State of Minnesota

HOUSE OF REPRESENTATIVES

NINETY-FIRST SESSION

H. F. No. 1405

02/18/2019 Authored by Stephenson, Sandell, Long, Acomb, Lillie and others
The bill was read for the first time and referred to the Committee on Ways and Means
03/11/2020 Adoption of Report: Amended and re-referred to the Jobs and Economic Development Finance Division without further recommendation
04/14/2020 Adoption of Report: Amended and re-referred to the Energy and Climate Finance and Policy Division

A bill for an act

relating to energy; establishing the Clean Energy First Act; requiring utilities to meet resource needs using clean energy resources; authorizing certain cost recovery; establishing a pilot project; requiring reports; amending Minnesota Statutes 2018, sections 216B.16, subdivision 13; 216B.1645, subdivisions 1, 2; 216B.1691, subdivision 9; 216B.2422, subdivisions 2, 3, 4, 5, by adding subdivisions; 216F.04; 216H.02, by adding a subdivision; Minnesota Statutes 2019 Supplement, section 216B.2422, subdivision 1; proposing coding for new law in Minnesota Statutes, chapters 216B; 216C; 216F.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MINNESOTA:

Section 1. **TITLE.**

Sections 2 to 26 shall be referred to as the "Clean Energy First Act."

EFFECTIVE DATE. This section is effective the day following final enactment.

Sec. 2. Minnesota Statutes 2018, section 216B.16, subdivision 13, is amended to read:

Subd. 13. **Economic and community development.** The commission may allow a public utility to recover from ratepayers the expenses incurred for (1) economic and community development, and (2) efforts to maximize employment of local workers to construct and maintain generation facilities that supply power to the utility's customers. The commission must, to the maximum extent possible, prioritize the hiring of workers from communities hosting retiring power plants, including but not limited to Becker, Monticello, Oak Park Heights, and Red Wing.

Sec. 3. Minnesota Statutes 2018, section 216B.1645, subdivision 1, is amended to read:

Subdivision 1. **Commission authority.** Upon the petition of a public utility, the Public Utilities Commission shall approve or disapprove power purchase contracts, investments, or expenditures entered into or made by the utility to satisfy the wind and biomass mandates contained in sections 216B.169, 216B.2423, and 216B.2424, and to satisfy the renewable energy objectives and standards set forth in section 216B.1691, including reasonable investments and expenditures, net of revenues, made to:

(1) transmit the electricity generated from sources developed under those sections that is ultimately used to provide service to the utility's retail customers, including studies necessary to identify new transmission facilities needed to transmit electricity to Minnesota retail customers from generating facilities constructed to satisfy the renewable energy objectives and standards, provided that the costs of the studies have not been recovered previously under existing tariffs and the utility has filed an application for a certificate of need or for certification as a priority project under section 216B.2425 for the new transmission facilities identified in the studies;

(2) provide storage facilities for renewable energy generation facilities that contribute to the reliability, efficiency, or cost-effectiveness of the renewable facilities; ~~or~~

(3) develop renewable energy sources from the account required in section 116C.779~~.~~; or

(4) upgrade or modify existing transmission facilities used primarily to transmit electricity generated by a clean energy resource, as defined in section 216B.2422, subdivision 1, paragraph (f), regardless of whether the public utility has satisfied the standards set forth in section 216B.1691.

Sec. 4. Minnesota Statutes 2018, section 216B.1645, subdivision 2, is amended to read:

Subd. 2. **Cost recovery.** (a) The expenses incurred by the utility over the duration of the approved contract or useful life of the investment ~~and~~, expenditures made pursuant to section 116C.779 ~~shall be~~, and efforts to maximize employment of local workers to construct and maintain generation facilities that supply power to the utility's customers are recoverable from the ratepayers of the utility, to the extent they are not offset by utility revenues attributable to the contracts, investments, or expenditures. The commission must, to the maximum extent possible, prioritize the hiring of workers from communities hosting retiring power plants, including but not limited to Becker, Monticello, Oak Park Heights, and Red Wing.

(b) Upon petition by a public utility, the commission shall approve or approve as modified a rate schedule providing for the automatic adjustment of charges to recover the expenses or costs approved by the commission under subdivision 1, which, in the case of transmission expenditures, are limited to the portion of actual transmission costs that are directly allocable to the need to transmit power from the renewable sources of energy.

