1.1 A bill for an act
relating to energy; appropriating money; amending Minnesota Statutes 2018,
sections 13.685; 116C.7792; 216B.16, subdivisions 6, 13, by adding a subdivision;
216B.1641; 216B.1645, subdivisions 1, 2; 216B.1691, subdivisions 1, 2b, 9, by
adding a subdivision; 216B.2401; 216B.241, subdivisions 1a, 1c, 1d, 1f, 2, 2b, 3,
7, 9, by adding a subdivision; 216B.2422, subdivisions 1, 2, 3, 4, 5, by adding
subdivisions; 216B.243, subdivisions 3, 3a; 216C.435, subdivisions 3a, 8;
216C.436, subdivision 4, by adding a subdivision; 216F.04; 216F.08; 326B.106,
by adding a subdivision; proposing coding for new law in Minnesota Statutes,
chapters 216B; 216C; repealing Minnesota Statutes 2018, section 216B.241,
subdivisions 1, 2c, 4, 5.

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

1.13 Section 1. Minnesota Statutes 2018, section 13.685, is amended to read:

1.14 **13.685 MUNICIPAL UTILITY CUSTOMER DATA.**

1.15 Data on customers of municipal electric utilities are private data on individuals or
nonpublic data, but may be released to:

1.16 (1) a law enforcement agency that requests access to the data in connection with an
investigation;

1.17 (2) a school for purposes of compiling pupil census data;

1.18 (3) the Metropolitan Council for use in studies or analyses required by law;

1.19 (4) a public child support authority for purposes of establishing or enforcing child support;

1.20 or

1.21 (5) a person authorized to receive the data under section 216B.078; or
(5) a person where use of the data directly advances the general welfare, health, or
safety of the public; the commissioner of administration may issue advisory opinions
construing this clause pursuant to section 13.072.

Sec. 2. Minnesota Statutes 2018, section 116C.7792, is amended to read:

116C.7792 SOLAR ENERGY INCENTIVE PROGRAM.

The utility subject to section 116C.779 shall operate a program to provide solar energy
production incentives for solar energy systems of no more than a total aggregate nameplate
capacity of 40 kilowatts direct alternating current per premise. The owner of a solar energy
system installed before June 1, 2018, is eligible to receive a production incentive under this
section for any additional solar energy systems constructed at the same customer location,
provided that the aggregate capacity of all systems at the customer location does not exceed
40 kilowatts. The program shall be operated for eight nine consecutive calendar years
commencing in 2014. $5,000,000 shall be allocated in each of the first four years,
$15,000,000 in each of the fifth year, $10,000,000 and sixth years, $14,000,000 in each of
the sixth and seventh and eighth years, and $5,000,000 in the eighth ninth year from funds
withheld from transfer to the renewable development account under section 116C.779,
subdivision 1, paragraphs (b) and (e), and placed in a separate account for the purpose of
the solar production incentive program operated by the utility and not for any other program
or purpose. Any unspent amount allocated in the fifth year is available until December 31
of the sixth year. Any unspent amount remaining at the end of any other allocation year
must be transferred to the renewable development account. The solar system must be sized
to less than 120 percent of the customer's on-site annual energy consumption when combined
with other distributed generation resources and subscriptions provided under section
216B.1641 associated with the premise. The production incentive must be paid for ten years
commencing with the commissioning of the system. The utility must file a plan to operate
the program with the commissioner of commerce. The utility may not operate the program
until it is approved by the commissioner. A change to the program to include projects up
to a nameplate capacity of 40 kilowatts or less does not require the utility to file a plan with
the commissioner. Any plan approved by the commissioner of commerce must not provide
an increased incentive scale over prior years unless the commissioner demonstrates that
changes in the market for solar energy facilities require an increase.

EFFECTIVE DATE. This section is effective the day following final enactment.
Sec. 3. [216B.078] CUSTOMER ENERGY DATA.

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

(b) "Customer" means a person contracting for or purchasing electric or natural gas service from a utility.

(c) "Customer data" means all data a utility collects, creates, receives, or maintains in which a customer is identified or can be identified as the subject of the data. Customer data includes energy usage data.

(d) "Energy usage data" means a customer's account information and the data a utility collects from the customer's meter that reflects the quantity, quality, or timing of the customer's natural gas use, electricity use, or electricity production. Customer energy usage data includes but is not limited to data regarding:

(1) the amount and timing of energy use and production;

(2) energy outages, frequency, intermittency, or shutoffs;

(3) pricing and rate data applicable to the customer; and

(4) any other energy usage data used to calculate the customer's bill.

(e) "Summary energy usage data" means statistical records and reports derived from energy usage data that do not contain a customer's personally identifiable information.

(f) "Personally identifiable information" means any data in which a customer is identified or can be identified as the subject of the data.

(g) "Third party" means a person, other than a customer, who requests customer energy usage data or summary energy data from the utility that maintains the data.

(h) "Utility" means a public utility, retail municipal utility, or retail cooperative association that provides electric or natural gas service to Minnesota customers.

Subd. 2. Customer access to energy usage data. (a) A utility must provide a customer with access to the customer's own energy usage data.

(b) Access must be convenient for the typical customer. A utility's procedure to access energy usage data must be user-friendly. The utility must present the energy usage data in a format comprehensible to the typical customer.

(c) A utility must provide access to energy usage data in as close to real-time as practicable.
(d) Access to energy usage data must be provided free of charge to the customer, except that a utility may charge a fee if a customer requests access to energy usage data in a format or standard that differs from the format or standard the utility generally offers to customers.

(e) A utility must notify a customer if it substantially modifies the customer's energy usage data. The notification must include a detailed explanation of the changes made to the customer's energy usage data.

Subd. 3. Third-party access to energy usage data. (a) If a customer provides authorization, a utility must provide a third party with access to the customer's energy usage data.

(b) The procedure a utility uses to allow a customer to authorize third-party access to energy usage data must be (1) convenient for the typical customer, and (2) available on the utility's website and in physical form by mail.

(c) The scope of the authorization may limit a third party's access to specific elements of the customer's energy usage data.

(d) An authorization to access energy usage data is valid for the period of time specified in the written authorization. An authorization may include a period without a specified end date.

(e) A customer may revoke an authorization for third-party access at any time. The utility's procedure to revoke authorization must be (1) convenient for the typical customer, and (2) available on the utility's website and in physical form by mail.

(f) Subject to the scope of the authorization, an authorized third party must have the same level of access to the customer's energy usage data as the customer.

(g) To the extent a third party with access to energy usage data under this subdivision maintains the data independent of the utility providing access, the third party is subject to the data security and privacy requirements under subdivision 6.

Subd. 4. Public access to summary energy data. (a) A utility must prepare and make available summary energy usage data upon the written request of any person. The procedure a utility uses to allow a person to request summary energy data must be (1) convenient for the typical customer, and (2) available on the utility's website. A utility may charge the requester a fee to prepare and supply summary energy data.

(b) Summary energy usage data provided under this subdivision may include aggregated sets of customer energy usage data from no less than 15 customers. A single customer's energy use must not constitute more than 15 percent of total energy consumption for the
5.1 requested data set. Summary energy usage data may be disaggregated on a per-customer basis, provided that the customer's identity is not ascertainable.

5.2 (c) Within ten days of the date a request for summary energy data is received, a utility must respond by providing the requester with:

5.3 (1) the summary energy data requested or a reference to responsive summary energy data published under paragraph (d);

5.4 (2) a written statement that describes any fee charged and a time schedule for preparing the requested summary energy data, including reasons for any time delays; or

5.5 (3) a written statement stating reasons why the utility has determined the requested summary energy data cannot be prepared.

5.6 (d) A utility may make summary energy data publicly available on its website.

5.7 Subd. 5. **Fees charged for data.** A utility charging a data access fee authorized by this section must:

5.8 (1) base the fee amount on the actual costs incurred by the utility to create and deliver the requested data;

5.9 (2) consider the reasonable value of the data prepared to the utility and, if appropriate, reduce the fee assessed to the requesting person;

5.10 (3) provide the requesting person with an estimate and explanation of the fee; and

5.11 (4) collect the fee before preparing or supplying the requested data.

5.12 Subd. 6. **Data security and privacy.** (a) A utility must establish appropriate, industry-standard safeguards to protect the security of energy usage data it maintains. A utility is prohibited from selling, sharing, licensing, or disseminating energy usage data, except as authorized under this section or by state or federal law.

5.13 (b) Utilities must implement risk management practices to protect customer data. Risk management practices must include but are not limited to practices that:

5.14 (1) identify, analyze, and mitigate cybersecurity risks to customer data;

5.15 (2) reasonably protect against loss and unauthorized use, access, or dissemination of customer data;

5.16 (3) implement employee training measures to preserve data integrity; and

5.17 (4) maintain a comprehensive data breach response program to identify, mitigate, and resolve an incident that causes or results in the unauthorized use, access, or dissemination...
of customer data. The data breach response program must provide for complete, accurate, and timely notice to customers whose customer data may have been compromised.

(c) If a utility uses a third-party service to maintain or store customer data, the utility must ensure that the third-party service implements risk management practices that meet the requirements under paragraph (b).

Subd. 7. **Enforcement.** The commissioner may enforce this section as provided under section 45.027.

Sec. 4. Minnesota Statutes 2018, section 216B.16, subdivision 6, is amended to read:

Subd. 6. **Factors considered, generally.** The commission, in the exercise of its powers under this chapter to determine just and reasonable rates for public utilities, shall give due consideration to the public need for adequate, efficient, and reasonable service and to the need of the public utility for revenue sufficient to enable it to meet the cost of furnishing the service, including adequate provision for depreciation of its utility property used and useful in rendering service to the public, and to earn a fair and reasonable return upon the investment in such property. In determining the rate base upon which the utility is to be allowed to earn a fair rate of return, the commission shall give due consideration to evidence of the cost of the property when first devoted to public use, to prudent acquisition cost to the public utility less appropriate depreciation on each, to construction work in progress, to offsets in the nature of capital provided by sources other than the investors, and to other expenses of a capital nature. For purposes of determining rate base, the commission shall consider the original cost of utility property included in the base and shall make no allowance for its estimated current replacement value. If the commission orders a generating facility to terminate its operations before the end of the facility's physical life in order to comply with a specific state or federal energy statute or policy, the commission may allow the public utility to recover any positive net book value of the facility as determined by the commission.

