

NATURAL RESOURCES COMMITTEE

The Natural Resources Committee was assigned three studies:

- Section 7 of House Bill No.1008 (2017) directed a study of the impact of wind energy development on the environment, including consideration of the impact of wind energy development on the environment, property values, agriculture, aesthetic impacts, and the advantages and disadvantages of implementing legislation for pooling or unitization of wind resources similar to that of the oil and gas industry in North Dakota Century Code Chapter 38-08 and the necessary processes for the decommissioning of a wind energy project.
- Section 4 of Senate Bill No. 2156 (2017) directed a study on whether state and local level regulation of high-level radioactive waste disposal is consistent with applicable federal regulations, including how to ensure the state has proper input into the federal location selection process for high-level radioactive waste material deposits, the mechanisms for calling a special session to approve the depositing of high-level radioactive waste material in the state, the notice of disapproval requirements under federal law, special laws, local laws, and the feasibility and desirability of developing new statutes and regulations for subsurface disposal of waste and the storage and retrieval of material.
- Section 4 of Senate Bill No. 2286 (2017) directed a study on the cooperation and communication between the Public Service Commission (PSC) and political subdivisions in regard to ensuring local ordinances and zoning provisions are considered and addressed as part of the application and public hearing process, including an examination of the impacts on relationships between landowners and the oil and gas industry, impacts on the efficiency of the siting process, impacts on the public input process, and impacts on compliance with, and enforcement of, political subdivision zoning ordinances.

The Legislative Management also delegated to the committee the responsibility to receive a report from the Energy and Environmental Research Center (EERC) regarding the results and recommendations of the pipeline leak detection study (Section 3 of 2017 House Bill No. 1347).

Committee members were Representatives Jay Seibel (Chairman), Dick Anderson, Roger Brabandt, Mike Brandenburg, Tom Kading, Vernon Laning, Alisa Mitskog, Todd Porter, Vicky Steiner, and Greg Westlind and Senators Bill L. Bowman, Diane Larson, Larry Luick, and Merrill Piepkorn.

The committee submitted this report to the Legislative Management at the biennial meeting of the Legislative Management in November 2018. The Legislative Management accepted the report for submission to the 66th Legislative Assembly.

WIND ENERGY DEVELOPMENT Background

General Jurisdiction of the Public Service Commission

Section 2 of Article V of the Constitution of North Dakota provides the PSC consists of three Public Service Commissioners and the powers and duties of the commissioners must be prescribed by law. Section 49-02-01 sets out the general jurisdiction of the PSC. That section provides the general jurisdiction of the commission extends to:

- Contract and common carriers engaged in the transportation of persons and property, excluding air carriers.
- Telecommunications companies engaged in the furnishing of telecommunications services as provided for in Chapter 49-21.
- Pipeline utilities engaged in the transportation of gas, oil, coal, and water.
- Electric utilities engaged in the generation and distribution of light, heat, or power.
- Gas utilities engaged in the distribution of natural, synthetic, or artificial gas.
- All heating utilities engaged in the distribution of heat.
- Warehouse companies engaged in the marketing, storage, or handling of agricultural products.
- All other public utilities engaged in business in this state or in any county, city, township, or other political subdivision of the state.

Energy Conversion and Transmission Facility Siting Act

The 1975 Legislative Assembly passed Senate Bill No. 2050, the North Dakota Energy Conversion and Transmission Facility Siting Act, codified as Chapter 49-22. This chapter provides areas of protection to individual landowners in the siting of transmission facilities, including:

- Requiring the PSC, in evaluating an application for a certificate of site compatibility, to consider the:
 - Effects of the location, construction, and operation of the proposed facility on public health and welfare, natural resources, and the environment;
 - Effect of the proposed site or route on existing scenic areas, historic sites and structures, and paleontological or archaeological sites;
 - Potential for beneficial uses of waste energy from a proposed energy conversion facility;
 - Adverse direct and indirect environmental effects that cannot be avoided if the proposed site or route be designated;
 - Alternatives to the proposed site, corridor, or route which are developed during the hearing process and which minimize adverse effects;
 - Irreversible and irretrievable commitments of natural resources if the proposed site, corridor, or route is designated;
 - Direct and indirect economic impacts of the proposed facility;
 - Existing plans of the state, local government, and private entities for other developments at or in the vicinity of the proposed site, corridor, or route;
 - Effect of the proposed site or route on areas that are unique because of biological wealth or because the areas are habitats for rare and endangered species; and
 - Problems raised by federal agencies, other state agencies, and local entities.
- Requiring the PSC to hold a public hearing in each county in which any portion of a site, corridor, or route is proposed to be located in an application for a certificate or a permit.
- Prohibiting a certificate of site compatibility for an energy conversion facility from superseding or preempting any local land use, zoning, or building rules, regulations, or ordinances and prohibiting a site from being designated if the site violates local land use, zoning, or building rules, regulations, or ordinances.

Wind Energy Jurisdiction

Section 49-02-24 authorizes the PSC to adopt rules to establish or participate in a program to track, record, and verify the trading of credits for electricity generated from renewable and recycled heat sources among electric generators, utilities, and other interested entities within North Dakota and with similar entities in other states. Renewable electricity and recycled energy include electricity generated from facilities using the wind as the source of energy for producing electricity.