(c) The commission may not approve recovery of the costs for that portion of the power generated from sources governed by this section that the utility sells into the wholesale market.

Sec. 5. **[216B.1682] ELECTRICITY RATES; WEBSITE POSTING.**

(a) A utility providing retail electric service to customers in Minnesota must post on its website a copy of the current rate schedules available to each customer class, including:

(1) the amount of any demand charge that is paid monthly regardless of the amount of the customer's electricity consumption;

(2) the amount paid per kilowatt-hour of electricity consumed, including how the rate changes with the amount of electricity consumed and the season or time of day when the electricity is consumed, as applicable; and

(3) any other relevant factors, terms, or conditions that directly impact a customer's bill, excluding rate riders.

(b) A utility must update the posted rate schedules required under this section within 30 days of the date any change is made.

(c) A utility must submit a copy of all postings required under this section to the commission within 30 days of the date the posting is made.

(d) Within 30 days of the date the commission receives a posting under paragraph (c), the commission must post on its website the most recent copy of the utility's rate schedule submitted to the commission under this section.

EFFECTIVE DATE; APPLICATION. This section is effective the day following final enactment. A utility providing retail electric service must comply with this section no later than September 1, 2020.

Sec. 6. **[216B.1683] UTILITY FINANCIAL INCENTIVES; BILL INSERTS.**

(a) By September 1, 2020, and continuing at least twice annually beginning in 2021, a utility providing retail electric service to customers in Minnesota must include with each

customer's electricity bill, including bills delivered electronically, information regarding financial incentives provided by the utility to encourage customers to:

(1) implement energy conservation improvements and measures that increase energy efficiency; and

(2) use electricity that is generated from renewable energy sources.

(b) The utility must send a copy of the information provided to customers under paragraph (a) to the commission.

(c) For the purposes of this section, the following terms have the meanings given:

(1) "energy conservation improvement" has the meaning given in section 216B.241, subdivision 1, paragraph (e);

(2) "energy efficiency" has the meaning given in section 216B.241, subdivision 1, paragraph (f); and

(3) "renewable energy" has the meaning given in section 216B.2422, subdivision 1, paragraph (c).

EFFECTIVE DATE. This section is effective the day following final enactment.

Sec. 7. **[216B.1684] PREVAILING WAGE.**

Erection, construction, installation, remodeling, and repairs approved or authorized by the commission are projects under section 177.42, subdivision 2. All laborers and mechanics on the project must be paid the prevailing wage rate as defined in section 177.42, subdivision 6, and the project is subject to the requirements of sections 177.30 and 177.41 to 177.45.

EFFECTIVE DATE. This section is effective the day following final enactment and applies to all applicable approvals or authorizations issued by the commission on or after that date.

Sec. 8. Minnesota Statutes 2018, section 216B.1691, subdivision 9, is amended to read:

Subd. 9. **Local benefits.** The commission shall take all reasonable actions within its statutory authority to ensure this section is implemented to maximize benefits to Minnesota citizens and local workers as defined in section 216B.2422, subdivision 1, balancing factors such as local ownership of or participation in energy production, local job impacts as defined in section 216B.2422, subdivision 1, development and ownership of eligible energy technology facilities by independent power producers, Minnesota utility ownership of

eligible energy technology facilities, the costs of energy generation to satisfy the renewable standard, and the reliability of electric service to Minnesotans.

Sec. 9. **[216B.1697] ELECTRIC UTILITY REPORTS TO CUSTOMERS; GENERATION SOURCES AND ENVIRONMENTAL IMPACTS.**

(a) The commission must develop a uniform reporting format that all utilities providing retail electric service to customers in Minnesota must use to report to customers as required under this section.

(b) By April 1, 2021, and by April 1 each year thereafter, a utility providing retail electric service to customers in Minnesota must report the information required by this section for the previous calendar year. The report must be included in an easily understood presentation as part of a customer's monthly electric bill.