Sec. 5. Minnesota Statutes 2018, section 216B.16, is amended by adding a subdivision to read:

Subd. 7e. **Energy storage system pilot projects.** (a) A public utility may petition the commission under this section to recover costs associated with implementing an energy storage system pilot project. As part of the petition, the public utility must submit a report to the commission containing, at a minimum, the following information regarding the proposed energy storage system pilot project:

(1) the storage technology utilized;
(2) the energy storage capacity and the duration of output at that capacity;

(3) the proposed location;

(4) the purchase and installation costs;

(5) how the project will interact with existing distributed generation resources on the utility's grid; and

(6) the goals the project proposes to achieve, which may include controlling frequency or voltage, mitigating transmission congestion, providing emergency power supplies during outages, reducing curtailment of existing renewable energy generators, and reducing peak power costs.

(b) A utility may petition the commission to approve a rate schedule that provides for the automatic adjustment of charges to recover prudently incurred investments, expenses, or costs associated with energy storage system pilot projects approved by the commission under this subdivision. A petition filed under this subdivision must include the elements listed in section 216B.1645, subdivision 2a, paragraph (b), clauses (1) to (4), and must describe the benefits of the pilot project.

(c) The commission may approve, or approve as modified, a rate schedule filed under this subdivision. The rate schedule filed by the public utility may include the elements listed in section 216B.1645, subdivision 2a, paragraph (a), clauses (1) to (5).

(d) For each pilot project that the commission has found to be in the public interest, the commission must determine the specific amounts that are eligible for recovery under the approved rate schedule within 90 days of the date the specific pilot program receives final approval or within 90 days of the date the public utility files for approval of cost recovery for the specific pilot program, whichever is later.

(e) Nothing in this subdivision prohibits or deters the deployment of energy storage systems.

(f) For the purposes of this subdivision:

(1) "energy storage system" has the meaning given in section 216B.2422, subdivision 1; and

(2) "pilot project" means a project that is owned, operated, and controlled by a public utility to optimize safe and reliable system operations and is deployed at a limited number of locations in order to assess the technical and economic effectiveness of its operations.

EFFECTIVE DATE. This section is effective the day following final enactment.
Sec. 6. 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 (1) for economic and community development, and (2) to employ local workers to construct and maintain generation facilities that supply power to the utility's customers.

Sec. 7. Minnesota Statutes 2018, section 216B.1641, is amended to read:

**216B.1641 COMMUNITY SOLAR GARDEN.**

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

(b) "Subscriber" means a retail customer of a utility who owns one or more subscriptions of a community solar garden interconnected with that utility.

(c) "Subscription" means a contract between a subscriber and the owner of a solar garden.

**Subd. 2. Solar garden; project requirements.** (a) The public utility subject to section 116C.779 shall file by September 30, 2013, a plan with the commission to operate a community solar garden program which shall begin operations within 90 days after commission approval of the plan. Other public utilities may file an application at their election. The community solar garden program must be designed to offset the energy use of not less than five subscribers in each community solar garden facility of which no single subscriber has more than a 40 percent interest. The owner of the community solar garden may be a public utility or any other entity or organization that contracts to sell the output from the community solar garden to the utility under section 216B.164. There shall be no limitation on the number or cumulative generating capacity of community solar garden facilities other than the limitations imposed under section 216B.164, subdivision 4c, or other limitations provided in law or regulations.

(b) A solar garden is a facility that generates electricity by means of a ground-mounted or roof-mounted solar photovoltaic device whereby subscribers receive a bill credit for the electricity generated in proportion to the size of their subscription. The solar garden must have a nameplate capacity of no more than one megawatt. Each subscription shall be sized to represent at least 200 watts of the community solar garden's generating capacity and to supply, when combined with other distributed generation resources serving the premises, no more than 120 percent of the average annual consumption of electricity by each subscriber at the premises to which the subscription is attributed.
The solar generation facility must be located in the service territory of the public utility filing the plan. Subscribers must be retail customers of the public utility. Subscribers must be located in the same county as the solar garden or in a contiguous county to where the facility is located, unless:

1. the solar garden has a minimum setback of 100 feet from the nearest residential property; and
2. the owner or operator of the solar garden provides written certification to the commission that at least ten percent of the solar garden's electric generating capacity will be reserved for residential subscribers.

(d) The public utility must purchase from the community solar garden all energy generated by the solar garden. Except as provided under subdivision 7, the purchase shall be at the most recent three-year average of the rate calculated annually under section 216B.164, subdivision 10, or, until that rate for the public utility has been approved by the commission, the applicable retail rate. A solar garden is eligible for any incentive programs offered under either section 116C.7792 or section 216C.415. A subscriber's portion of the purchase shall be provided by a credit on the subscriber's bill.

(e) Beginning May 1, 2019, any solar garden application filed with a utility must certify that all workers constructing the solar garden will be paid at the prevailing wage rate, as defined in section 177.42, subdivision 6.

Subd. 3. Solar garden plan; requirements; nonutility status. (a) The commission may approve, disapprove, or modify a community solar garden program plan. Any plan approved by the commission must:

1. reasonably allow for the creation, financing, and accessibility of community solar gardens;
2. establish uniform standards, fees, and processes for the interconnection of community solar garden facilities that allow the utility to recover reasonable interconnection costs for each community solar garden;
3. not apply different requirements to utility and nonutility community solar garden facilities;
4. be consistent with the public interest;
5. identify the information that must be provided to potential subscribers to ensure fair disclosure of future costs and benefits of subscriptions;
(6) include a program implementation schedule;
(7) identify all proposed rules, fees, and charges; and
(8) identify the means by which the program will be promoted.

(f) (b) Notwithstanding any other law, neither the manager of nor the subscribers to a community solar garden facility shall be considered a utility solely as a result of their participation in the community solar garden facility.

(g) (c) Within 180 days of commission approval of a plan under this section, a utility shall begin crediting subscriber accounts for each community solar garden facility in its service territory, and shall file with the commissioner of commerce a description of its crediting system.

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

(1) "subscriber" means a retail customer of a utility who owns one or more subscriptions of a community solar garden facility interconnected with that utility; and
(2) "subscription" means a contract between a subscriber and the owner of a solar garden.

Subd. 4. Program administration; enforcement. (a) The Department of Commerce shall administer the solar community garden program and shall be responsible for implementing all elements of the program. The department's duties under this section include:

(1) processing community solar garden applications;
(2) establishing and accepting program fees from applicants and solar garden managers;
(3) calculating the rate that subscribers will be paid and submitting the rate to the commission for approval;
(4) ensuring that community solar garden program documents and protocols are available to subscribers;
(5) ensuring that solar garden managers provide adequate notice of changes in solar garden operations to subscribers, including, but not limited to, adjustments in subscriber bill credit rates;
(6) ensuring that a utility conducts the interconnection process in a timely fashion;
(7) ensuring that the actions of solar garden owners, operators, and subscribers conform to the provisions of this section and orders of the commission; and
(8) other administrative tasks as determined by the commissioner.
(b) The commissioner may use the authority granted under section 45.027 to enforce any violations related to the duties and responsibilities entrusted to the commissioner under this subdivision.

Subd. 5. Account established. A solar garden administrative account is established in the special revenue fund. Fees collected under this section must be deposited in and credited to the account. Money in the account, including interest, is appropriated to the commissioner for the administration of this section.

Subd. 6. Community access project; eligibility. Any community solar garden established under a plan approved by the commission may petition the commission to be designated as a community access project. The commission shall designate a solar garden as a community access project if the solar garden meets the following conditions:

1. at least 50 percent of the solar garden's generating capacity is subscribed by residential customers;
2. the contract between an owner of the solar garden and the public utility that purchases the garden's electricity, and any agreement between the utility or owner of the solar garden and subscribers, states that the owner of the solar garden does not discriminate against or screen subscribers based on income or credit score and that any customer of a utility whose community solar garden plan has been approved by the commission under subdivision 3 is eligible to become a subscriber;
3. the solar garden is operated by an entity that maintains a physical address in Minnesota and has designated a contact person in Minnesota who responds to subscriber inquiries; and
4. the agreement between the owner of the solar garden and subscribers states that the owner will adequately publicize and convene at least one meeting annually to provide an opportunity for subscribers to address questions to the manager or owner.

Subd. 7. Community access project; financial arrangements. (a) If a solar garden is approved by the commission as a community access project:

1. the public utility purchasing the electricity generated by the community access project may charge the owner of the community access project no more than one cent per watt AC (alternating current) based on the solar garden's generating capacity for any refundable deposit the utility requires of a solar garden during the application process;
2. notwithstanding subdivision 2, paragraph (d), the public utility must purchase all energy generated by the community access project at the retail rate;
(3) a subscriber's portion of the energy purchased from a community access project by a public utility shall be credited to the subscriber's bill; and

(4) all renewable energy credits generated by the community access project belong to subscribers unless the operator contracts to:

(i) sell them to a third party; or

(ii) sell or transfer them to the utility; and

(iii) discloses such a sale or transfer to subscribers at the time they enter into a subscription.

(b) If at any time a solar garden approved by the commission as a community access project fails to meet the conditions under subdivision 4, the solar garden shall no longer be subject to the provisions of subdivisions 5 and 6 and shall operate under the program rules established by the commission for a solar garden that does not qualify as a community access project.

(c) An owner of a solar garden whose designation as a community access project is revoked under this subdivision may reapply to the commission at any time to have its designation as a community access project reinstated under the provisions of subdivision 4.

Subd. 8. Community access project; reporting. (a) The owner of a community access project must include the following information in an annual report to the subscribers of the community access project and the utility:

(1) a description of the process by which subscribers can provide input to solar garden policy and decision-making;

(2) the amount of revenues received by the solar garden in the previous year that were allocated to categories that include, but are not limited to operating costs, debt service, profits distributed to subscribers, and profits distributed to others; and

(3) an analysis of the proportion of subscribers that are low- and moderate-income and a description of one or more of the following methods used to calculate that proportion:

(i) income verification by subscribers;

(ii) subscriber evidence that the subscriber or a member of the subscriber's household receives assistance from any of the following sources:

(A) the Low-Income Home Energy Assistance Program;
(B) Section 8 housing assistance;
(C) medical assistance;
(D) the Supplemental Nutrition Assistance Program; or
(E) the National School Lunch Program;

(iii) characterization of the census tract in which the subscriber resides as low- or
moderate-income by the Federal Financial Institutions Examination Council; or
(iv) other methods approved by the commission.