Section 49-02-27 requires the PSC to adopt rules governing the decommissioning of commercial wind energy conversion facilities. The rules must address:

- The anticipated life of the project;
- The estimated decommissioning costs in current dollars;
- The method and schedule for updating the costs of the decommissioning and restoration;
- The method of ensuring that funds will be available for decommissioning and restoration;
- The anticipated manner in which the project will be decommissioned and the site restored; and
- Present and future natural resource development.

Section 49-22-05.1 requires the PSC to develop criteria to be used in identifying exclusion and avoidance areas and to guide the site, corridor, and route suitability evaluation and designation process. The criteria also may include an identification of impacts and policies or practices, which may be considered in the evaluation and designation process.

Renewable Energy Council

The Renewable Energy Council consists of the Commissioner of Commerce or the commissioner's designee and six members appointed by the Governor. The Governor selects one member from each of the following industries--agriculture, biodiesel, biomass, wind, ethanol, and advanced biofuel and sugar-based biofuel.

Section 54-63-01 provides the purpose of the Renewable Energy Council is to recommend to the Industrial Commission the approval of grants, loans, or other financial assistance necessary or appropriate for funding, research, development, marketing, and educational projects or activities.

Under Section 54-63-03, the Industrial Commission may:

- Make grants or loans, and provide other forms of financial assistance as necessary or appropriate, to qualified persons for funding research, development, marketing, and educational projects or activities, feasibility studies, applied research and demonstrations, venture capital investments, and low-interest loans and loan buydowns to foster the development of renewable energy, including wind, biofuels, biomass, solar, hydroelectric, geothermal, and hydrogen, that is produced from the foregoing renewable energy sources.
- Execute contracts and all other instruments necessary or convenient for the performance of its powers and functions.
- Accept aid, grants, or contributions of money or other things of value from any source, to be held, used, and applied to carry out Chapter 54-63, subject to certain conditions.

WIND ENERGY PROPERTY RIGHTS

Background

Chapter 17-04 pertains to wind energy property rights and addresses wind option agreements, wind easements, and wind energy leases.

Wind Option Agreement

Section 17-04-01 provides a wind option agreement is a contract in which the owner of property gives another the right to produce energy from wind power on that property at a fixed price within a time period not to exceed 5 years on agreed terms. A wind option agreement is void and terminates if, within 5 years after the agreement commences, a certificate of site compatibility or conditional use permit has been issued, if required, and a transmission interconnection request is in process and not under suspension, have not occurred. If the requirements are not met by the owner of the wind option agreement, the owner of the energy rights may provide to the owner of the wind option agreement a notice of termination. Termination of the wind option agreement is effective 5 years after the wind option commences.

Wind Easements

Section 17-04-02 provides a wind easement means a right, whether stated in the form of a restriction, easement, covenant, or condition, in a deed, will, or other instrument executed by or on behalf of an owner of land or airspace for the purpose of ensuring adequate exposure of a wind power system to the winds. Section 17-04-03 allows a property owner to grant a wind easement in the same manner and with the same effect as the conveyance of an interest in real property.

Except for a wind easement, an interest in a resource located on a tract of land and associated with the production of energy for wind power on the tract of land may not be severed from the surface estate.

Wind Energy Leases

Section 17-04-05 provides a lease for wind energy purposes is void and terminates if, within 5 years after the lease commences, a certificate of site compatibility or conditional use permit has been issued, if required, and a transmission interconnection request is in process and not under suspension, have not occurred. A wind lease is presumed to be abandoned if a period of 36 consecutive months has passed with no construction or operation of the wind farm facility.

Wind Easement and Wind Energy Lease Requirements

Section 17-04-06 provides in a wind easement and a wind energy lease, the easement and lease:

- Must contain specific language informing the property owner of certain property owner rights.
- May not require either party to maintain the confidentiality of any negotiations or the terms of any proposed lease or easement except that the parties may agree to a mutual confidentiality agreement in the final executed lease or easement.
- Must preserve the right of the property owner to continue conducting business operations as currently conducted for the term of the agreement.
- May not make the property owner liable for any property tax associated with the wind energy facility or other equipment related to wind energy generation.
- May not make the property owner liable for any damages caused by the wind energy facility and equipment or the operation of the generating facility and equipment, including liability or damage to the property owner or to third parties.
- Must obligate the developer, owner, and operator of the wind energy facility to comply with federal, state, and local laws and regulations and may not make the property owner liable in the case of a violation.

- Must allow the property owner to terminate the agreement if the wind energy facility has not operated for a period of at least 3 years unless the property owner receives the normal minimum lease payments that would have occurred if the wind energy facility had been operating during that time.
- Must state clearly any circumstances that will allow the developer, owner, and operator of the wind energy facility to withhold payments from the property owner.

Section 17-04-06 requires the owner of the wind energy facility to carry general liability insurance relating to claims for property damage or bodily injury arising out of the construction or operation of the wind energy facility project site and may include the property owner as an additional insured on the policy.

Testimony and Committee Considerations

The committee received testimony from a representative of the PSC regarding wind energy jurisdiction, wind energy development in North Dakota, siting requirements, and the rules governing decommissioning of commercial wind energy conversion facilities. The testimony indicated when siting energy conversion facilities and transmission facilities, the PSC ensures the location, construction, and operation of energy conversion facilities and transmission facilities produce minimal adverse effects on the environment and welfare of North Dakota citizens.