(c) The uniform report format developed by the commission must provide for reporting of the following information each calendar year:

(1) the average proportion of each technology or fuel source used to generate all electricity sold at retail to the utility's Minnesota retail customers, including but not limited to coal, natural gas, nuclear fuel, wind, solar, hydropower, solid waste incineration, and biomass. Electricity purchased by a utility from the Midcontinent Independent System Operator must reflect the system's average fuel mix during the calendar year;

(2) for each megawatt-hour of electricity sold by a utility to Minnesota retail customers, the average number of pounds each of carbon dioxide, sulfur dioxide, and nitrogen oxides released into the atmosphere as a result of generating the electricity. For electricity purchased by a utility from the Midcontinent Independent System Operator, the commission must:

(i) determine default values for each pollutant listed in this clause per megawatt-hour of electricity purchased;

(ii) share the default values with all utilities subject to this section; and

(iii) update the default values annually; and

(3) for each megawatt-hour of electricity sold by a utility to Minnesota retail customers that is generated from nuclear fuel, the number of pounds of nuclear waste produced.

(d) Within 15 days after the date the information required under this section is distributed with a customer's monthly bill, the utility compiling the information must place the information on its website.

(e) A utility subject to this section must forward a copy of the information required under this section to the commission. The commission must place the information on the commission's website and must update the information as necessary.

EFFECTIVE DATE; APPLICATION. This section is effective the day following final enactment. The commission must develop the uniform reporting format required under this section no later than January 1, 2021.

Sec. 10. Minnesota Statutes 2019 Supplement, section 216B.2422, subdivision 1, is amended to read:

Subdivision 1. **Definitions.** (a) For purposes of this section, the terms defined in this subdivision have the meanings given them.

(b) "Utility" means an entity with the capability of generating 100,000 kilowatts or more of electric power and serving, either directly or indirectly, the needs of 10,000 retail customers in Minnesota. Utility does not include federal power agencies.

(c) "Renewable energy" means electricity generated through use of any of the following resources:

(1) wind;

(2) solar;

(3) geothermal;

(4) hydro;

(5) trees or other vegetation;

(6) landfill gas; or

(7) predominantly organic components of wastewater effluent, sludge, or related by-products from publicly owned treatment works, but not including incineration of wastewater sludge.

(d) "Resource plan" means a set of resource options that a utility could use to meet the service needs of its customers over a forecast period, including an explanation of the supply and demand circumstances under which, and the extent to which, each resource option would be used to meet those service needs. These resource options include using, refurbishing, and constructing utility plant and equipment, buying power generated by other entities, controlling customer loads, and implementing customer energy conservation.

(e) "Refurbish" means to rebuild or substantially modify an existing electricity generating resource of 30 megawatts or greater.

(f) "Energy storage system" means a commercially available technology that:

(1) uses mechanical, chemical, or thermal processes to:

(i) store energy, including energy generated from renewable resources and energy that would otherwise be wasted, and deliver the stored energy for use at a later time; or

(ii) store thermal energy for direct use for heating or cooling at a later time in a manner that reduces the demand for electricity at the later time;

(2) is composed of stationary equipment;

(3) if being used for electric grid benefits, is operationally visible and capable of being controlled by the distribution or transmission entity managing it, to enable and optimize the safe and reliable operation of the electric system; and

(4) achieves any of the following:

(i) reduces peak or electrical demand;

(ii) defers the need or substitutes for an investment in electric generation, transmission, or distribution assets;

(iii) improves the reliable operation of the electrical transmission or distribution systems, while ensuring transmission or distribution needs are not created; or

(iv) lowers customer costs by storing energy when the cost of generating or purchasing it is low and delivering it to customers when the costs are high.

(g) "Clean energy resource" means renewable energy; an energy storage system; energy efficiency, as defined in section 216B.241, subdivision 1, paragraph (f); or load management, as defined in section 216B.241, subdivision 1, paragraph (k).

(h) "Carbon-free resource" means a generation technology that, when operating, does not contribute to statewide greenhouse gas emissions, as defined in section 216H.01, subdivision 2. Carbon-free resource does not include a nuclear-powered electric generation facility operating in Minnesota on the effective date of this act.

(i) "Nonrenewable energy facility" means a generation facility, other than a nuclear facility, that does not use a renewable energy or other clean energy resource.

(j) "Local job impacts" means the impacts of an integrated resource plan, a certificate of need, a power purchase agreement, or commission approval of a new or refurbished

electric generation facility on the availability of high-quality construction and mining employment opportunities for local workers.

(k) "Local workers" means workers employed to construct and maintain energy infrastructure, or employed in a mining industry, that are Minnesota residents, residents of the utility's service territory, or who permanently reside within 150 miles of a proposed new or refurbished energy facility.