Subd. 9. Commission order. Within 180 days of the effective date of this act, the
commission shall issue an order incorporating the provisions of this act.

EFFECTIVE DATE. Subdivisions 4 and 5 are effective January 1, 2020. Subdivisions
1 to 3 and 6 to 9 are effective the day following final enactment.

Sec. 8. [216B.1643] LOW-INCOME HOME ENERGY ASSISTANCE PROGRAM
COMMUNITY SOLAR GARDEN GRANT PROGRAM.

Subdivision 1. Establishment; purpose. A Low-Income Home Energy Assistance
Program (LIHEAP) community solar garden grant program is established in the Department
of Commerce for the purpose of awarding grants to promote the development of community
solar gardens in partnership with community action agencies for eligible residential
subscribers.

Subd. 2. Eligibility. (a) An owner of a community solar garden that meets all of the
following conditions is eligible to receive a grant under this section:

(1) the capacity of the solar garden is no greater than 500 kilowatts;
(2) all subscribers to the solar garden are residential subscribers who received LIHEAP
assistance during the previous year; and
(3) the solar garden is to be operated and managed by: (i) a community action agency,
as defined in section 256E.31, or by a third-party performing those duties under a contract
with a community action agency; or (ii) an organization, including, but not limited to, an
Indian tribe or tribal organization, that is under contract to the department to disburse
LIHEAP grants to eligible recipients, or a third-party performing those duties under contract
with such an organization.
(b) An entity listed under paragraph (a), clause (3), that is responsible for managing a
solar garden whose owner receives a grant under this section must certify annually to the

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commissioner that the provisions of paragraph (a) continue to be met by the LIHEAP solar
garden.

Subd. 3. Application process. An eligible applicant must submit an application to the
commissioner on a form designed by the commissioner. The commissioner shall develop
administrative procedures governing the application and grant award process.

Subd. 4. Application content. An application for a grant under this section must include
evidence that the community solar garden meets the eligibility requirements of subdivision
2, and any other information requested by the commissioner.

Subd. 5. Limitations. No grant awarded under this section may exceed 95 percent of
the total costs of developing the community solar garden.

Subd. 6. Eligible expenditures. Grants awarded under this section may be expended to
finance, purchase, and install facilities necessary for the operation of a community solar
garden.

Sec. 9. 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.
Sec. 10. Minnesota Statutes 2018, section 216B.1645, subdivision 2, is amended to read:

**Subd. 2. Cost recovery.** 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 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. 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. 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. 11. Minnesota Statutes 2018, section 216B.1691, subdivision 1, is amended to read:

**Subdivision 1. Definitions.** (a) Unless otherwise specified in law, "eligible energy technology" means an energy technology that generates electricity from the following renewable energy sources:

1. solar;
2. wind;
3. hydroelectric with a capacity of less than 100 megawatts;
4. hydrogen, provided that after January 1, 2010, the hydrogen must be generated from the resources listed in this paragraph; or
5. biomass, which includes, without limitation, landfill gas; an anaerobic digester system; the predominantly organic components of wastewater effluent, sludge, or related by-products from publicly owned treatment works, but not including incineration of wastewater sludge to produce electricity; and an energy recovery facility used to capture the heat value of mixed municipal solid waste or refuse-derived fuel from mixed municipal solid waste as a primary fuel.

(b) "Electric utility" means a public utility providing electric service, a generation and transmission cooperative electric association, a municipal power agency, or a power district.
(c) "Total retail electric sales" means the kilowatt-hours of electricity sold in a year by
an electric utility to retail customers of the electric utility or to a distribution utility for
distribution to the retail customers of the distribution utility. "Total retail electric sales"
does not include the sale of hydroelectricity supplied by a federal power marketing
administration or other federal agency, regardless of whether the sales are directly to a
distribution utility or are made to a generation and transmission utility and pooled for further
allocation to a distribution utility.

(d) "Carbon-free" means a technology that generates electricity without emitting carbon
dioxide.

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

Sec. 12. Minnesota Statutes 2018, section 216B.1691, subdivision 2b, is amended to read:

Subd. 2b. **Modification or delay of standard.** (a) The commission shall modify or delay
the implementation of a standard obligation, in whole or in part, if the commission determines
it is in the public interest to do so. The commission, when requested to modify or delay
implementation of a standard, must consider:

1. the impact of implementing the standard on its customers' utility costs, including the
   economic and competitive pressure on the utility's customers;

2. the environmental costs that would be incurred as a result of a delay or modification,
   based on the environmental cost values established in section 216B.2422, subdivision 3;

3. the effects of implementing the standard on the reliability of the electric system;

4. technical advances or technical concerns;

5. delays in acquiring sites or routes due to rejection or delays of necessary siting
   or other permitting approvals;

6. delays, cancellations, or nondelivery of necessary equipment for construction or
   commercial operation of an eligible energy technology facility;

7. transmission constraints preventing delivery of service; and

8. other statutory obligations imposed on the commission or a utility.

(b) The commission may modify or delay implementation of a standard obligation under
paragraph (a), clauses (1) to (3), only if it finds implementation would cause significant
rate impact, requires significant measures to address reliability, would cause significant
environmental costs, or raises significant technical issues. The commission may modify or
delay implementation of a standard obligation under paragraph (a), clauses (4) (5) to (6)
only if it finds that the circumstances described in those clauses were due to circumstances
beyond an electric utility's control and make compliance not feasible.

(c) When evaluating transmission capacity constraints under paragraph (a), clause (7),
the commission must consider:

(1) whether the utility has, in a timely fashion, undertaken reasonable measures under
its control and consistent with its obligations under local, state, and federal laws and
regulations, and its obligations as a member of the Midcontinent Independent System
Operator, to acquire sites, necessary permit approvals, and necessary equipment to develop
and construct new transmission lines or upgrade existing transmission lines to transmit
electricity generated by eligible energy technologies; and

(2) whether the utility has taken all reasonable operational measures to maximize
cost-effective electricity delivery from eligible energy technologies in advance of
transmission availability.

(d) When considering whether to delay or modify implementation of a standard
obligation, the commission must give due consideration to a preference for electric generation
through use of eligible energy technology and to the achievement of the standards set by
this section.

(e) An electric utility requesting a modification or delay in the implementation of a
standard must file a plan to comply with its standard obligation in the same proceeding that
it is requesting the delay.

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

Sec. 13. Minnesota Statutes 2018, section 216B.1691, is amended by adding a subdivision
to read:

Subd. 2g. **Carbon-free standard.** By 2050, 100 percent of the electricity each electric
utility subject to subdivision 2a, paragraph (a), provides directly to Minnesota retail
customers, or indirectly through wholesale sales to a distribution utility serving Minnesota
retail customers, must be generated by a technology that is carbon-free.

**EFFECTIVE DATE.** This section is effective the day following final enactment.
Sec. 14. Minnesota Statutes 2018, section 216B.1691, subdivision 9, is amended to read:

Subd. 9. Local benefits. (a) The commission shall take all reasonable actions within its statutory authority to ensure this section is implemented to maximize in a manner that maximizes benefits to all Minnesota citizens, balancing and local workers throughout the state. Benefits under this subdivision include but are not limited to:

1. the creation of high-quality jobs in Minnesota that pay wages that support families;
2. recognition of the rights of workers to organize and unionize;
3. ensuring that workers have the necessary tools, opportunities, and economic assistance to adapt successfully during the energy transition, particularly in communities that host retiring power plants or that contain historically marginalized and underrepresented populations;
4. ensuring that all Minnesotans share (i) the benefits of clean and renewable energy, and (ii) the opportunity to participate fully in the clean energy economy;
5. ensuring that air emissions are reduced in communities historically burdened by pollution and the impacts of climate change; and
6. the provision of affordable electric service to Minnesotans, particularly to low-income consumers.

(b) The commission must also implement this section in a manner that balances factors such as local ownership of or participation in energy production, local job impacts, 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 carbon-free standards, and the reliability of electric service to Minnesotans.

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

Sec. 15. [216B.1697] ENERGY STORAGE SYSTEM; APPLICATION.

Subdivision 1. Definition. For the purposes of this section, "energy storage system" means a commercially available technology that uses mechanical, chemical, or thermal processes to:

1. store energy and deliver the stored energy for use at a later time; or
2. 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.
Subd. 2. **Application requirement.** No later than January 1, 2021, each public utility providing retail electric service in this state must submit an application to the commission for review and approval to install one or more energy storage systems.

Subd. 3. **Application contents.** (a) Each application submitted under this section shall contain the following information:

1. (1) technical specifications of the energy storage system, including, but not limited to:
   (i) the maximum amount of electric output that the energy storage system can provide;
   (ii) the length of time the energy storage system can sustain its maximum output;
   (iii) the location of the project, and a description of the analysis conducted to determine the location;
   (iv) what needs of the public utility's electric system the proposed energy storage system will address;
   (v) a description of the types of services the energy storage system is expected to provide; and
   (vi) a description of the technology required to construct, operate, and maintain the energy storage system, including any data or communication system necessary to operate the energy storage system;

2. (2) the estimated cost of the project, including:
   (i) capital costs;
   (ii) the estimated cost per unit of energy delivered by the energy storage system; and
   (iii) an evaluation of the cost-effectiveness of the energy storage system;

3. (3) the estimated benefits of the energy storage system to the public utility's electric system, including, but not limited to:
   (i) deferred investments in generation, transmission, or distribution capacity;
   (ii) reduced need for electricity during times of peak demand;
   (iii) improved reliability of the public utility's transmission or distribution system; and
   (iv) improved integration of the public utility's renewable energy resources;

4. (4) how the addition of an energy storage system complements proposed actions of the public utility described in its most recent integrated resource plan submitted under section 216B.2422, to meet expected demand with the least cost combination of resources; and
(5) any additional information required by the commission.

(b) A public utility must include in its application an evaluation of the potential to store energy in the public utility's electric system, and must identify geographic areas in the public utility's service area where the deployment of energy storage systems has the greatest potential to achieve the economic benefits identified in paragraph (a), clause (3).