The committee was informed a facility needs a siting permit if the facility:

- Generates 50,000 kilowatts of electricity;
- Refines 100 million cubic feet or more of gas per day;
- Refines 50,000 barrels per day of liquid hydrocarbon products;
- Enriches uranium minerals;
- Is a 115 kilovolt and higher electric transmission line greater than 1 mile;
- Is a gas or liquid transmission pipeline; or
- Is a water line to or from an energy conversion facility.

The representative of the PSC informed the committee wind facilities are required to report progress toward meeting the 10 percent objective for renewable consumption to the PSC, and the PSC works with wind facility companies during the application process until enough information is received to hold a public hearing. According to the testimony, North Dakota's siting process and the laws and rules associated with the siting process are thorough, fair, and adequate. It was noted for purposes of what the PSC is authorized to consider in determining the merits of a siting project permit the siting process laws and rules do not have any defects or inefficiencies.

The committee received testimony from representatives of NextEra Energy Resources regarding the economic benefits of wind projects, wind energy development and marketing, federal production tax credits, environmental considerations for wind siting in North Dakota, and environmental permitting for wind energy facilities. The testimony indicated NextEra Energy Resources has invested over \$1.9 billion to develop about 1,250 megawatts of wind projects in North Dakota and NextEra Energy Resources builds renewable energy projects when selected by an energy provider as part of a request for proposal (RFP) process. Over the last 5 years NextEra Energy responded to 11 different renewable energy RFPs from energy providers in North Dakota. The testimony indicated wind energy provides positive economic impacts for North Dakota through manufacturing, construction, and operation of wind farms including:

- 500 jobs created in 2016;
- \$7.7 million in property taxes paid in 2016;
- \$119 million in manufacturing activities in 2016; and
- \$2.8 billion of total capital invested.

According to the testimony, impacts to agricultural uses are minimized through careful siting to balance landowner preferences and regulations. Impacts to prime farmland are regulated by the PSC and all landowner participation is voluntary. Landowners negotiate when specific infrastructure types will be allowed on their land. It was noted environmental constraints are one of many factors involved in wind siting. The PSC permitting process offers an opportunity for a complimentary state approach, and collaboration by state and federal agencies with the wind industry is important for any guidance document addressing wind impacts.

The committee received testimony from a representative of Ollson Environmental Health Management, regarding public health and safety practices for siting wind turbine projects. The testimony indicated considerable research has been conducted around the world on the potential for wind turbines to adversely impact health, and North Dakota's existing state and county permitting requirements ensure the protection of public health and safety.

The committee received testimony from representatives of North Dakota Farmers Union, North Dakota Farm Bureau, North Dakota Association of Counties, and the Northwest Landowners Association regarding local-level perspective and input on wind energy development, the impact of wind energy development on farmers and ranchers, and the impact of wind energy development on agriculture and rural communities. The testimony indicated the state has the ability to supply a significant amount of the nation's electricity needs by harnessing wind resources. Wind energy holds new income potential for farmers and rural landowners; and as a result, important farmers and ranchers are educated on their rights and the issues that surround this industry. It was noted farmers and ranchers consider the crop damage payments appropriate and commend companies for acting in a fair and responsive manner. According to the testimony, North Dakota needs to embrace all energy sources, put everyone on a level playing field, and let the free market determine which energy sources are cost-effective. It was suggested North Dakota and local units of government should develop reasonable guidelines, not mandates or rules, while allowing local residents to decide what is best for the communities. The testimony indicated political subdivision budgets have been built around the wind tax policies. Any changes to remove the revenue stream would have a significant negative impact on budgets and taxpayers.

The committee discussed the adequacy of bonds required for decommissioning wind projects. Liens are placed on a landowner's property as a result of a wind developer failing to pay subcontractors. The committee was informed this is a serious concern, and ensuring the bonds required by the PSC are sufficient for decommissioning is a step toward protecting the landowner. The committee discussed requiring adequate reclamation of disturbed lands by wind developers. Although wind companies often are portrayed as having less of an environmental impact than other forms of energy development, it was noted any disturbance of topsoil can have an impact on agricultural productivity.

The committee received testimony from a representative of the Game and Fish Department regarding potential impacts and voluntary guidelines for avoidance, minimization, and offsetting impacts. The testimony indicated the direct and indirect impacts of wind development on wildlife include:

- Wildlife fatality due to collisions;
- Disturbance - Avoidance and displacement of wildlife;
- Habitat loss;
- Noise;
- Shadow flicker; and
- Traffic.

According to the testimony, the goal of the *North Dakota Native Wildlife Resources: Guidelines for Reducing Impacts from Wind Energy Development* is to avoid, minimize, and offset impacts by providing transparent and predictable tools for use by industry to plan and site turbines on the landscape to avoid and reduce impacts to native habitats, and to encourage development activities to occur outside high-priority areas.

The committee received testimony from representatives of Utility Shareholders of North Dakota, the PSC, and the Department of Agriculture regarding wind energy mitigation and mitigation options for unavoidable, direct, or indirect impacts. Because the PSC is required by law to ensure wind projects produce minimal adverse effects on the environment, the PSC must rely on the expertise of other agencies' specialized skill sets. It was noted the developer of a proposed project has a right to a hearing to dispute the findings. An offset package agreed to between the Game and Fish Department and the developer was cited as an example of cooperation and collaboration between state and private entities.

