department used eminent domain. He said other bypasses being developed are a bypass for Alexander and for Watford City.

Mr. Levi said the total traffic count has increased 422 percent from 1950 to 2010 for certain roads. He provided information on western North Dakota highway energy corridors.

In response to a question from Representative Porter, Mr. Levi said the department works closely with counties for a more integrated system. He said there are some gaps in the energy corridors because of the federal parks. He said McKenzie County is the focal point of oil industry development. He said some state roads serve more of a county purpose and some county roads serve more of a state purpose, and the department will be speaking to counties about trading roads.

In response to a question from Representative Porter, Mr. Levi said the department is limited to the number of miles in the state highway system and to which roads can be placed in the system. He said there are roads being added to the system through the new bypasses. He said when there is drilling, there is heavy traffic, but the traffic decreases over time.

In response to a question from Representative Porter, Mr. Levi said there are some statutory limitations on adding to the state highway system, and he does not advocate any change. He said the department is revisiting adding roads to the system that have been previously rejected for addition to the system.

In response to a question from Senator Andrist, Mr. Levi said the Upper Great Plains Transportation Institute has conducted a needs study for local roads and \$160 million was provided to nine counties for roads based upon that study, and there had been changes made to the distribution formula. He said the oil industry provides a moving target, and the state and political subdivisions are trying to catch up.

In response to a question from Senator Andrist, Mr. Levi said there is a strong consulting industry in this state which is working with political subdivisions. He said the Upper Great Plains Transportation Institute has a technical assistance person available to political subdivisions.

Senator Wardner said the committee will review 2013 House Bill No. 1358 and how the money is being distributed. He said he will provide a presentation on that bill at a future meeting. He said the committee will monitor the resources being provided to political subdivisions and see if any changes are needed.

In response to a question from Representative Schatz, Mr. Levi said there has been consideration of another bridge across Lake Sakakawea. He said an engineering firm is looking at a toll bridge. He said a new bridge would be very expensive and would require a lot of time due to environmental concerns. He said the department could not enter a public/private partnership for this project because of state law.

Mr. Levi said the department is working to develop and construct bypasses and truck reliever routes in Dickinson, New Town, and Killdeer. He said the department wants to construct the interchange on the Dickinson truck bypass this year. He said it is needed because of the new refinery and the nearby transloading facility. He said the department is assisting local governments with \$10 million for basic safety projects, including signage. He said the top three contributing factors to highway fatalities are alcohol-related (50 percent), unrestrained (66 percent), and speed-related (29 percent).

In response to a question from Senator Wardner, Mr. Levi said the contracting industry has stepped forward and is working hard to complete projects. He said oil companies have at times paved roads if paving made economic sense.

In response to a question from Senator Andrist, Mr. Levi said the department's website shows active construction. He said it also shows the type of work. He said projects contain goals to limit delays. He said in Fargo there is technology being used to show the time to get through a construction site.

In response to a question from Representative Silbernagel, Mr. Levi said the department is working with counties to address appropriate bridge projects.

Mr. Gerry Fisher, Administrator, Energy Infrastructure and Impact Office, gave a presentation ([Appendix C](#)) on grants provided by the office. He said the office distributed \$125 million of the \$135 million allocated for energy impact grants in the previous biennium and \$8 million in the biennium prior to that. He said the money is distributed with the assistance of an advisory group made up of local county commissioners, city officials, an emergency manager, a township officer, an energy industry representative, and the Director of the Department of Transportation. He said House Bill No. 1358 provided \$293.3 million for the Board of University and School Lands to provide grants through the Energy Infrastructure and Impact Office. He said the bill identified eight earmarked grant areas totaling \$103.5 million of the oil and gas impact grant funds. He said these areas are:

1. \$5 million to counties experiencing new oil and gas development.
2. \$60 million to airports.
3. \$4 million to higher education.
4. \$3 million for a dust control pilot project.
5. \$7 million for sheriff's departments.
6. \$7 million for emergency medical services.
7. \$3.5 million for fire protection districts.
8. \$14 million to hub cities with \$2 million designated to Williston, \$7 million to Dickinson, and \$5 million to Minot.