Sec. 11. Minnesota Statutes 2018, section 216B.2422, subdivision 2, is amended to read:

Subd. 2. **Resource plan filing and approval.** (a) A utility shall file a resource plan with the commission periodically in accordance with rules adopted by the commission. The commission shall approve, reject, or modify the plan of a public utility, as defined in section 216B.02, subdivision 4, consistent with the public interest.

(b) In the resource plan proceedings of all other utilities, the commission's order shall be advisory and the order's findings and conclusions shall constitute prima facie evidence which may be rebutted by substantial evidence in all other proceedings. With respect to utilities other than those defined in section 216B.02, subdivision 4, the commission shall consider the filing requirements and decisions in any comparable proceedings in another jurisdiction.

(c) As a part of its resource plan filing, a utility shall include the least cost plan for meeting 50 ~~and~~, 75, and 100 percent of all energy needs from both new and refurbished generating facilities through a combination of ~~conservation~~ clean energy and ~~renewable energy~~ carbon-free resources.

Sec. 12. Minnesota Statutes 2018, section 216B.2422, is amended by adding a subdivision to read:

Subd. 2d. **Seasonal operations analysis.** (a) Each utility required to file a resource plan under subdivision 2 must include in the plan an analysis of the economic and environmental costs and benefits of operating each of its coal-fired electric generating units on a seasonal basis. The analysis must include:

(1) an estimate of the amount of excess generating capacity on the utility's grid for each of the next three years;

(2) a list of the dates on which each coal-fired electric generating unit was not committed to the Midcontinent Independent System Operator as a result of economics for the three most recent years;

(3) a comparison of the estimated reduction in variable costs to operate each unit on a seasonal basis for each of the next three years, including but not limited to operations costs, maintenance costs, and capital expenditures, with the concomitant reduction in revenues;

(4) the estimated reduction in carbon dioxide and criteria pollutant emissions at units operating on a seasonal basis for each of the next three years, and projections of the economic value of those reductions calculated using the environmental costs established by the commission under subdivision 3;

(5) the impact of seasonal operation on the reliability of the utility's grid;

(6) the impact of different Midcontinent Independent System Operator auction clearing prices on the economics of seasonal operation;

(7) how seasonal operations might require modification in order to comply with Midcontinent Independent System Operator and Federal Energy Regulatory Commission rules and regulations;

(8) additional operational flexibility that may be required in order to meet contingencies that develop under seasonal operation; and

(9) any other information requested by the commission.

(b) For the purposes of this subdivision, "seasonal operation" or "seasonal basis" means operating a coal-fired electric generating unit only during the months of June through August and December through February, while retaining the ability to restart the idled plant in other months.

EFFECTIVE DATE. This section is effective January 1, 2021, and applies to any integrated resource plan filed on or after that date.

Sec. 13. Minnesota Statutes 2018, section 216B.2422, subdivision 3, is amended to read:

Subd. 3. **Environmental costs.** ~~(a)~~ The commission shall, to the extent practicable, quantify and establish a range of environmental costs associated with each method of electricity generation. A utility shall use the values established by the commission in conjunction with other external factors, including socioeconomic costs, when evaluating and selecting resource options in all proceedings before the commission, including power purchase agreement, resource plan, and certificate of need proceedings. When evaluating resource options, the commission must include and consider the environmental cost values adopted under this subdivision. When considering the costs of a nonrenewable energy facility under this section, the commission must consider only nonzero values for the

environmental costs that must be analyzed under this subdivision, including both the low and high values of any cost range adopted by the commission.

~~(b) The commission shall establish interim environmental cost values associated with each method of electricity generation by March 1, 1994. These values expire on the date the commission establishes environmental cost values under paragraph (a).~~

Sec. 14. Minnesota Statutes 2018, section 216B.2422, is amended by adding a subdivision to read:

Subd. 3a. **Favored electricity resources; state policy.** It is the policy of the state that, in order to hasten the achievement of the greenhouse gas reduction goals under section 216H.02, the renewable energy standard under section 216B.1691, subdivision 2a, and the solar energy standard under section 216B.1691, subdivision 2f, and given the significant and continuing reductions in the cost of wind technologies, solar technologies, energy storage systems, and demand-response technologies, the favored method to meet electricity demand in Minnesota is a combination of clean energy resources.