Subd. 4. Commission review. The commission shall review each proposal submitted under this section, and may approve, reject, or modify the proposal. The commission shall approve a proposal it determines is in the public interest and reasonably balances the value derived from the deployment of an energy storage system for ratepayers and the public utility's operations with the costs of procuring, constructing, operating, and maintaining the energy storage system.

Subd. 5. Cost recovery. A public utility may recover from ratepayers all costs prudently incurred by the public utility in deploying an energy storage system approved by the commission under this section, net of any revenues generated by the operation of the energy storage system.

Subd. 6. Commission authority; orders. The commission may issue orders necessary to implement and administer this section.

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

Sec. 16. [216B.1697] INNOVATIVE CLEAN TECHNOLOGIES.

(a) For purposes of this section, "innovative clean technology" means advanced energy technology that is:

(1) environmentally superior to technologies currently in use;

(2) expected to offer energy-related, environmental, or economic benefits; and

(3) not widely deployed by the utility industry.

(b) A public utility may petition the commission for authorization to invest in a project or projects to deploy one or more innovative clean technologies to further the development, commercialization, and deployment of those technologies for the benefit of utility customers.

(c) The commission may approve a petition under paragraph (b) if it finds:

(1) the technologies to be deployed are innovative clean technologies;

(2) the utility is meeting its energy conservation goals under section 216B.241; and
(3) the petition would not result in utility spending greater than $5,000,000 per year on innovative clean technologies under this section.

(d) The commission may also permit a public utility to file rate schedules containing provisions to automatically adjust charges for public utility service in direct relation to changes in prudent costs incurred by a utility under this section, up to $5,000,000 each year. To the extent the utility investment under this section is for a capital asset, the utility may request the asset be included in the utility's rate base.

Sec. 17. Minnesota Statutes 2018, section 216B.2401, is amended to read:

**216B.2401 ENERGY SAVINGS AND OPTIMIZATION POLICY GOAL.**

(a) The legislature finds that energy savings are an energy resource, and that cost-effective energy savings are preferred over all other energy resources. In addition, the legislature finds that optimizing when and how energy consumers manage energy use can provide significant benefits to the consumers and to the utility system as a whole. The legislature further finds that cost-effective energy savings and load management programs should be procured systematically and aggressively in order to reduce utility costs for businesses and residents, improve the competitiveness and profitability of businesses, create more energy-related jobs, reduce the economic burden of fuel imports, and reduce pollution and emissions that cause climate change. Therefore, it is the energy policy of the state of Minnesota to achieve annual energy savings equal to at least 1.5 percent of annual retail energy sales of electricity and natural gas through cost-effective energy conservation improvement programs and rate design, energy efficiency achieved by energy consumers without direct utility involvement, energy codes and appliance standards, programs designed to transform the market or change consumer behavior, energy savings resulting from efficiency improvements to the utility infrastructure and system, and other efforts to promote energy efficiency and energy conservation, multiple means, including but not limited to:

1. cost-effective energy conservation improvement programs, and efficient fuel-switching utility programs, under sections 216B.2402 to 216B.241;
2. rate design;
3. energy efficiency achieved by energy consumers without direct utility involvement;
4. advancements in statewide energy codes and cost-effective appliance and equipment standards;
5. programs designed to transform the market or change consumer behavior;
energy savings resulting from efficiency improvements to the utility infrastructure and system; and

other efforts to promote energy efficiency and energy conservation.

(b) A utility should design and offer to their customers load management programs that enable: (1) customers to maximize the economic value gained from the energy purchased from their utility service providers; and (2) utilities to optimize the infrastructure and generation capacity needed to effectively serve customers and to facilitate the integration of renewable energy into the energy system. The commissioner must provide a reasonable estimate for progress toward this statewide energy savings goal in the annual report required under section 216B.241, subdivision 1c, along with recommendations for administrative or legislative initiatives to increase energy savings toward that goal. The commissioner must also report annually the energy productivity of the state's economy by providing an estimate of the ratio of economic output produced in a previous year to the primary energy inputs used in that year.

Sec. 18. DEFINITIONS.

(a) For the purposes of section 216B.16, subdivision 6b, and sections 216B.2401 to 216B.241, the terms defined in this section have the meanings given them.

(b) "Consumer-owned utility" means a municipal utility or a cooperative electric association.

(c) "Cumulative lifetime savings" means the total electric energy or natural gas savings in a given year from energy conservation improvements installed that year or in previous years that are still operational and providing savings in that year because the measures have not reached the end of the measure's useful life.

(d) "Efficient fuel-switching improvement" means a project that (1) results in converting a customer from use of a fuel to the use of electric energy or natural gas delivered at retail by a utility subject to this section, resulting in a net increase in the use of electric energy or natural gas and a net decrease in source energy consumption on a fuel-neutral basis, and (2) otherwise meets the criteria established in section 216B.2403, subdivision 8. An efficient fuel-switching improvement requires the installation of equipment that utilizes electric energy or natural gas, resulting in a reduction or elimination of use of the previous fuel.

(e) "Energy conservation" means an action that results in a net reduction in electric energy or natural gas consumption.
(f) "Energy conservation improvement" means a project that results in energy efficiency or energy conservation. Energy conservation improvement may include waste heat that is recovered and converted into electricity, but does not include electric utility infrastructure projects approved by the commission under section 216B.1636. Energy conservation improvement includes waste heat recovered and used as thermal energy.

(g) "Energy efficiency" means measures or programs, including energy conservation measures or programs, that target consumer behavior, equipment, processes, or devices designed to produce either an absolute decrease in consumption of electric energy or natural gas or a decrease in consumption of electric energy or natural gas on a per unit of production basis, without reducing the quality or level of service provided to the energy consumer.

(h) "Fuel" means energy consumed by a retail utility customer. Fuel includes electricity, propane, natural gas, heating oil, gasoline, diesel fuel, or steam.

(i) "Fuel neutral" means an approach that compares the use of various fuels for a given end use, using a common metric.

(j) "Gross annual retail energy sales" means the annual electric sales to all retail customers in a utility's or association's Minnesota service territory or natural gas throughput to all retail customers, including natural gas transportation customers, on a utility's distribution system in Minnesota. Gross annual retail energy sales does not include:

   (1) gas sales to:
       (i) a large energy facility;
       (ii) a large customer facility whose natural gas utility has been exempted by the commissioner under section 216B.241, subdivision 1a, paragraph (b), with respect to natural gas sales made to the large customer facility; and
       (iii) a commercial gas customer facility whose natural gas utility has been exempted by the commissioner under section 216B.241, subdivision 1a, paragraph (c), with respect to natural gas sales made to the commercial gas customer facility; or

   (2) electric sales to a large customer facility whose electric utility has been exempted by the commissioner under section 216B.241, subdivision 1a, paragraph (b), with respect to electric sales made to the large facility.

(k) "Investments and expenses of a public utility" means the investments and expenses incurred by a public utility in connection with an energy conservation improvement.
"Large customer facility" means all buildings, structures, equipment, and installations at a single site that collectively (1) impose a peak electrical demand on an electric utility's system of at least 20,000 kilowatts, measured in the same way as the utility that serves the customer facility measures electric demand for billing purpose, or (2) consume at least 500,000,000 cubic feet of natural gas annually. When calculating peak electrical demand, a large customer facility may include demand offset by on-site cogeneration facilities and, if engaged in mineral extraction, may aggregate peak energy demand from the large customer facility's mining processing operations.

"Large energy facility" has the meaning given it in section 216B.2421, subdivision 2, clause (1).

"Lifetime energy savings" means the amount of savings a particular energy conservation improvement produces over the improvement's effective useful lifetime.

"Load management" means an activity, service, or technology to change the timing or the efficiency of a customer's use of energy that allows a utility or a customer to respond to local and regional energy system conditions, or to reduce peak demand for electric energy or natural gas. Load management that reduces the customer's net annual energy consumption is also energy conservation.

"Low-income programs" means energy conservation improvement programs that directly serve the needs of low-income persons, including low-income renters. Multifamily buildings of five units or more that are rented by low-income persons are eligible to be served through low-income programs, which may include the upgrading of appliances, heating and air conditioning equipment, and building envelope improvements.

"Member" has the meaning given to it in section 308B.005, subdivision 15.

"Qualifying utility" means a utility that supplies energy to a customer that enables the customer to qualify as a large customer facility.

"Source energy" means the total amount of fuel required for a given purpose, considering energy losses in the production, transmission, and delivery of the energy.

"Waste heat recovered and used as thermal energy" means capturing heat energy that would be exhausted or dissipated to the environment from machinery, buildings, or industrial processes, and productively using the recovered thermal energy where it was captured or distributing it as thermal energy to other locations where it is used to reduce demand-side consumption of natural gas, electric energy, or both.
"Waste heat recovery converted into electricity" means an energy recovery process that converts otherwise lost energy from the heat of exhaust stacks or pipes used for engines or manufacturing or industrial processes, or the reduction of high pressure in water or gas pipelines.

Sec. 19. [216B.2403] CUSTOMER-OWNED UTILITIES; ENERGY CONSERVATION AND OPTIMIZATION.

Subdivision 1. Applicability. This section applies to:

(1) a cooperative electric association that provides retail service to more than 5,000 members;

(2) a municipality that provides electric service to more than 1,000 retail customers; and

(3) a municipality with more than 1,000,000,000 cubic feet in annual throughput sales to natural gas retail customers.

Subd. 2. Consumer-owned utility; energy savings goal. (a) Each individual consumer-owned utility subject to this section has an annual energy savings goal equivalent to 1.5 percent of gross annual retail energy sales. The annual energy savings goal must be met with a minimum of energy savings from energy conservation improvements equivalent to at least one percent of the consumer-owned utility's gross annual retail energy sales. The balance of energy savings toward the annual energy savings goal must be achieved by the following utility activities:

(1) energy savings from additional energy conservation improvements;

(2) electric utility infrastructure projects, as defined in section 216B.1636, subdivision 1; or

(3) net energy savings from efficient fuel-switching improvements that meet the criteria under subdivision 7.

(b) Nothing in this section limits a utility's ability to report and recognize savings from activities under paragraph (a), clauses (2) and (3), in excess of the utility's annual energy savings provided the utility has met the minimum energy savings goal from energy conservation improvements.