The representative from the Department of Agriculture contended a great deal of concern exists regarding the direct and indirect impacts to agricultural production from wind energy mitigation on agriculture producers. The testimony indicated companies are forced to pay a rate much higher than those charged in wetland mitigation with no correlation or reasonable answer to justify hundreds of thousands of dollars for small acreages. According to the testimony, North Dakota is setting an unsustainable precedent of requiring mitigation of agricultural land. It was noted the preference is to cease the mitigation practice and allow agriculture producers to work with developers to decide where and how to develop a project with minimal impacts. If mitigation is to be considered, it was noted, the process needs to be changed. It was suggested a committee of farmers, ranchers, and landowners could design criteria and a reasonable approach to mitigation.

Conclusion

The committee makes no recommendation regarding its study of the impact of wind energy development on the environment and on North Dakota landowners.

HIGH-LEVEL RADIOACTIVE WASTE DISPOSAL

Background

In 1979 the Legislative Assembly passed Senate Bill No. 2214, codified as Chapter 23-20.2, which placed jurisdiction over the storage or disposal of nuclear and other wastes with the Industrial Commission. Section 23-20.2-02 defines high-level radioactive waste material as the highly radioactive material resulting from the reprocessing of spent nuclear fuel, and other highly radioactive material, which contains fission products in sufficient concentrations to require permanent isolation under federal law, including liquid waste produced directly in reprocessing and any solid material derived from the liquid waste.

Section 23-20.2-03 grants the Industrial Commission, acting through the State Geologist, the authority to require the drilling, boring, excavating, and construction of facilities in a manner to prevent contamination and pollution of surface and ground water sources and the environment. This section also authorizes the commission to regulate the drilling, boring, excavating, and construction of all underground storage, retrieval, and waste disposal facilities; limit and prescribe the nature, quantity, and source of materials to be stored in, whether as waste or otherwise, or retrieved from any facility regulated by that chapter; and adopt and enforce rules and orders to effectuate the purposes of the chapter.

Section 23-20.2-04 prohibits the excavation, drilling, boring, or construction of an underground storage and retrieval facility or an underground waste disposal facility or the conversion of any existing facility for use in any activity regulated by Chapter 23-20.2, without a permit from the Industrial Commission. A permit may not be issued until after notice and a hearing and payment of a fee, not to exceed \$1,000, for each permit in an amount set by the commission.

After a hearing on a permit application, the commission may deny the application and refund the license fee. A person denied a permit may appeal the denial by the commission in accordance with the Administrative Agencies Practice Act. Section 23-20.2-06 contains the penalties for a violation of Chapter 23-20.2.

Section 23-20.2-09(1) prohibits a person from depositing, causing or permitting to be deposited in this state, any radioactive waste material that has been brought into the state for that purpose unless prior approval has been granted by a concurrent resolution passed by the Legislative Assembly.

North Dakota Law

Senate Bill No. 2156 (2017) amended Section 23-20.2-09(1) to include a county's zoning approval may not preclude the disposal development if approved by the Legislative Assembly, but may regulate the size, scope, and location. The bill further amended Section 23-20.2-09 to prohibit a person from conducting any testing or exploration for the development of a storage or disposal facility for high-level radioactive waste material to be brought into the state unless prior approval has been granted by a concurrent resolution passed by the Legislative Assembly.

Federal Regulation

The federal Nuclear Waste Policy Act of 1982 established a comprehensive national program for the safe, permanent disposal of highly radioactive wastes. The Act, which was codified as 42 U.S.C. 108, defines high-level radioactive waste as the highly radioactive material resulting from the reprocessing of spent nuclear fuel, including liquid waste produced directly in reprocessing and any solid material derived from that liquid waste which contains fission products in sufficient concentrations; and other highly radioactive material that the federal Nuclear Regulatory Commission (NRC), consistent with existing law, determines by rule requires permanent isolation.

The Nuclear Waste Act has four enumerated purposes:

- To establish a schedule for the siting, construction, and operation of repositories which will provide a reasonable assurance the public and the environment will be adequately protected from the hazards posed by high-level radioactive waste and spent nuclear fuel as may be disposed of in a repository;
- To establish the federal responsibility and a definite federal policy for the disposal of high-level radioactive waste and spent fuel;
- To define the relationship between the federal government and state governments with respect to the disposal of high-level radioactive waste and spent fuel; and
- To establish a Nuclear Waste Fund, composed of payments made by the generators and owners of high-level radioactive waste and spent fuel, to ensure the costs of carrying out activities relating to the disposal of the waste and spent fuel will be borne by the persons responsible for generating the waste and spent fuel.

The Nuclear Waste Act requires the President of the United States to review each candidate site recommendation made by the Secretary of Energy. If, during the 60-day site submission period, the President fails to approve or disapprove the candidate site or fails to invoke the authority to delay the decision, the candidate site is considered approved, and the Secretary of Energy must notify the Governor and legislature or governing body of the affected Indian tribe of the approval of the candidate site by reason of the inaction of the President. The President also must submit a recommendation of the site to Congress.

The designation of a site as suitable for application for a construction authorization for a repository is effective at the end of the 60-day period beginning on the date the President recommends the site to Congress, unless the Governor and legislature of the state in which the site is located or the governing body of an Indian tribe on whose reservation the site is located has submitted to Congress a notice of disapproval. If any notice of disapproval of a repository site designation has been submitted to Congress after a recommendation for approval of the site is made by the President, the site must be disapproved unless, during the first period of 90 calendar days of continuous session of Congress after the date of the receipt by Congress of the notice of disapproval, Congress passes a resolution of repository siting approval and the resolution becomes law.