EFFECTIVE DATE. This section is effective the day following final enactment.

Sec. 15. Minnesota Statutes 2018, section 216B.2422, is amended by adding a subdivision to read:

Subd. 3b. **Nonrenewable energy facility; required analysis.** (a) In an application requesting the commission to approve the construction, refurbishing, or purchase of energy or capacity from a nonrenewable energy facility in an integrated resource plan, a power purchase agreement, or any other proceeding, a utility must include, at a minimum, the information required under this subdivision.

(b) A utility must include plans to meet 50, 75, and 100 percent of the energy or capacity provided by the proposed nonrenewable energy facility using the least costly combination of clean energy and carbon-free resources.

(c) When analyzing costs under this subdivision, a utility must include the environmental costs most recently adopted by the commission for carbon dioxide emissions and criteria air pollutants, and socioeconomic costs required under subdivision 3, using both the low and high ends of any cost range adopted by the commission. When considering the costs of a nonrenewable energy facility under this section, the commission must consider only nonzero values for the environmental costs that must be analyzed under subdivision 3, including both the low and high values of any cost range adopted by the commission.

EFFECTIVE DATE. This section is effective the day following final enactment.

Sec. 16. Minnesota Statutes 2018, section 216B.2422, subdivision 4, is amended to read:

Subd. 4. **Preference for ~~renewable energy facility~~ clean energy resources.** (a) In order to achieve the greenhouse gas reduction goals under section 216H.02, and the renewable and solar energy standards under section 216B.1691, the commission shall not (1) approve a new or refurbished nonrenewable energy facility in an integrated resource plan or a certificate of need~~, pursuant to~~ under section 216B.243~~, nor shall the commission~~ or in any proceeding in which a utility seeks to construct an electric generating facility or procure electricity or capacity, (2) approve a power purchase agreement for power with a nonrenewable energy facility, or (3) allow rate recovery ~~pursuant to~~ under section 216B.16 for such a nonrenewable energy facility, unless the utility has demonstrated by clear and convincing evidence that a renewable energy facility, alone or in combination with other clean energy resources, is not in the public interest. ~~When making the public interest determination, the commission must consider:~~

~~(1) whether the resource plan helps the utility achieve the greenhouse gas reduction goals under section 216H.02, the renewable energy standard under section 216B.1691, or the solar energy standard under section 216B.1691, subdivision 2f;~~

~~(2) impacts on local and regional grid reliability;~~

~~(3) utility and ratepayer impacts resulting from the intermittent nature of renewable energy facilities, including but not limited to the costs of purchasing wholesale electricity in the market and the costs of providing ancillary services; and~~

~~(4) utility and ratepayer impacts resulting from reduced exposure to fuel price volatility, changes in transmission costs, portfolio diversification, and environmental compliance costs.~~

(b) In order to find that a renewable energy facility, alone or in combination with other clean energy resources, is not in the public interest, the commission must find by clear and convincing evidence that utilizing renewable or clean energy resources to meet the need for resources cannot be done affordably or reliably.

(c) To determine affordability, the commission must consider utility and ratepayer effects resulting from:

(1) the intermittent nature of renewable energy facilities, including but not limited to the costs to purchase wholesale electricity in the market and the costs to provide ancillary services;

(2) reduced exposure to fuel price volatility and changes in transmission and distribution costs, portfolio diversification, and environmental compliance costs; and

(3) other environmental costs of a nonrenewable energy facility, as determined by the commission under subdivision 3.

(d) To determine reliability, the commission must consider:

(1) effects on regional grid reliability; and

(2) the ability of the proposed energy resources or facilities to provide:

(i) essential reliability services, including frequency response, balancing services, and voltage control; and

(ii) energy and capacity.

(e) When considering the costs of a nonrenewable energy facility under this section, the commission must consider only nonzero values for the environmental costs that must be analyzed under subdivision 3, including both the low and high values of any cost range adopted by the commission.

(f) The commission must make a written determination of its findings and conclusions regarding affordability and reliability under this subdivision. The commission must also make a written determination as to whether the energy resources approved by the commission: (1) help the state achieve the greenhouse gas reduction goals under section 216H.02; or (2) help the utility achieve the renewable energy standard under section 216B.1691 or the solar energy standard under section 216B.1691, subdivision 2f.