Mr. Fisher said House Bill No. 1358 allocated \$60 million for grants to airports impacted by oil and gas development. He said the grant limit for hub cities was specified at \$14 million and was awarded to three cities-- Dickinson, Minot, and Williston. He said the Board of University and School Lands provided intent to award grants during the 2013-15 biennium of \$70,825,010 to nonhub cities. He said the board committed three \$1 million grants to Bowman, Dunn, and Mountrail Counties for pilot projects for dust control. He said the Legislative Assembly designated \$7 million of impact funds to be awarded to sheriff's departments in areas experiencing direct impacts from oil and gas development. Separately, he said, the legislature appropriated \$9.6 million to the Attorney General's office to be used in part for grants to impacted law enforcement agencies. He said the board granted awards from impact funds to the sheriff's offices totaling \$390,910 and approved grants totaling \$978,721 to other criminal justice agencies from the \$9,600,000. He said the board has approved preliminary guidelines and an advisory committee for the \$12.5 million of oil and gas impact grant funds allocated for K-12 schools.

In response to a question from Representative Silbernagel, Mr. Fisher said sustainability is reviewed as part of the grant-making process.

In response to a question from Senator Triplett, Mr. Fisher said \$10.1 million was left as contingency funding for fiscal year 2013-14 to provide for flexibility. He said \$6.2 million was provided in fiscal year 2014-15 for contingency funding. He said money that is not allocated will also go to contingency funding.

In response to a question from Senator Andrist, Mr. Fisher said the contingency funding has been used to provide funds for a burst pipe in a water tower in a small city and for police and fire trucks that have unexpected maintenance. He said flooding is a broad-based and large problem and is not designed for the program.

In response to a question from Senator Andrist, Mr. Fisher said the office is flexible as to emergency road problems. He said the townships can apply in the open grant round.

Senator Wardner said the office has no money to disburse on July 1. He said the money has to come in over the biennium. He said July production provides money in August which is distributed in September.

Mr. Dale Niezwaag, Senior Legislative Representative, Basin Electric Power Cooperative, Bismarck, gave a presentation ([Appendix D](#)) on carbon capture and sequestration and electricity demands in oil country. He said Great Plains Synfuels is the only commercial coal gasification facility producing synthetic natural gas. He said the plant produces carbon dioxide, which is transported to Canada for sequestration. He said the facility receives a tax credit. He said if there is a 20 percent reduction in carbon dioxide emissions, there is a 20 percent reduction in coal conversion taxes that go to the state, not counties. He said the load growth in western North Dakota will require the amount of electricity provided by an Antelope Valley or Coal Creek Station by 2025. He said over 70 percent of the load growth in the Williston Basin is the result of the Bakken oil play. He said there will be approximately a 9 percent increase per year from 2011 to 2025 from oil-related entities. He said each year there is an increase of over 130 megawatts of demand. He said the options to meet growth include building transmission lines, building generation facilities, entering power supply contracts, and joining a regional transmission organization. He said Basin Electric is investigating joining the Midwest Independent System Operator (MISO) or the Southwest Power Pool (SPP). He provided an update of recent construction projects, including transmission lines and natural gas projects.

In response to a question from Senator Andrist, Mr. Niezwaag said oil companies need a continuous supply of carbon dioxide, and although Basin Electric has the ability to capture more on an intermittent basis, it is unable to sell it to oil companies.

In response to a question from Senator Wardner, Mr. Niezwaag said it may be possible if there is additional carbon dioxide pipeline capacity to sell that capacity to other companies.

In response to a question from Senator Wardner, Mr. Niezwaag said Basin Electric receives its natural gas for natural gas power plants under a contract with Northern Border Pipeline.

In response to a question from Representative Silbernagel, Mr. Niezwaag said the Antelope Valley to Tioga line is on time, but it has been difficult to get easements.

In response to a question from Senator Murphy, Mr. Niezwaag said Basin Electric is in discussions with Canada to receive more power. He said Basin Electric has contracts with Saskatchewan Power and exchanges power on a seasonal basis.

In response to a question from Senator Triplett, Mr. Niezwaag said gas in a pipeline is fungible in that it is difficult to tell if the gas being burned is gas that would have otherwise been flared.

Mr. Curtis Jabs, Acting Director, North Dakota Transmission Authority, gave a presentation ([Appendix E](#)) on transmission projects. He provided information on the Manitoba hydro study. He said the study is moving forward to investigate the benefit of providing Canadian hydroelectric power to balance wind power in MISO. He said if Manitoba hydroelectric power is brought in, it will displace two-thirds of a coal plant of electricity.