(c) The energy savings goals specified in this section must be calculated based on the most recent three-year, weather-normalized average. A consumer-owned utility that elects to file annual plans may carry forward for up to three years any energy savings in excess of its 1.5 percent energy savings goal in a single year.
(d) A consumer-owned utility subject to this section is not required to make energy conservation improvements that are not cost-effective, even if the improvement is necessary to attain the energy savings goal. A consumer-owned utility subject to this section must make reasonable efforts to implement energy conservation improvements above the minimum level set under this subdivision, if cost-effective opportunities and utility funding are available, considering other potential investments the utility plans to make for the benefit of customers during the term of the plan filed under subdivision 3.

(e) A consumer-owned utility may request that the commissioner adjust its minimum goal for energy savings from energy conservation improvements specified under paragraph (a) for the period of the plan filed under subdivision 3. The request must be made by January 1 of any year when the utility must file a plan under subdivision 4. The request must be based on:

1. historical energy conservation improvement program achievements;
2. customer class makeup;
3. projected load growth;
4. an energy conservation potential study that estimates the amount of cost-effective energy conservation potential that exists in the utility's service territory;
5. the cost-effectiveness and quality of the energy conservation programs offered by the utility; and
6. other factors the commissioner and consumer-owned utility determine warrants an adjustment.

The commissioner must adjust the savings goal to a level the commissioner determines is supported by the record, but must not approve a minimum energy savings goal from energy conservation improvements that is less than one percent of gross annual retail energy sales.

Subd. 3. Consumer-owned utility; energy savings investments. (a) Each cooperative electric association and municipality subject to subdivision 2 must spend and invest in the following amounts for energy conservation improvements under this subdivision:

1. for a municipality, 0.5 percent of its gross operating revenues from the sale of gas and 1.5 percent of its gross operating revenues from the sale of electricity, excluding gross operating revenues from electric and gas service provided in Minnesota to large electric customer facilities; and
(2) for a cooperative electric association, 1.5 percent of its gross operating revenues from service provided in the state, excluding gross operating revenues from service provided in the state to large electric customer facilities indirectly through a distribution cooperative electric association.

(b) Each municipality and cooperative electric association subject to this subdivision must identify and implement energy conservation improvement spending and investments that are appropriate for the municipality or association, except that a municipality or association must not spend or invest for energy conservation improvements that directly benefit a large energy facility or a large electric customer facility that the commissioner has issued an exemption to under section 216B.241, subdivision 1a, paragraph (b).

Subd. 4. Consumer-owned utility; energy conservation and optimization plans. (a) By June 1, 2021, each consumer-owned utility must file with the commissioner an energy conservation and optimization plan that describes the programs for energy conservation, efficient fuel-switching improvements and load management programs, and other processes and programs the utility plans to use to achieve its energy-savings goal. The plan may cover a period not to exceed two years. The plan must provide an analysis of the cost-effectiveness of the consumer-owned utility's programs offered under the plan, using a list of baseline energy and capacity savings assumptions developed in consultation with the department. An individual utility program may combine elements of energy conservation, load management, or efficient fuel-switching. Plans received by June 1 must be evaluated by the commissioner based on how well the plan meets the goals set under subdivision 2 by December 1 of the same year, including the commissioner's assessment of whether the plan will likely achieve those goals. Beginning June 1, 2022, and each subsequent June 1, each consumer-owned utility must file: (1) an annual update identifying the status of its annual plan filed under this subdivision, including total expenditures and investments made to date, and any intended changes to the plan; and (2) a summary of the annual energy-savings achievements under a completed plan, and a new plan that complies with this section.

(b) In the filings required under paragraph (a), the consumer-owned utility must provide a description and evaluation of the programs offered by the utility under the plan, including:

(1) energy conservation improvements in the previous period, and its progress toward the minimum energy savings goal from energy conservation improvements described in subdivision 2, including accounting for lifetime savings and cumulative lifetime energy savings under the plan. The evaluation must briefly describe each conservation program the utility offers or plans to offer, and must specify the energy savings or increased efficiency in the use of energy within the service territory of the utility that is the result of the program.
The commissioner must review each evaluation and make recommendations, where appropriate, to the consumer-owned utility to increase the effectiveness of conservation improvement activities. The commissioner must consider and may require a consumer-owned utility to undertake a cost-effective program suggested by an outside source, including a political subdivision, nonprofit corporation, or community organization:

(2) load management activities, including an analysis of the reduction in peak load that is the result of the program, and an assessment of the cost-effectiveness of each program;

and

(3) efficient fuel-switching improvement activities, including an analysis regarding how each program meets the criteria specified in subdivision 8, and an assessment of the cost-effectiveness of each program. For improvements requiring the deployment of electric technologies, the plan must also provide an analysis regarding how the fuel-switching improvement will be operated in order to facilitate the integration of variable renewable energy into the electric system.

(c) When evaluating the cost-effectiveness of utility programs, the consumer-owned utility and the commissioner must consider the costs and benefits to ratepayers, the utility, participants, and society. In addition, the commissioner must consider the rate at which the consumer-owned utility is increasing its energy savings and expenditures on energy conservation, as well as the lifetime energy savings and cumulative energy savings of the consumer-owned utility.

(d) Each consumer-owned utility subject to this subdivision may annually spend and invest up to ten percent of the total amount spent and invested on energy conservation improvements under this subdivision on research and development projects that meet the definition of energy conservation improvement and that are funded directly by the consumer-owned utility.

(e) A generation and transmission cooperative electric association or municipal power agency that provides energy services to consumer-owned utilities may invest in energy conservation improvements on behalf of consumer-owned utilities it serves and may fulfill the conservation, reporting, and energy-savings goals for any of those consumer-owned utilities on an aggregate basis. For consumer-owned utilities electing to aggregate services under this paragraph, multiyear plans up to three years may be filed with the department under subdivision 3 activities with continued annual performance reporting.

(f) A consumer-owned utility must not spend for or invest in energy conservation improvements that directly benefit a large energy facility or a large electric customer facility.
for which the commissioner has issued an exemption under section 216B.241, subdivision
la.

(g) The energy conservation and optimization plan of each consumer-owned utility
subject to this section must have a component focused on improving the energy efficiency
in the public schools served by the utility. At a minimum, the efficiency in schools component
must consist of programs to update lighting in the school, update the heating and cooling
systems of the school, provide for building recommissioning, provide building operator
training, and provide opportunities to educate students, teachers, and staff regarding energy
efficiency measures implemented at that school, including associated benefits for improved
learning resulting from the measures.

Subd. 5. Low-income programs. (a) Each consumer-owned utility subject to this section
must provide low income energy conservation programs. For purposes of this subdivision,
low-income is defined as 60 percent of state median income, notwithstanding the criteria
established in paragraph (e). The commissioner must provide an evaluation of a utility's
plans under this section, considering the utility's historic spending and participation levels,
energy savings for low-income programs, and the number of low-income persons residing
in the utility's service territory. A municipal utility that furnishes gas service must spend at
least 0.4 percent of its most recent three-year average gross operating revenue from residential
customers in Minnesota on low-income programs. A consumer-owned utility that furnishes
electric service must spend at least 0.4 percent of its gross operating revenue from residential
customers in Minnesota on low-income programs. This requirement applies to each
generation and transmission cooperative association's members' aggregate gross operating
revenue from the sale of electricity to residential customers in Minnesota.

(b) To meet the requirements of paragraph (a), a consumer-owned utility may contribute
money to the energy and conservation account in section 216B.241, subdivision 2a. An
energy conservation improvement plan must state the amount, if any, of low-income energy
conservation improvement funds the utility plans to contribute to the energy and conservation
account. Contributions must be remitted to the commissioner by February 1 each year.

(c) The commissioner must establish low-income programs to use money contributed
to the energy and conservation account under paragraph (b). When establishing low-income
programs, the commissioner must consult political subdivisions, utilities, and nonprofit and
community organizations, including organizations engaged in providing energy and
weatherization assistance to low-income persons. Money contributed to the energy and
conservation account under paragraph (b) must provide programs for low-income persons,
including low-income renters, located in the service territory of the utility or association
providing the money. The commissioner must record and report expenditures and energy
savings achieved as a result of low-income programs funded through the energy and
conservation account in the report required under section 216B.241, subdivision 1c, paragraph
(g). The commissioner may contract with a political subdivision, nonprofit or community
organization, public utility, municipality, or cooperative electric association to implement
low-income programs funded through the energy and conservation account.

(d) A consumer-owned utility may petition the commissioner to modify its required
spending under this subdivision if the utility and the commissioner were unable to expend
the amount required for three consecutive years.

(e) For purposes of this subdivision, "multifamily building" is defined as a residential
building with five or more dwelling units. For purposes of determining eligibility for
multifamily buildings in low-income programs, a utility or association may use one or more
of the following:

(1) information showing that a multifamily building's units are rented to households
meeting one of the following criteria:

(i) household income at or below 200 percent of federal poverty level;

(ii) household income at or below 60 percent of area median income;

(iii) occupancy within a building that is certified on the Low Income Renter Classification
(LIRC) Assessor Report compiled annually by Minnesota Housing Finance Agency; or

(iv) occupancy within a building which has a declaration against the property requiring
that a portion of the units will be rented to tenants with an annual household income less
than or equal to 60 percent of area median income;

(2) a property's participation in an affordable housing program, including low-income
housing tax credits (LIHTC), United States Department of Housing and Urban Development
(HUD) assistance, United States Department of Agriculture (USDA) assistance, state housing
finance agency assistance, or local tax abatement for low-income properties; or

(3) documentation demonstrating that the property is on the waiting list for or currently
participating in the United States Department of Energy Weatherization Assistance Program.

Subd. 6. Recovery of expenses. The commission must allow a cooperative electric
association subject to rate regulation under section 216B.026 to recover expenses resulting
from (1) a plan under this subdivision, and (2) assessments and contributions to the energy
and conservation account under section 216B.241, subdivision 2a.
Subd. 7. **Ownership of energy conservation improvement.** An energy conservation improvement to or installed in a building under this section, except systems owned by the consumer-owned utility and designed to turn off, limit, or vary the delivery of energy, is the exclusive property of the building owner, except to the extent that the improvement is subject to a security interest in favor of the utility in case of a loan to the building owner.