(g) If the commission approves a resource plan that includes the retirement of a nonrenewable energy facility owned by a public utility, the public utility shall own at least an amount of the accredited capacity of clean energy resources equal to the percentage of the retiring nonrenewable energy facility that remains undepreciated multiplied by the accredited capacity of the retiring facility, and owns the transmission and other facilities necessary to replace the accredited capacity of the retiring facility, provided:

(1) the utility demonstrates its ownership of replacement resources is in the public interest, considering customer impacts and benefits; and

(2) the resource plan results in the utility meeting the following standards:

(i) for an electric utility that owned a nuclear generating facility as of January 1, 2007, at least 85 percent of its electric supply by the year 2030 and until 2045, and 100 percent of its electric supply by the year 2045 and thereafter, is generated by resources that do not

contribute to statewide greenhouse gas emissions, as defined in section 216H.01, subdivision 2; and

(ii) for an electric utility that did not own a nuclear generating facility as of January 1, 2007, at least 80 percent of its electric supply by the year 2030 and until 2050, and 100 percent of its electric supply by the year 2050 and thereafter, is generated by resources that do not contribute to statewide greenhouse gas emissions, as defined in section 216H.01, subdivision 2.

(h) Nothing in this section impacts a utility's decision to continue operating a nuclear facility that is generating energy in Minnesota as of June 1, 2020. If a decision is made to retire an existing nuclear unit, the process in paragraphs (a) to (g) applies to the process to identify replacement resources.

EFFECTIVE DATE. This section is effective the day following final enactment.

Sec. 17. Minnesota Statutes 2018, section 216B.2422, is amended by adding a subdivision to read:

Subd. 4a. **Preference for local job creation.** As a part of its resource plan filing, a utility must report on associated local job impacts and the steps the utility and its energy suppliers and contractors are taking to maximize the availability of construction employment opportunities for local workers. The commission must consider local job impacts and give preference to proposals that maximize the creation of construction employment opportunities for local workers, consistent with the public interest, when evaluating any utility proposal that involves the selection or construction of facilities used to generate or deliver energy to serve the utility's customers, including but not limited to an integrated resource plan, a certificate of need, a power purchase agreement, or commission approval of a new or refurbished electric generation facility. The commission must, to the maximum extent possible, prioritize the hiring of workers from communities hosting retiring power plants, including but not limited to Becker, Monticello, Oak Park Heights, and Red Wing.

Sec. 18. Minnesota Statutes 2018, section 216B.2422, subdivision 5, is amended to read:

Subd. 5. **Bidding; exemption from certificate of need proceeding.** (a) A utility may select resources to meet its projected energy demand through a bidding process approved or established by the commission. A utility shall use the environmental cost estimates determined under subdivision 3 and consider local job impacts in evaluating bids submitted in a process established under this subdivision.

(b) Notwithstanding any other provision of this section, if an electric power generating plant, as described in section 216B.2421, subdivision 2, clause (1), is selected in a bidding process approved or established by the commission, a certificate of need proceeding under section 216B.243 is not required.

(c) A certificate of need proceeding is also not required for an electric power generating plant that has been selected in a bidding process approved or established by the commission, or such other selection process approved by the commission, to satisfy, in whole or in part, the wind power mandate of section 216B.2423 or the biomass mandate of section 216B.2424.

Sec. 19. Minnesota Statutes 2018, section 216B.2422, is amended by adding a subdivision to read:

Subd. 8. **Transmission planning in advance of generation retirement.** A utility must identify in its resource plan each nonrenewable resource on the utility's system that has a depreciation term, probable service life, or operating license term that will end within 15 years of the resource plan filing date. For each resource identified, the utility must include in its resource plan an initial plan to (1) replace the resource if retired, and (2) upgrade any transmission or other grid capabilities needed to support the retirement of that resource.

Sec. 20. **[216B.2427] SEASONAL OPERATIONS; PILOT PROJECT PLAN.**

(a) A public utility may file a plan, as part of an integrated resource plan or via a separate filing, for the commission to review and approve the public utility's implementation of a pilot project to operate one or more of its coal-fired electric generating facilities on a seasonal basis. The plan must include:

(1) the analysis required under section 216B.2422, subdivision 2d;

(2) the proposed changes in operation and the duration of the changes;

(3) a description of the data collected from the pilot project;

(4) how the public utility proposes to evaluate the data collected;

(5) protections employed by the public utility to ensure the pilot project does not unreasonably increase rates to ratepayers or negatively impact the utility's ability to provide reliable electric service; and

(6) a schedule of reports made by the public utility to the commission during and after the operation of the pilot project, and the data and analyses contained in the reports.