Testimony and Committee Considerations

The committee received testimony from a representative of Pierce County regarding state and local level regulation of high-level radioactive waste disposal and the size, scope, and location of high-level radioactive waste material deposits in the state. The testimony indicated in 2015 the EERC, in partnership with Battelle, pursued a funding opportunity with the United States Department of Energy to conduct a borehole field test to identify alternatives and conduct scientific and technological development to enable storage, transportation, and disposal of used nuclear fuel and wastes generated by existing and future nuclear fuel cycles. The EERC proposed to conduct the field test on school trust land. The testimony indicated Pierce County commissioners formally rejected the EERC's borehole field test in Pierce County because the lowest level of government should be consulted first and the exploration or the testing for the purposes of nuclear waste disposal must address the long-term implications of the eventual depositing.

The committee received testimony from a representative of the Department of Mineral Resources regarding state and federal regulation of high-level radioactive waste disposal, the federal location selection process for high-level radioactive waste material deposits, how to ensure the state has proper input into the federal location selection process for high-level radioactive waste material deposits, the mechanisms for calling a special legislative session to approve the depositing of high-level radioactive waste material in the state, and the notice of disapproval requirements under federal law. The testimony indicated Chapter 23-23.2 was created in 1979 to encourage the proper emplacement of material into subsurface strata for:

- Storage and retrieval of material (compressed air);
- Promoting the terminal disposal of municipal, industrial, and domestic waste. Waste not covered by the Underground Injection Control Program; and
- Subsurface disposal of high-level radioactive waste.

The testimony indicated the NRC regulates the production of radioactive source materials, nuclear reactors, nuclear materials, and radioactive waste. The NRC licenses high-level radioactive waste repositories. The Department of Energy is responsible for designing, constructing, operating, and decommissioning a permanent disposal facility for high-level radioactive waste. The United States Environmental Protection Agency developed standards for the protection of the general environment from offsite releases of radioactive material in repositories.

A representative from the Environmental Health Section of the State Department of Health indicated the three types of radioactive material are high-level, low-level, and technologically enhanced naturally occurring radioactive materials (TENORM). According to the testimony, North Dakota does not have any authority or role in regulating high-level radioactive materials because that regulatory authority belongs to the NRC. The NRC regulates the transportation, handling, disposal, and storage of high-level radioactive material while North Dakota has the authority to regulate low-level radioactive materials with oversight from the NRC. It was noted North Dakota, South Dakota, Arizona, and California, which are members of a compact, have located a site in Texas which takes the low-level radioactive waste from the four compact states on an annual basis. North Dakota generates about 12 to 14 tons of TENORM per quarter which is tracked according to state regulations.

The committee received testimony from a representative of the Geosciences Group Lead of the EERC regarding the EERC's relevant experience and observations with respect to the accommodation of scientific discovery. The committee was informed the activity proposed to take place in Pierce County was solely of a scientific and discovery nature and was designed to validate drilling technology in a geologic environment that met criteria defined by the Department of Energy. Specifically, the location offered the optimal ratio between thickness of sedimentary and crystalline rock for a

5-kilometer-deep drilling validation exercise. The testimony indicated the location selection did not consider aspects of any actual storage of high-level nuclear waste or the potential to seek a storage permit. The testimony indicated, contrary to widely spread misinformation and multiplied by unfounded speculation, there was never any implied or subversive intent to store, or promote the storage of, nuclear waste in Pierce County or any other location in North Dakota. According to the testimony, the active and aggressive misinformation campaign led to a county decision to deny a special use permit for the planned research. The committee was urged to consider carefully the unintended consequences of well-intended laws that may preclude the accommodation of scientific discovery.

Testimony from a representative of the North Dakota Association of Counties regarding local input and location of high-level radioactive waste material deposits in the state indicated local input and some local control is critical to this exceptionally sensitive area. According to the testimony, North Dakota counties were not prepared in 2016 when the Department of Energy announced an award of \$35 million to explore North Dakota's deep geology to determine its potential for nuclear waste disposal. That exploratory well was to be located south of Rugby in Pierce County on state land. The testimony indicated, due to misperceptions and the lack of communication with local officials, it became evident any future exploration or eventual disposal would require more local government involvement. It was emphasized any future legislation regarding disposal of high-level radioactive waste must include a mechanism for local residents to have procedural input and involvement in the matter.

As a result of the testimony regarding the disposal of high-level nuclear waste in the state, the committee considered a bill to:

- Repeal Chapter 23-20.2 (Disposal of Nuclear and Other Waste Material);
- Create two new chapters of Century Code, one for high-level radioactive waste disposal and one for subsurface storage and retrieval of nonhydrocarbons;
- Designate the Industrial Commission as the point of contact with the Department of Energy and other federal agencies;
- Authorize the Industrial Commission to issue a notice of disapproval if the Legislative Assembly is not in session;
- To cover the costs of permit review, set the permit fee for a facility at not less than \$800,000;
- Establish guidelines for reporting requirements, preventing pollution, reclamation, and bonds;
- Authorize the Industrial Commission to regulate drilling, excavating, construction, operation, and onsite inspections;
- Require an exploration permit from the Industrial Commission before exploring for a high-level radioactive waste facility and require a facility permit before operating a high-level radioactive waste facility;
- Authorize the Industrial Commission to deny an application if the activity poses a threat to human health or the environment or economic impacts;
- Establish a high-level radioactive waste fund into which funds from the federal government and permit fees and civil penalties are deposited;
- Create a high-level radioactive waste advisory council to advise the Industrial Commission and the Legislative Assembly; and
- Authorize counties to regulate the size, scope, and the location of a facility, but not to prohibit a facility permitted by the Industrial Commission.