Subd. 8. **Criteria for efficient fuel-switching improvements.** A fuel-switching improvement is deemed efficient if the improvement, relative to the fuel that is being displaced:

1. results in a net reduction in the cost and amount of source energy consumed for a particular use, measured on a fuel-neutral basis;
2. results in a net reduction of statewide greenhouse gas emissions, as defined in section 216H.01, subdivision 2, over the lifetime of the improvement. For an efficient electrification or conversion improvement installed by an electric utility, the reduction in emissions must be measured based on the emissions profile of the utility or the utility's wholesale provider. Where applicable, the emissions profile used must be the most recent resource plan accepted by the commission under section 216B.2422;
3. is cost-effective from a societal perspective, considering the costs associated with both the fuel used in the past and the fuel used in the future; and
4. is planned to be installed and operated in a manner that does not unduly increase the utility's system peak demand or require significant new investment in utility infrastructure.

Subd. 9. **Manner of filing and service.** (a) A consumer-owned utility must submit the filings required by this section to the department using the department's electronic filing system.

(b) The submission of a document to the department's electronic filing system constitutes service on the department. If a department rule requires service of a notice, order, or other document by the department, utility, or interested party upon persons on a service list maintained by the department, service may be made by personal delivery, mail, or electronic service, except that electronic service may only be made to persons on the service list that have previously agreed in writing to accept electronic service at an electronic address provided to the department for electronic service purposes.

Subd. 10. **Assessment.** The commission or department may assess utilities subject to this section to carry out the purposes of section 216B.241, subdivisions 1d, 1e, and 1f. An assessment under this paragraph must be proportionate to the utility's respective gross...
operating revenue from sales of gas or electric service in Minnesota during the previous
calendar year. Assessments under this subdivision are not subject to the cap on assessments
under section 216B.62 or any other law.

Subd. 11. Waste heat recovery; thermal energy distribution. Subject to department
approval, demand-side natural gas or electric energy displaced by use of waste heat recovered
and used as thermal energy, including the recovered thermal energy from a cogeneration
or combined heat and power facility, is eligible to be counted toward a consumer-owned
utility's natural gas or electric savings goals.

Sec. 20. Minnesota Statutes 2018, section 216B.241, subdivision 1a, is amended to read:

Subd. 1a. Investment, expenditure, and contribution; public utility Large customer
facility. (a) For purposes of this subdivision and subdivision 2, "public utility" has the
meaning given it in section 216B.02, subdivision 4. Each public utility shall spend and
invest for energy conservation improvements under this subdivision and subdivision 2 the
following amounts:

(1) for a utility that furnishes gas service, 0.5 percent of its gross operating revenues
from service provided in the state;

(2) for a utility that furnishes electric service, 1.5 percent of its gross operating revenues
from service provided in the state; and

(3) for a utility that furnishes electric service and that operates a nuclear-powered electric
generating plant within the state, two percent of its gross operating revenues from service
provided in the state.

For purposes of this paragraph (a), "gross operating revenues" do not include revenues
from large customer facilities exempted under paragraph (b), or from commercial gas
customers that are exempted under paragraph (c) or (e).

(b) (a) The owner of a large customer facility may petition the commissioner to exempt
both electric and gas utilities serving the large customer facility from the investment and
expenditure requirements of paragraph (a) a utility's plan under this section or section
216B.2403 with respect to retail revenues attributable to the large customer facility. The
filing must include a discussion of the competitive or economic pressures facing the owner
of the facility and the efforts taken by the owner to identify, evaluate, and implement energy
conservation and efficiency improvements. A filing submitted on or before October 1 of
any year must be approved within 90 days and become effective January 1 of the year
following the filing, unless the commissioner finds that the owner of the large customer
33.1 facility has failed to take reasonable measures to identify, evaluate, and implement energy conservation and efficiency improvements. If a facility qualifies as a large customer facility solely due to its peak electrical demand or annual natural gas usage, the exemption may be limited to the qualifying utility if the commissioner finds that the owner of the large customer facility has failed to take reasonable measures to identify, evaluate, and implement energy conservation and efficiency improvements with respect to the nonqualifying utility. Once an exemption is approved, the commissioner may request the owner of a large customer facility to submit, not more often than once every five years, a report demonstrating the large customer facility's ongoing commitment to energy conservation and efficiency improvement after the exemption filing. The commissioner may request such reports for up to ten years after the effective date of the exemption, unless the majority ownership of the large customer facility changes, in which case the commissioner may request additional reports for up to ten years after the change in ownership occurs. The commissioner may, within 180 days of receiving a report submitted under this paragraph, rescind any exemption granted under this paragraph upon a determination that the large customer facility is not continuing to make reasonable efforts to identify, evaluate, and implement energy conservation improvements. A large customer facility that is, under an order from the commissioner, exempt from the investment and expenditure requirements of paragraph (a) as of December 31, 2010, is not required to submit a report to retain its exempt status, except as otherwise provided in this paragraph with respect to ownership changes. No exempt large customer facility may participate in a utility conservation improvement program unless the owner of the facility submits a filing with the commissioner to withdraw its exemption.

33.23 (c) A commercial gas customer that is not a large customer facility and that purchases or acquires natural gas from a public utility having fewer than 600,000 natural gas customers in Minnesota may petition the commissioner to exempt gas utilities serving the commercial gas customer from the investment and expenditure requirements of paragraph (a) of a utility's plan under this section or section 216B.2403 with respect to retail revenues attributable to the commercial gas customer. The petition must be supported by evidence demonstrating that the commercial gas customer has acquired or can reasonably acquire the capability to bypass use of the utility's gas distribution system by obtaining natural gas directly from a supplier not regulated by the commission. The commissioner shall grant the exemption if the commissioner finds that the petitioner has made the demonstration required by this paragraph.

33.24 (d) The commissioner may require investments or spending greater than the amounts required under this subdivision for a public utility whose most recent advance forecast
required under section 216B.2422 or 216C.17 projects a peak demand deficit of 100
megawatts or greater within five years under midrange forecast assumptions.

(d) A public utility or owner of a large customer facility may appeal a decision of
the commissioner under paragraph (a) or (b), (c), or (d) to the commission under subdivision
2. In reviewing a decision of the commissioner under paragraph (a) or (b), (c), or (d), the
commission shall rescind the decision if it finds that the required investments or spending
will:

(1) not result in cost-effective energy conservation improvements; or

(2) otherwise the decision is not be in the public interest.

(e) A public utility is prohibited from spending for or investing in energy conservation
improvements that directly benefit a large energy facility or a large electric customer facility
for which the commissioner has issued an exemption under this section.

Sec. 21. Minnesota Statutes 2018, section 216B.241, subdivision 1c, is amended to read:

Subd. 1c. Public utility; energy-saving goals. (a) The commissioner shall establish
energy-saving goals for energy conservation improvement expenditures and shall evaluate
an energy conservation improvement program on how well it meets the goals set.

(b) Each individual public utility and association shall have providing electric service
has an annual energy-savings goal equivalent to 1.5 1.75 percent of gross annual retail
energy sales unless Each individual public utility providing natural gas service has an annual
energy savings goal equivalent to one percent of gross annual retail energy sales. The level
of the savings goal may be modified by the commissioner under paragraph (d) (c). The
savings goals must be calculated based on the most recent three-year weather-normalized
average. A public utility or association providing electric service may elect to carry forward
energy savings in excess of 1.5 1.75 percent for a year to the succeeding three calendar
years, except that savings from electric utility infrastructure projects allowed under paragraph
(d) may be carried forward for five years. A public utility providing natural gas service may
elect to carry forward energy savings in excess of one percent for a year to the succeeding
three calendar years. A particular energy savings can be used only for one year's goal.

(c) The commissioner must adopt a filing schedule that is designed to have all utilities
and associations operating under an energy savings plan by calendar year 2010.

(d) In its energy conservation improvement and optimization plan filing, a public
utility or association may request the commissioner to adjust its annual energy-savings
percentage goal based on its historical conservation investment experience, customer class
makeup, load growth, a conservation potential study, or other factors the commissioner
determines warrants an adjustment. The commissioner may not approve a plan of a public
utility that provides for an annual energy-savings goal of less than one percent of gross
annual retail energy sales from energy conservation improvements.

(d) A public utility or association may include in its energy conservation and optimization
plan energy savings from electric utility infrastructure projects approved by the commission
under section 216B.1636 or waste heat recovery converted into electricity projects that may
count as energy savings in addition to a minimum energy-savings goal of at least one percent
for energy conservation improvements. Energy savings from electric utility infrastructure
projects, as defined in section 216B.1636, may be included in the energy conservation plan
of a municipal utility or cooperative electric association. Electric utility infrastructure projects
must result in increased energy efficiency greater than that which would have occurred
through normal maintenance activity.

(e) An energy-savings goal is not satisfied by attaining the revenue expenditure
requirements of subdivisions 1a and 1b, but can only be satisfied by meeting the
energy-savings goal established in this subdivision.

(f) An association or (e) A public utility is not required to make energy conservation
investments to attain the energy-savings goals of this subdivision that are not cost-effective
even if the investment is necessary to attain the energy-savings goals. For the purpose of
this paragraph, in determining cost-effectiveness, the commissioner shall consider the costs
and benefits to ratepayers, the utility, participants, and society. In addition, the commissioner
shall consider the rate at which an association or municipal utility is increasing its energy
savings and its expenditures on energy conservation, as well as the lifetime energy savings
and cumulative energy savings of the public utility.

(g) (f) On an annual basis, the commissioner shall produce and make publicly available
a report on the annual energy and capacity savings and estimated carbon dioxide reductions
achieved by the energy conservation improvement programs under this section and section
216B.2403 for the two most recent years for which data is available. The report must also
include information regarding any annual energy sales or generation capacity increases
resulting from any efficient fuel-switching improvements. The commissioner shall report
on program performance both in the aggregate and for each entity filing an energy
conservation improvement plan for approval or review by the commissioner, and must
provide an estimate for progress toward the statewide energy savings goal under section
216B.2401.
(h) By January 15, 2010, the commissioner shall report to the legislature whether the spending requirements under subdivisions 1a and 1b are necessary to achieve the energy-savings goals established in this subdivision.

(i) This subdivision does not apply to:

1. a cooperative electric association with fewer than 5,000 members;
2. a municipal utility with fewer than 1,000 retail electric customers; or
3. a municipal utility with less than 1,000,000,000 cubic feet in annual throughput sales to retail natural gas customers.