(b) The commission may approve, modify, or reject a plan. A public utility may decide to not implement a plan modified by the commission.

(c) The commission may approve a plan if it finds that the plan:

(1) produces useful information on the costs and benefits of seasonal operations as a means of reducing the electric utility's greenhouse gas emissions;

(2) does not jeopardize reliable electric service to ratepayers; and

(3) does not unreasonably increase electric rates.

(d) A public utility implementing an approved pilot project under this section is authorized to recover prudently incurred costs, including fuel costs, resulting from the plan's implementation.

EFFECTIVE DATE. This section is effective the day following final enactment.

Sec. 21. **[216B.2428] SEASONAL OPERATIONS; ENERGY CLAUSE ADJUSTMENT.**

An electric utility may propose seasonal operation of one or more of its coal-fired electric generating facilities through an energy clause adjustment under section 216B.16, subdivision 7.

Sec. 22. **[216C.45] POWER PLANT HOST COMMUNITY TRANSITION PLANNING.**

The commissioner of commerce must coordinate with the commissioner of labor and industry and the commissioner of employment and economic development to develop plans, programs, and other recommendations to mitigate the impacts on host communities and workers resulting from the eventual retirement of large generation facilities. The commissioners must coordinate this work with representatives of the local government units that host large generation facilities; the workers at large generation facilities, including full-time employees and contractors; and the utilities that own large generation facilities.

Sec. 23. Minnesota Statutes 2018, section 216F.04, is amended to read:

216F.04 SITE PERMIT.

(a) No person may construct an LWECS without a site permit issued by the Public Utilities Commission.

(b) Any person seeking to construct an LWECS shall submit an application to the commission for a site permit in accordance with this chapter and any rules adopted by the commission. The permitted site need not be contiguous land.

(c) The commission shall make a final decision on an application for a site permit for an LWECS within 180 days after acceptance of a complete application by the commission. The commission may extend this deadline for cause.

(d) The commission may place conditions in a permit and may deny, modify, suspend, or revoke a permit.

(e) The commission must not issue an applicant a site permit to construct an LWECS with a nameplate capacity exceeding 25 megawatts, or a site permit amendment for a repowering project, as defined in section 216B.243, subdivision 8, paragraph (b), unless the applicant certifies that all employees constructing the project are paid, at a minimum, the prevailing wage rate, as defined in section 177.42.

EFFECTIVE DATE. This section is effective the day following final enactment.

Sec. 24. **[216F.084] WIND TURBINE LIGHTING SYSTEMS.**

Subdivision 1. **Definitions.** (a) For the purposes of this section, the following terms have the meanings given.

(b) "Duration" means the length of time during which the lights of a wind turbine lighting system are lit.

(c) "Intensity" means the brightness of a wind turbine lighting system's lights.

(d) "Light-mitigating technology" means a sensor-based system that reduces the duration or intensity of wind turbine lighting systems by:

(1) using radio frequency or other sensors to detect aircraft approaching one or more wind turbines, or detecting visibility conditions at turbine sites; and

(2) automatically activating appropriate obstruction lights until the lights are no longer needed by the aircraft and are turned off or dimmed.

A light-mitigating technology may include an audio feature that transmits an audible warning message to provide a pilot additional information regarding a wind turbine the aircraft is approaching.

(e) "Repowering project" has the meaning given in section 216B.243, subdivision 8, paragraph (b).

(f) "Wind turbine lighting system" means a system of lights installed on an LWECS that meets the applicable Federal Aviation Administration requirements.

Subd. 2. **Application.** This section applies to an LWECS issued a site permit or site permit amendment by the commission under section 216F.04 or a county that has assumed responsibility for issuing site permits and site permit amendments for an LWECS under section 216F.08, provided that the application for a site permit or a site permit amendment for an LWECS repowering project is filed after July 1, 2020.