Recommendation

The committee recommends [Senate Bill No. 2037](#) to regulate the disposal and storage of high-level radioactive waste, permit the Industrial Commission to issue a notice of disapproval in regard to high-level radioactive waste disposal when the Legislative Assembly is not in session, and regulate subsurface storage and retrieval of nonhydrocarbons.

PUBLIC SERVICE COMMISSION AND POLITICAL SUBDIVISIONS

Background

General Jurisdiction of the Public Service Commission

Section 2 of Article V of the Constitution of North Dakota provides the PSC consists of three Public Service Commissioners and the powers and duties of the PSC must be prescribed by law. Section 49-02-01 sets out the general jurisdiction of the PSC. That section provides the general jurisdiction of the commission extends to:

- Contract and common carriers engaged in the transportation of persons and property, excluding air carriers.

- Telecommunications companies engaged in the furnishing of telecommunications services as provided for in Chapter 49-21.
- Pipeline utilities engaged in the transportation of gas, oil, coal, and water.
- Electric utilities engaged in the generation and distribution of light, heat, or power.
- Gas utilities engaged in the distribution of natural, synthetic, or artificial gas.
- All heating utilities engaged in the distribution of heat.
- Warehouse companies engaged in the marketing, storage, or handling of agricultural products.
- All other public utilities engaged in business in this state or in any county, city, township, or other political subdivision of the state.

Section 49-02-02 authorizes the PSC to require public utilities or other persons to conform to the laws of this state and to all rules, regulations, and orders of the commission not contrary to law. In addition the PSC may hold hearings on good cause or on its own motion.

Chapter 49-22 grants the PSC authority to issue certificates of site compatibility or route permits for energy conversion or transmission facilities.

Energy Conversion and Transmission Facility Siting Act

Chapter 49-22, the North Dakota Energy Conversion and Transmission Facility Siting Act, provides areas of protection to individual landowners in the siting of transmission facilities, such as:

- Including a statement of policy in which the Legislative Assembly declares "the construction of energy conversion facilities and transmission facilities affects the environment and the welfare of the citizens of this state. Therefore, it is necessary to ensure that the location, construction, and operation of energy conversion facilities and transmission facilities will produce minimal adverse effects on the environment and upon the welfare of the citizens of this state by providing that no energy conversion facility or transmission facility shall be located, constructed, and operated within this state without a certificate of site compatibility or a route permit acquired pursuant to this chapter."
- Requiring each utility that owns or operates, or plans within the next 10 years to own, operate, or start construction on any facility to develop an explicit 10-year plan and submit the plan to the PSC.
- Requiring the PSC, in evaluating an application for a certificate of site compatibility, to consider the:

Effects of the location, construction, and operation of the proposed facility on public health and welfare, natural resources, and the environment;

Effect of the proposed site or route on existing scenic areas, historic sites and structures, and paleontological or archaeological sites;

Potential for beneficial uses of waste energy from a proposed energy conversion facility;

Adverse direct and indirect environmental effects that cannot be avoided should the proposed site or route be designated;

Alternatives to the proposed site, corridor, or route which are developed during the hearing process and which minimize adverse effects;

Irreversible and irretrievable commitments of natural resources should the proposed site, corridor, or route be designated;

Direct and indirect economic impacts of the proposed facility;

Existing plans of the state, local government, and private entities for other developments at or in the vicinity of the proposed site, corridor, or route;

Effect of the proposed site or route on areas which are unique because of biological wealth or because they are habitats for rare and endangered species; and

Problems raised by federal agencies, other state agencies, and local entities.

- Requiring the PSC to hold a public hearing in each county in which any portion of a site, corridor, or route is proposed to be located in an application for a certificate or a permit.
- Allowing the PSC to appoint advisory committees to evaluate sites or corridors considered for designation.

- Prohibiting a certificate of site compatibility for an energy conversion facility from superseding or preempting any local land use; zoning; or building rules, regulations, or ordinances and prohibiting a site from being designated if it violates local land use; zoning; or building rules, regulations, or ordinances.
- Allowing any party aggrieved by the issuance of a certificate of site compatibility or transmission facility construction permit from the PSC, certification of continuing suitability filed by a utility with the commission, or promulgation of a final order by the commission, to request a rehearing by the commission.

North Dakota Law

2017 Legislation

Senate Bill No. 2286 (2017) amended Sections 49-22-03, 49-22-14.1, and 49-22-16, related to energy conversion and transmission facility siting. The bill was intended to provide efficiency to the PSC approval process for siting gas or liquid transmission pipelines. The bill also was intended to reduce duplication between state and local pipeline permitting processes and to eliminate the need for companies to obtain local conditional use permits for pipelines. In addition, the 2017 legislation clarifies a process whereby the PSC must coordinate with local governments to ensure local priorities are considered throughout the process. The bill provided:

- The PSC must require an applicant for certificate of site compatibility or a route permit to comply with the road use agreements of the impacted political subdivision. A permit may supersede and preempt the requirements of a political subdivision if the applicant shows by a preponderance of the evidence the regulations or ordinances are unreasonably restrictive in view of existing technology, factors of cost or economics, needs of consumers regardless of their location, or are in direct conflict with state or federal laws or rules.
- When an application for a certificate for a transmission facility is filed, the PSC is required to notify the townships with retained zoning authority and cities and counties in which any part of the proposed corridor is located. The PSC may not schedule a public hearing sooner than 45 days from the date notification is sent by mail or email. Upon notification, a political subdivision must provide a listing to the PSC of all local land use, zoning, or building requirements. The requirements must be filed at least 10 days before the hearing or the requirements are superseded and preempted.
- An applicant must comply with all local requirements provided to the commission not otherwise superseded by the PSC.