In response to a question from Representative Boe, Mr. Jabs said the hydroelectric power is to be built and is not in existence.

Mr. Jabs said the northern area study was conducted by MISO to identify the economic opportunity for transmission development in the area on a regional rather than local perspective.

Mr. Terry O'Clair, Director, Division of Air Quality, State Department of Health, provided testimony ([Appendix F](#)) on:

- The climate action plan announced by the White House.
- Regional haze.
- Federal sulfur dioxide standards.
- Fugitive dust in western North Dakota.

Mr. O'Clair said the climate action plan contains three main pillars:

1. Cut carbon emissions in the United States.
2. Prepare for the impacts of climate change.
3. Lead international efforts to combat climate change and prepare for its impacts.

Mr. O'Clair said the efforts to reduce carbon emissions have begun with more stringent mileage standards for new motor vehicles and the requirement to use the best available control technology to limit greenhouse gases from new major stationary sources. He said in 2015 the United States Environmental Protection Agency (EPA) will finalize guidance for existing power plants. He said the State Department of Health will have to develop a Section 111(d) plan for existing power plants, which specifies the required reduction in greenhouse gases.

Mr. O'Clair provided information on regional haze. He said the EPA approved most of the state plan in March 2010. He said the EPA did not agree with the department's determination of best available retrofit technology for nitrogen oxides controls at the Coal Creek Station, and additional nitrogen oxides controls were unnecessary at the Antelope Valley Station. He said the EPA developed its own plan for nitrogen oxides controls at these plants. He said the department has challenged the EPA plan in court, and the court has not made a decision.

Mr. O'Clair said in that same plan, the EPA agreed with North Dakota regarding the best available retrofit technology for nitrogen oxides control at the Milton R. Young Station and Leland Olds Station. He said an environmental group sued, and the EPA agreed to review the petition for reconsideration. He said the EPA has not announced a decision.

Mr. O'Clair said the EPA adopted new national ambient air quality standards for sulfur dioxide in 2010. He said the standards were based on a one-hour average period which is more stringent than previous standards. He said the EPA has proposed many air monitoring networks are not sufficient and wants to use computer modeling. He said the department believes such computer modeling can overpredict ambient concentrations. He said in May 2011 the department submitted to the EPA a recommendation the entire state be designated as in attainment, and the EPA has failed to act.

Mr. O'Clair said dust is created by traffic on gravel roads. He said there are federal ambient air quality standards for particulate matter, including dust. He said the department has added an additional ambient monitoring site in Williston, and it shows Williston is at 40 parts per billion (ppb) to 50 ppb, which is 10 ppb to 15 ppb higher than the other sites in the state, but well below the federal standard of 150 ppb. He said dust suppressants such as magnesium chloride work well, but the cost is approximately \$8,000 per mile for the first application and \$4,900 per mile for additional treatments. He said the department is studying the possible use of oilfield-generated brine water as a dust suppressant.

In response to a question from Senator Triplett, Mr. O'Clair said the computer modeling is a national position. He said this state has more sensors than most states, and the department is requesting the EPA allow the state to use industry sensors.

In response to a question from Senator Wardner, Mr. O'Clair said the study on saltwater brine as a dust suppressant should be completed near the end of the year. He said the department is working with counties to provide a cost-effective solution.

In response to a question from Representative Schatz, Mr. O'Clair said the use of saltwater brine on a paved road for ice reduction is different from dust suppression on gravel because water runs off pavement faster than gravel. He said the saltwater brine for dust suppression is saltier than that used for melting ice.

In response to a question from Representative Silbernagel, Mr. O'Clair said the department will move the Fargo core air testing site to Bismarck because the site in Fargo requires the department to contract for services, and it will save money to move it to Bismarck.

In response to a question from Senator Triplett, Mr. O'Clair said this state has the tightest standards in the nation as it relates to radioactive waste. He said the department is looking to see if the standards are appropriate. He said the problems with radioactive socks are they have a higher level than the standard of radioactivity and may not be placed in a municipal landfill but must be sent to a proper site in Colorado.