Subd. 3. **Required lighting system.** (a) An LWECS subject to this section must be equipped with a light-mitigating technology that meets the requirements established in Chapter 14 of the Federal Aviation Administration's Advisory Circular 70/760-1, Obstruction Marking and Lighting, as updated, unless the Federal Aviation Administration, after reviewing the LWECS site plan, rejects the use of the light-mitigating technology for the LWECS. A light-mitigating technology installed on a wind turbine in Minnesota must be purchased from a vendor approved by the Federal Aviation Administration.

(b) If the Federal Aviation Administration, after reviewing the LWECS site plan, rejects the use of a light-mitigating technology for the LWECS under paragraph (a), the LWECS must be equipped with a wind turbine lighting system that minimizes the duration or intensity of the lighting system while maintaining full compliance with the lighting standards established in Chapter 13 of the Federal Aviation Administration's Advisory Circular 70/760-1, Obstruction Marking and Lighting, as updated.

Subd. 4. **Exemptions.** (a) The Public Utilities Commission or a county that has assumed permitting authority under section 216F.08 must grant an owner of an LWECS an exemption from the provisions of subdivision 3, paragraph (a), if the Federal Aviation Administration denies the owner's application to equip an LWECS with a light-mitigating technology.

(b) The Public Utilities Commission or a county that has assumed permitting authority under section 216F.08 must grant an owner of an LWECS an exemption from or an extension of time to comply with the provisions of subdivision 3, paragraph (a), if, after notice and public hearing, the owner of the LWECS demonstrates to the satisfaction of the commission or county that:

(1) equipping an LWECS with a light-mitigating technology is technically infeasible;

(2) equipping an LWECS with a light-mitigating technology imposes a significant financial burden on the permittee; or

(3) a vendor approved by the Federal Aviation Administration cannot deliver a light-mitigating technology to the LWECS owner in a reasonable amount of time.

EFFECTIVE DATE. This section is effective the day following final enactment.

Sec. 25. Minnesota Statutes 2018, section 216H.02, is amended by adding a subdivision to read:

Subd. 1b. **Emissions-reduction goals; transmission resources.** It is the policy of the state that sufficient electric transmission infrastructure be constructed in a timely manner in order to facilitate the state's meeting the greenhouse gas emissions reduction goals established in subdivision 1.

EFFECTIVE DATE. This section is effective the day following final enactment.

Sec. 26. **COORDINATED ELECTRIC TRANSMISSION STUDY.**

(a) The commissioner of commerce must request the Midcontinent Independent System Operator (MISO) to conduct an engineering study of the impacts on reliability and the estimated costs of operational changes and enhancements to the transmission system necessary to support increased use of carbon-free electrical generation sources for Minnesota and throughout the MISO footprint, including the possible eventual retirement of existing generation resources serving Minnesota customers.

(b) If the request is accepted, MISO is responsible for completing the study work, with the support of the electric utilities subject to transmission planning under Minnesota Rules, chapter 7848. Prior to the start of the study, MISO must appoint a technical review committee with experience and expertise in electric transmission system engineering, power system operation, and renewable and carbon-free energy technologies to review the study's proposed methods, work plan, models, and preliminary and near final results. The technical review committee must be chaired by a representative from MISO and include representatives from Minnesota electric utilities, including one representative from a utility that owns nuclear generation, one from a generation and transmission cooperative, and one from a municipal utility. In addition, MISO must work with state utility regulators, as well as stakeholders from across the electricity industry, nongovernmental organizations, consumer advocates, and labor representatives.

(c) To the extent possible, the study must integrate and optimize the study and resulting potential transmission projects with previous and current study efforts, coordinate with

neighboring regions to the MISO footprint and adjacent regional transmission organizations, and identify barriers, challenges, and opportunities.

(d) The study must include but is not limited to:

(1) establishing scenarios to study increased carbon-free energy resources, energy storage, and retirement of existing generation;

(2) identifying new power system operating challenges, possible mitigation strategies, and areas where new strategies are required but not yet discernible;

(3) developing conceptual level plans of the required new and modified transmission, including time frames and indicative cost;

(4) when ascertainable, identifying likely new significant transmission projects or modifications, including time frames and indicative cost; and

(5) identifying functional requirements for and time frames when nontransmission technology may be needed to augment the transmission in conceptual plan and the new projects or modifications.

(e) The first meeting of the technical review committee must be held no later than June 15, 2020, and the study completed, with a comprehensive report submitted to the Public Utilities Commission, no later than December 1, 2021.