The 2017 Legislative Assembly also passed House Bill No. 1144, relating to energy conversion and transmission facility siting. The bill split the North Dakota Energy Conversion and Transmission Facility Siting Act, codified as Chapter 49-22, into two chapters. The bill created Chapter 49-22.1 to address gas or liquid transmission facilities and gas or liquid energy conversion facilities, while amending Chapter 49-22 to pertain only to electric transmission and electric energy conversion facilities.

Zoning Provisions

Chapter 11-33, which provides for county zoning, contains provisions for creating, amending, repealing, and enforcing county zoning regulations. Cities have zoning authority within city limits under Chapter 40-47. Organized townships that have not relinquished zoning authority to the county have zoning authority within the township under Sections 58-03-11 through 58-03-15.

Section 11-33-01 provides counties may promote public health, safety, morals, public convenience, general prosperity, and public welfare by regulating the location and use of buildings and structures and the use, condition of use, or occupancy of lands for residence, recreation, and other purposes through land use zoning. Section 11-33-03(3) provides standards for the regulation or restriction of construction, reconstruction, alteration, repair, or use of buildings and structures by the county.

Section 11-33-03 provides county zoning regulations are made to regulate and restrict buildings and structures and to conserve and develop natural resources among other things. In the 1997 North Dakota Supreme Court case, *Continental Resources, Inc. v. Farrar Oil Company*, the court concluded counties with home rule authority do not have authority to regulate any industry or activity which is regulated by state law or by rules adopted by a state agency. However, Sections 11-33-01 and 40-47-01 provide for county and city boards to establish institutional controls that address environmental concerns with the State Department of Health as provided in Section 23-20.3-03.1.

Section 40-47-01 provides the governing body of a city may regulate and restrict the height; number of stories; the size of buildings and other structures; the percentage of lot that may be occupied; the size of yards, courts, and other open spaces; the density of population; and the location and use of buildings, structures, and land for trade, industry, residence, or other purposes. Section 40-47-06 provides the governing body of a city must appoint a commission, to be known as the zoning commission, to recommend the boundaries of the various original districts, and appropriate regulations to be enforced in the zoning districts.

Section 58-03-11 provides the board of township supervisors may establish one or more zoning districts and within the districts may regulate and restrict the erection; construction; reconstruction; alteration; repair; use of buildings and structures; the height, number of stories, and size of buildings and structures; the percentage of lot that may be occupied; the size of courts, yards, and other open spaces; the density of population; and the location and use of buildings, structures, land for trade, industry, residence, or other purposes. Section 58-03-12 provides the regulations and restrictions established in a township zoning district must be made in accordance with a comprehensive plan with reasonable consideration as to the character of the district; its peculiar suitability for particular uses; the normal growth of the municipality; the various types of occupations, industries, and land uses within the area; must be designed to facilitate traffic movement; encourage orderly growth and development of the municipality and adjacent areas; promote health, safety, and general welfare; and provide for emergency management.

Section 58-03-13 provides the board of township supervisors of a township must establish, by resolution, a township zoning commission to recommend the boundaries of the various township zoning districts and appropriate regulations and restrictions to be established in the districts.

Testimony and Committee Considerations

The committee received testimony from a representative of the PSC regarding the cooperation and communication between the PSC and political subdivisions, and the efficiency of the siting process. According to the testimony, as it relates to electric transmission lines, the authority of the PSC supersedes and preempts local land use if a zoning or building rule, regulation, or ordinance, as applied to the proposed route, is unreasonably restrictive in view of existing technology, factors of cost or economics, or needs of consumers regardless of their location. Regarding pipelines (gas or liquid transmission facilities), a PSC permit supersedes and preempts any local land use or zoning regulations. Before the facility is approved; however, the application must comply with the road use agreements of the impacted political subdivision. A permit may supersede and preempt the requirements of the political subdivision if the applicant shows by a preponderance of the evidence the regulations or ordinances are unreasonably restrictive in view of existing technology, factors of cost or economics, or needs of consumers regardless of the location or whether the political subdivision requirements are in direct conflict with state or federal laws or rules.

The testimony indicated, as of March 29, 2018, the PSC had received three pipeline siting applications since August 1, 2017, the effective date of Senate Bill No. 2286 (2017). The testimony noted the PSC has received one request to waive or reduce the 45-day waiting period from the date of notification to the date of public hearing. The testimony indicated the PSC is not aware of any impact on the relationships between landowners and the oil and gas industry, the public input process, or on compliance with, and enforcement of, political subdivision zoning ordinances.

The committee received testimony from a representative of North Dakota Petroleum Council regarding the relationship the oil and gas industry has with landowners throughout the state, and particularly the impact passage of Senate Bill No. 2286 (2017) has had on that relationship. According to the testimony, the 2017 legislation provides political subdivisions the opportunity to provide input to the PSC as the PSC considers permits for gas and liquid facilities. The testimony indicated the oil and gas industry considers the PSC to be best suited to administer the siting of gas and liquid transmission facilities, with input from interested parties, including political subdivisions. It was noted a better assessment of the siting process can be made once there are siting permits issued which have undergone the full process.