Sec. 22. Minnesota Statutes 2018, section 216B.241, subdivision 1d, is amended to read:

Subd. 1d. Technical assistance. (a) The commissioner shall evaluate energy conservation improvement programs under this section and section 216B.2403 on the basis of cost-effectiveness and the reliability of the technologies employed. The commissioner shall, by order, establish, maintain, and update energy-savings assumptions that must be used when filing energy conservation improvement programs. The department must track a public utility's or consumer-owned utility's lifetime energy savings and cumulative lifetime energy savings provided to the commissioner in plans submitted under this section. The commissioner shall establish an inventory of the most effective energy conservation programs, techniques, and technologies, and encourage all Minnesota utilities to implement them, where appropriate, in their service territories. The commissioner shall describe these programs in sufficient detail to provide a utility reasonable guidance concerning implementation. The commissioner shall prioritize the opportunities in order of potential energy savings and in order of cost-effectiveness. The commissioner may contract with a third party to carry out any of the commissioner's duties under this subdivision, and to obtain technical assistance to evaluate the effectiveness of any conservation improvement program. The commissioner may assess up to $850,000 annually for the purposes of this subdivision. The assessments must be deposited in the state treasury and credited to the energy and conservation account created under subdivision 2a. An assessment made under this subdivision is not subject to the cap on assessments provided by section 216B.62, or any other law.

(b) Of the assessment authorized under paragraph (a), the commissioner may expend up to $400,000 annually for the purpose of developing, operating, maintaining, and providing technical support for a uniform electronic data reporting and tracking system available to all utilities subject to this section, in order to enable accurate measurement of the cost and
energy savings of the energy conservation improvements required by this section. This paragraph expires June 30, 2018. By March 15 of the year following the enactment of this section, the commissioner must, by order, develop and publish technical information necessary to evaluate whether deployment of a fuel-switching improvement meets the criteria established under subdivision 11, paragraph (c), and section 216B.2403, subdivision 8, including the formula to account for the energy saved by a fuel-switching improvement on a fuel-neutral basis. The commissioner must update the technical information as necessary.

Sec. 23. Minnesota Statutes 2018, section 216B.241, subdivision 1f, is amended to read:

Subd. 1f. Facilities energy efficiency. (a) The commissioner of administration and the commissioner of commerce shall maintain and, as needed, revise the sustainable building design guidelines developed under section 16B.325.

(b) The commissioner of administration and the commissioner of commerce shall maintain and update the benchmarking tool developed under Laws 2001, chapter 212, article 1, section 3, so that all public buildings can use the benchmarking tool to maintain energy use information for the purposes of establishing energy efficiency benchmarks, tracking building performance, and measuring the results of energy efficiency and conservation improvements.

(c) The commissioner shall require that utilities include in their conservation improvement plans programs that facilitate professional engineering verification to qualify a building as Energy Star-labeled, Leadership in Energy and Environmental Design (LEED) certified, or Green Globes-certified. The state goal is to achieve certification of 1,000 commercial buildings as Energy Star labeled, and 100 commercial buildings as LEED certified or Green Globes certified by December 31, 2010.

(d) The commissioner may assess up to $500,000 annually for the purposes of this subdivision. The assessments must be deposited in the state treasury and credited to the energy and conservation account created under subdivision 2a. An assessment made under this subdivision is not subject to the cap on assessments provided by section 216B.62, or any other law.

Sec. 24. Minnesota Statutes 2018, section 216B.241, subdivision 2, is amended to read:

Subd. 2. Programs Public utility; energy conservation and optimization plans. (a) The commissioner may require public utilities to make investments and expenditures in energy conservation improvements, explicitly setting forth the interest rates, prices, and terms under which the improvements must be offered to the customers. The required programs must cover no more than a three-year period. Public utilities shall file energy
conservation improvement and optimization plans by June 1, on a schedule determined by
order of the commissioner, but at least every three years. As provided in subdivision 11,
plans may include programs for efficient fuel-switching improvements and load management.
An individual utility program may combine elements of energy conservation, load
management, or efficient fuel-switching. Plans received by a public utility by June 1 must
be approved or approved as modified by the commissioner by December 1 of that same
year. The plan must account for the lifetime energy savings and cumulative lifetime savings
under the plan. The commissioner shall evaluate the program on the basis of
cost-effectiveness and the reliability of technologies employed. The commissioner’s order
must provide to the extent practicable for a free choice, by consumers participating in the
program, of the device, method, material, or project constituting the energy conservation
improvement and for a free choice of the seller, installer, or contractor of the energy
conservation improvement, provided that the device, method, material, or project seller,
installer, or contractor is duly licensed, certified, approved, or qualified, including under
the residential conservation services program, where applicable.

(b) The commissioner may require a utility subject to subdivision 1c to make an energy
conservation improvement investment or expenditure whenever the commissioner finds
that the improvement will result in energy savings at a total cost to the utility less than the
cost to the utility to produce or purchase an equivalent amount of new supply of energy.
The commissioner shall nevertheless ensure that every public utility operate one or more
programs under periodic review by the department.

(c) Each public utility subject to this subdivision 1a may spend and invest annually up
to ten percent of the total amount required to be spent and invested on energy conservation
improvements under this section by the utility on research and development projects that
meet the definition of energy conservation improvement in subdivision 1 and that are funded
directly by the public utility.

(d) A public utility may not spend for or invest in energy conservation improvements
that directly benefit a large energy facility or a large electric customer facility for which the
commissioner has issued an exemption pursuant to subdivision 1a, paragraph (b). The
commissioner shall consider and may require a public utility to undertake a program
suggested by an outside source, including a political subdivision, a nonprofit corporation,
or community organization.

(e) A utility, a political subdivision, or a nonprofit or community organization that has
suggested a program, the attorney general acting on behalf of consumers and small business
interests, or a utility customer that has suggested a program and is not represented by the
attorney general under section 8.33 may petition the commission to modify or revoke a department decision under this section, and the commission may do so if it determines that the program is not cost-effective, does not adequately address the residential conservation improvement needs of low-income persons, has a long-range negative effect on one or more classes of customers, or is otherwise not in the public interest. The commission shall reject a petition that, on its face, fails to make a reasonable argument that a program is not in the public interest.

(f) The commissioner may order a public utility to include, with the filing of the utility's annual status report, the results of an independent audit of the utility's conservation improvement programs and expenditures performed by the department or an auditor with experience in the provision of energy conservation and energy efficiency services approved by the commissioner and chosen by the utility. The audit must specify the energy savings or increased efficiency in the use of energy within the service territory of the utility that is the result of the spending and investments. The audit must evaluate the cost-effectiveness of the utility's conservation programs.

(g) A gas utility may not spend for or invest in energy conservation improvements that directly benefit a large customer facility or commercial gas customer facility for which the commissioner has issued an exemption pursuant to subdivision 1a, paragraph (b), (c), or (e). The commissioner shall consider and may require a utility to undertake a program suggested by an outside source, including a political subdivision, a nonprofit corporation, or a community organization.

(g) The energy conservation and optimization plan for each public utility subject to this section must include a component focused on improving energy efficiency in public schools served by the utility. At a minimum, the efficiency in schools component must consist of programs to update lighting in schools, update heating and cooling systems in schools, provide for building recommissioning, provide building operator training, and provide opportunities to educate students, teachers, and staff regarding energy efficiency measures implemented at the school, including the associated benefits for improved learning resulting from the measures.

Sec. 25. Minnesota Statutes 2018, section 216B.241, subdivision 2b, is amended to read:

Subd. 2b. Recovery of expenses. The commission shall allow a public utility to recover expenses resulting from an energy conservation improvement program required and optimization plan approved by the department under this section and contributions and assessments to the energy and conservation account, unless the recovery would be
inconsistent with a financial incentive proposal approved by the commission. The commission shall allow a cooperative electric association subject to rate regulation under section 216B.026, to recover expenses resulting from energy conservation improvement programs, load management programs, and assessments and contributions to the energy and conservation account unless the recovery would be inconsistent with a financial incentive proposal approved by the commission. In addition, a public utility may file annually, or the Public Utilities Commission may require the utility to file, and the commission may approve, rate schedules containing provisions for the automatic adjustment of charges for utility service in direct relation to changes in the expenses of the utility for real and personal property taxes, fees, and permits, the amounts of which the utility cannot control. A public utility is eligible to file for adjustment for real and personal property taxes, fees, and permits under this subdivision only if, in the year previous to the year in which it files for adjustment, it has spent or invested at least 1.75 percent of its gross revenues from provision of electric service, excluding gross operating revenues from electric service provided in the state to large electric customer facilities for which the commissioner has issued an exemption under subdivision 1a, paragraph (b), and 0.6 percent of its gross revenues from provision of gas service, excluding gross operating revenues from gas services provided in the state to large electric customer facilities for which the commissioner has issued an exemption under subdivision 1a, paragraph (b), for that year for energy conservation improvements under this section.

Sec. 26. Minnesota Statutes 2018, section 216B.241, subdivision 3, is amended to read:

Subd. 3. Ownership of energy conservation improvement. A pre-weatherization measure or energy conservation improvement made to or installed in a building in accordance with this section, except systems owned by the utility and designed to turn off, limit, or vary the delivery of energy, are the exclusive property of the owner of the building except to the extent that the improvement is subjected to a security interest in favor of the utility in case of a loan to the building owner. The utility has no liability for loss, damage or injury caused directly or indirectly by a pre-weatherization measure or energy conservation improvement except for negligence by the utility in purchase, installation, or modification of the product.

Sec. 27. Minnesota Statutes 2018, section 216B.241, subdivision 7, is amended to read:

Subd. 7. Low-income programs. (a) The commissioner shall ensure that each public utility and association subject to subdivision 1c provides low-income programs. When approving spending and energy-savings goals for low-income programs, the commissioner shall consider historic spending and participation levels, energy savings for low-income
programs, and the number of low-income persons residing in the utility's service territory. A municipal utility that furnishes gas service must spend at least 0.2 percent, and a public utility furnishing gas service must spend at least 0.4 percent, of its most recent three-year average gross operating revenue from residential customers in the state on low-income programs. A utility or association that furnishes electric service must spend at least 0.4 percent of its gross operating revenue from residential customers in the state on low-income programs. For a generation and transmission cooperative association, this requirement shall apply to each association's members' aggregate gross operating revenue from sale of electricity to residential customers in the state. Beginning in 2010, A utility or association that furnishes electric service must spend 0.2 percent of its gross operating revenue from residential customers in the state on low-income programs.