In response to a question from Senator Triplett, Mr. O'Clair said the weak link in radioactive waste regulation is the tracking of the waste, and the department is getting better at tracking.

Mr. Alan Anderson, Commissioner, Department of Commerce, provided testimony ([Appendix G](#)) on the activities of the EmPower North Dakota Commission. He said the commission will be working on value-added market opportunities for oil and gas and renewable energy sources. He said the commission has decided to focus this study on natural gas liquids and ethanol.

Mr. Lynn Helms, Director, Department of Mineral Resources, gave a presentation ([Appendix H](#)) on hydraulic fracturing rules and rulemaking by the department. He said a draft EPA guidance for the regulation of hydraulic fracturing using diesel fuel was published last year, and the EPA has submitted a revised guidance to the federal Office of Management and Budget. He said final guidance is anticipated before the end of 2013.

In response to a question from Senator Triplett, Mr. Helms said the comments made by the department were made on the first revision, and the second revision is at the federal Office of Management and Budget.

Mr. Helms said draft Bureau of Land Management regulations for hydraulic fracturing on federal lands were published last year, and the regulations were withdrawn. He said a revised proposed rule was published May 24, 2013, with a comment deadline of August 23, 2013. He said there is United States House of Representatives legislation that removes federal agencies from fracturing activities, and there is an idea in the United States Senate to allow the EPA to regulate the aboveground activities and states to regulate the belowground activities for fracturing.

Mr. Helms said if fracturing rules regulate wells as Class 2 underground injection wells, there will need to be a hearing, order, and permit before the frac job and an undoing of those actions after the frac job. He said this will increase the time for permits from 20 days to 60 days.

In response to a question from Senator Andrist, Mr. Helms said the concern with frac jobs started with the use of frac jobs in coalbed methane. He said coalbed methane is near the surface, and there is water in the coalbed. He said diesel fuel was used as the frac fluid. He said frac jobs in this state use much less diesel fuel and are two miles under the ground. He said there is .08 percent of petroleum distillate in the fluid.

Mr. Helms said 20 percent of production in this state comes from the Fort Berthold Reservation. He said most of the land is allotted lands owned by individuals. He said the Bureau of Land Management has trust responsibility, but is treating these lands the same as fully owned federal lands. He said 80 to 90 percent of Bakken spacing units have federal minerals. He said these federal minerals were taken back from farmers and ranchers in the 1930s. He said the proposed rules require the bureau to approve where water comes from, the route the water takes, and where the frac flowback is disposed.

In response to a question from Senator Hogue, Mr. Helms said the activity on the Fort Berthold Reservation is being accelerated by the uncertainty as to future rules. He said other federal lands are being undeveloped.

In response to a question from Senator Armstrong, Mr. Helms said the speed and intensity of held production is diminished by about 20 percent.

In response to a question from Senator Wardner, Mr. Helms said there are about 8,500 reclaimed sites in western North Dakota. He said most of these sites are invisible. He said there are approximately 3,000 abandoned pre-1981 sites. He said 1 to 2 percent of these sites look pretty rough.

In response to a question from Senator Wardner, Mr. Helms said a possible future phase for the reclamation fund will be to clean up old sites. He said the initial phase is to build the fund balance. He said the fund has been expanded to include saltwater wells and pipeline spills. He said the cost to clean up some of the old sites would be very expensive and would use the entire fund.

In response to a question from Senator Triplett, Mr. Helms said the longest a well can produce at the maximum efficient rate under a permit is six months. He said when a spacing unit is held by production, there will be a review of the maximum efficient rate permits.

In response to a question from Senator Triplett, Mr. Helms said the rules automatically give 60 days.

Senator Triplett said the department needs to pressure the industry to not flare--in terms that are not vague.

Mr. Jason Bohrer, President, Lignite Energy Council, provided information to the committee. He said the council is developing a public relations initiative and is focusing on research and development.

In response to a question from Senator Triplett, Mr. Bohrer said the research and development is focused on complying with federal regulations. He said there is an opportunity to engage with the federal government as to clean coal so they are informed as to the possibilities.

Committee Counsel presented a background memorandum entitled [Comprehensive Energy Policy Study - Background Memorandum](#).

No further business appearing, Chairman Wardner adjourned the meeting at 2:20 p.m.

Timothy J. Dawson
Counsel

ATTACH:8