The testimony noted several companies have formed a consortium in response to one of Governor Burgum's "Energizing North Dakota" energy policy priorities of eliminating pipeline leaks. The consortium intends to submit a proposal to the oil and gas research program to fund a multiyear pipeline research and development program. This multimillion dollar program would focus on multiple demonstrations of new technologies that hold the potential to help industry avoid pipeline leaks or provide for early detection of leaks from liquids gathering pipelines. According to the testimony, results of this project have the potential to work toward eliminating pipeline leaks.

The committee received testimony from a representative of the Northwest Landowners Association which expressed concern about the limited timeline for local authorities to file local land use, zoning, or building requirements in advance of a hearing. The testimony proposed copies of zoning regulations, local ordinances, and county comprehensive plans be readily available upon request. It was suggested this would streamline the process and negate the possibility a notice is misplaced or misfiled to the prejudice of all the residents of a locale and ensure the community's regulations are considered and applied. The testimony indicated if the application of local ordinances becomes a matter for the PSC to decide, no incentive exists for a developer to engage with the local community and work with the local officials to find a solution which works for the subdivision, as well as the developer.

The committee discussed the possibility of the siting process bypassing the township and county levels, and going directly to the PSC. The committee recognized companies may spend 6 months to 1 year researching local zoning provisions and receiving county and township input before submitting an application to the PSC.

The committee also received testimony regarding energy conversion facilities and correction of the codification issues caused by the conflict between House Bill No. 1144 and Senate Bill No. 2286. The testimony indicated the two bills addressed the same section of Century Code. When two bills cannot be harmonized, typically the bill passed last will prevail over other conflicting bills. Senate Bill No. 2286 expanded the guidelines governing gas or liquid transmission facility siting, required a gas or liquid transmission facility to be in compliance with the road use agreements of the impacted political subdivision before receiving a certificate of site compatibility or a route permit from the PSC, and provided any local regulations not filed at least 10 days before the hearing are deemed superseded and preempted. House Bill No. 1144 separated the siting requirements for electric energy facilities and the gas or liquid facilities into two chapters in Title 49 of the Century Code. The testimony indicated some of the new items addressing gas or liquid transmission facilities were addressed in Section 49-22-16 when those items should have been incorporated in the newly created Chapter 49-22.1, which governs gas or liquid facility siting. As a result, there are two sections in Century Code, in two chapters, which give different processes and rules for the same area of law.

The committee considered a bill to correct the codification issues caused by the conflict between House Bill No. 1144 and Senate Bill No. 2286.

Recommendation

The committee recommends [Senate Bill No. 2038](#) relating to energy conversion facilities to correct the codification issues caused by the conflict between House Bill No. 1144 and Senate Bill No. 2286.

REPORT

Energy and Environmental Research Center

The committee accepted the report of the EERC regarding the results and recommendations of the pipeline leak detection study. According to the report, the EERC concluded a three-phase study of liquids gathering pipelines. Phases I and II of the study informed the state on the status of the liquids gathering pipelines industry in North Dakota and demonstrated different approaches to leak detection, respectively. Phase III of the study, the focus of the report, focused on emerging technologies to prevent and detect leaks from these pipelines and risk assessment methods that can be applied to prioritize these pipelines for additional preventative actions. The report indicated the ultimate goal of the three-phase pipeline study is to reduce the frequency and total volume of leaks and spills from liquids gathering pipeline systems in the state. The results of this study phase inform stakeholders on possible approaches to risk assessment, which may facilitate appropriate layering of risk abatement approaches, including employment of technology.

The report indicated a variety of new technologies are emerging to address the needs of liquids gathering pipelines. These technologies have emerged since the 2015 EERC report on liquids gathering pipelines as a response to the developing market and a heightened interest in improving the operations and safety of liquids gathering pipelines. Many of these emerging technologies are not ready for easy commercial application, but are close to maturing. It is anticipated with willing pipeline operators as demonstration partners, some of these technologies can be matured to directly contribute positively to the safe operation of liquids gathering pipelines. New technology can be applied to improve performance, but new technology does not necessarily mean fewer pipeline leaks. Addition of technology often leads to more hardware and software. These additions can contribute to new failure pathways and increased risk, especially when technology lacks sufficient proof of performance in a representative environment.

According to the report, the EERC encourages the investigation and testing of new approaches to improve pipeline performance. Additionally, stakeholders should proceed deliberately to ensure adequate testing and demonstration is achieved before implementation is widely deployed. Technology also has potential to add failure pathways with little performance benefit, if the technology is not appropriately applied. Pipeline operators should seek to employ technology through which gains can be realized. To do so often requires development work to specifically tune these technologies for liquids gathering pipelines.

The report indicated the ultimate goal of risk assessment and risk management is to identify and prioritize actions to assure pipeline safety and integrity. Available standards recommend operators be provided great latitude performing risk assessment to ensure the purpose and approach match the needs and resources of the situation. Principles of continuous improvement are woven into every approach to risk assessment. The reliability, usefulness, and resources demanded for each approach to risk assessment vary greatly. More complex quantitative methods provide greater potential for insight, but they also require significant additional resources to complete and, therefore, are not globally applicable.