(b) To meet the requirements of paragraph (a), a public utility or association may contribute money to the energy and conservation account. An energy conservation improvement plan must state the amount, if any, of low-income energy conservation improvement funds the public utility or association will contribute to the energy and conservation account. Contributions must be remitted to the commissioner by February 1 of each year.

(c) The commissioner shall establish low-income programs to utilize money contributed to the energy and conservation account under paragraph (b). In establishing low-income programs, the commissioner shall consult political subdivisions, utilities, and nonprofit and community organizations, especially organizations engaged in providing energy and weatherization assistance to low-income persons. Money contributed to the energy and conservation account under paragraph (b) must provide programs for low-income persons, including low-income renters, in the service territory of the public utility or association providing the money. The commissioner shall record and report expenditures and energy savings achieved as a result of low-income programs funded through the energy and conservation account in the report required under subdivision 1c, paragraph (g). The commissioner may contract with a political subdivision, nonprofit or community organization, public utility, municipality, or cooperative electric association to implement low-income programs funded through the energy and conservation account.

(d) A public utility or association may petition the commissioner to modify its required spending under paragraph (a) if the utility or association and the commissioner have been unable to expend the amount required under paragraph (a) for three consecutive years.

(e) For purposes of this subdivision, "multifamily building" is defined as a residential building with five or more dwelling units. For purposes of determining eligibility for
multifamily buildings in low-income programs, a utility or association may use one or more of the following:

(1) information showing that a multifamily building's units are rented to households meeting one of the following criteria:

(i) household income at or below 200 percent of federal poverty level;

(ii) household income at or below 60 percent of area median income;

(iii) occupancy within a building that is certified on the Low Income Renter Classification (LIRC) Assessor Report compiled annually by Minnesota Housing Finance Agency; or

(iv) occupancy within a building which has a declaration against the property requiring that a portion of the units will be rented to tenants with an annual household income less than or equal to 60 percent of area median income;

(2) a property's participation in an affordable housing program, including low-income housing tax credits (LIHTC), United States Department of Housing and Urban Development (HUD) assistance, United States Department of Agriculture (USDA) assistance, state housing finance agency assistance, or local tax abatement for low-income properties; or

(3) documentation demonstrating that the property is on the waiting list for or currently participating in the United States Department of Energy Weatherization Assistance Program.

(f) Up to 15 percent of a public utility's spending on low-income programs may be spent on pre-weatherization measures. For purposes of this section, "pre-weatherization measures" are improvements necessary to allow energy conservation improvements to be installed in a home.

(1) The commissioner shall, by order, establish a list of qualifying pre-weatherization measures eligible for inclusion in low-income programs no later than March 15 of the year following enactment of this section.

(2) A public utility may elect to contribute money to the Healthy Asbestos Insulation Removal (AIR) program administered by the department. Money contributed to the fund will count toward the minimum low-income spending requirement in paragraph (a) and toward the cap on pre-weatherization measures.

(g) The costs and benefits associated with any approved low-income gas or electric conservation improvement program that is not cost-effective when considering the costs and benefits to the utility may, at the discretion of the utility, be excluded from the calculation of net economic benefits for purposes of calculating the financial incentive to the utility.
The energy and demand savings may, at the discretion of the utility, be applied toward the
calculation of overall portfolio energy and demand savings for purposes of determining
progress toward annual goals and in the financial incentive mechanism.

Sec. 28. Minnesota Statutes 2018, section 216B.241, subdivision 9, is amended to read:

Subd. 9. Building performance standards; Sustainable Building 2030. (a) The purpose
of this subdivision is to establish cost-effective energy-efficiency performance standards
for new and substantially reconstructed commercial, industrial, and institutional buildings
that can significantly reduce carbon dioxide emissions by lowering energy use in new and
substantially reconstructed buildings. For the purposes of this subdivision, the establishment
of these standards may be referred to as Sustainable Building 2030.

(b) The commissioner shall contract with the Center for Sustainable Building Research
at the University of Minnesota to coordinate development and implementation of
energy-efficiency performance standards, strategic planning, research, data analysis,
technology transfer, training, and other activities related to the purpose of Sustainable
Building 2030. The commissioner and the Center for Sustainable Building Research shall,
in consultation with utilities, builders, developers, building operators, and experts in building
design and technology, develop a Sustainable Building 2030 implementation plan that must
address, at a minimum, the following issues:

(1) training architects to incorporate the performance standards in building design;

(2) incorporating the performance standards in utility conservation improvement
programs; and

(3) developing procedures for ongoing monitoring of energy use in buildings that have
adopted the performance standards.

The plan must be submitted to the chairs and ranking minority members of the senate and
house of representatives committees with primary jurisdiction over energy policy by July
1, 2009.

(c) Sustainable Building 2030 energy-efficiency performance standards must be firm,
quantitative measures of total building energy use and associated carbon dioxide emissions
per square foot for different building types and uses, that allow for accurate determinations
of a building's conformance with a performance standard. Performance standards must
address energy use by electric vehicle charging infrastructure in or adjacent to buildings as
that infrastructure begins to be made widely available. The energy-efficiency performance
standards must be updated every three or five years to incorporate all cost-effective measures.
The performance standards must reflect the reductions in carbon dioxide emissions per square foot resulting from actions taken by utilities to comply with the renewable energy standards in section 216B.1691. The performance standards should be designed to achieve reductions equivalent to the following reduction schedule, measured against energy consumption by an average building in each applicable building sector in 2003: (1) 60 percent in 2010; (2) 70 percent in 2015; (3) 80 percent in 2020; and (4) 90 percent in 2025. A performance standard must not be established or increased absent a conclusive engineering analysis that it is cost-effective based upon established practices used in evaluating utility conservation improvement programs.

(d) The annual amount of the contract with the Center for Sustainable Building Research is up to $500,000. The Center for Sustainable Building Research shall expend no more than $150,000 of this amount each year on administration, coordination, and oversight activities related to Sustainable Building 2030. Up to an additional $150,000 of this amount may be used by the Center for Sustainable Building Research to provide technical assistance to local jurisdictions which adopt a voluntary stretch code, under section 326B.106, subdivision 16, that conforms to Sustainable Building 2030. The balance of contract funds must be spent on substantive programmatic activities allowed under this subdivision that may be conducted by the Center for Sustainable Building Research and others, and for subcontracts with not-for-profit energy organizations, architecture and engineering firms, and other qualified entities to undertake technical projects and activities in support of Sustainable Building 2030. The primary work to be accomplished each year by qualified technical experts under subcontracts is the development and thorough justification of recommendations for specific energy-efficiency performance standards. Additional work may include:

(1) research, development, and demonstration of new energy-efficiency technologies and techniques suitable for commercial, industrial, and institutional buildings;

(2) analysis and evaluation of practices in building design, construction, commissioning and operations, and analysis and evaluation of energy use in the commercial, industrial, and institutional sectors;

(3) analysis and evaluation of the effectiveness and cost-effectiveness of Sustainable Building 2030 performance standards, conservation improvement programs, and building energy codes;

(4) development and delivery of training programs for architects, engineers, commissioning agents, technicians, contractors, equipment suppliers, developers, and others in the building industries; and
(5) analysis and evaluation of the effect of building operations on energy use.

(e) The commissioner shall require utilities to develop and implement conservation improvement programs that are expressly designed to achieve energy efficiency goals consistent with the Sustainable Building 2030 performance standards. These programs must include offerings of design assistance and modeling, financial incentives, and the verification of the proper installation of energy-efficient design components in new and substantially reconstructed buildings. These programs shall be available to customers in local jurisdictions that adopt a voluntary stretch code under section 326B.106, subdivision 16. A utility’s design assistance program must consider the strategic planting of trees and shrubs around buildings as an energy conservation strategy for the designed project. A utility making an expenditure under its conservation improvement program that results in a building meeting the Sustainable Building 2030 performance standards may claim the energy savings toward its energy-savings goal established in subdivision 1c.

(f) The commissioner shall report to the legislature every three years, beginning January 15, 2010, on the cost-effectiveness and progress of implementing the Sustainable Building 2030 performance standards and shall make recommendations on the need to continue the program as described in this section.

Sec. 29. Minnesota Statutes 2018, section 216B.241, is amended by adding a subdivision to read:

Subd. 11. Programs for efficient fuel-switching improvements and load management. (a) A public utility subject to this section may include in its plan required under subdivision 2 programs for efficient fuel-switching improvements and load management, or combinations of energy conservation improvements, fuel-switching improvements, and load management. For each program, the utility must provide proposed budgets, cost-effectiveness analyses, and estimated net energy and demand savings.

(b) The department may approve proposed programs for efficient fuel-switching improvements if it finds the improvements meet the requirements of paragraph (c). For improvements requiring the deployment of electric technologies, the department must also consider whether the fuel-switching improvement can be operated in a manner that facilitates the integration of variable renewable energy into the electric system. The net benefits from an efficient fuel-switching improvement that is integrated with an energy efficiency program approved under this section may be counted toward the net benefits of the energy efficiency program, provided the department finds the primary purpose and effect of the program is energy efficiency.
(c) The department may approve a proposed program in load management if it finds the program investment is cost-effective after considering the costs and benefits of the proposed investment to ratepayers, the utility, participants, and society. The net benefits from a load management activity that is integrated with an energy efficiency program approved under this section may be counted toward the net benefits of the energy efficiency program, provided the department finds the primary purpose and effect of the program is energy efficiency.

(d) The commission may permit a public utility to file rate schedules that provide for annual cost recovery for efficient fuel-switching improvements and cost-effective load management programs approved by the department, including reasonable and prudent costs of implementing and promoting programs approved under this subdivision. The commission may approve, modify, or reject a proposal made by the department or a utility for an incentive plan to encourage investments in load management programs, applying the considerations established under section 216B.16, subdivision 6c, paragraphs (b) and (c). An incentive plan to encourage cost-effective load management programs may be structured as a regulatory asset on which a public utility could earn a rate of return. A utility is not eligible for a financial incentive under this subdivision in any year the utility or association did not achieve its minimum energy savings goal.

(e) A fuel-switching improvement is deemed efficient if the commissioner finds the improvement, relative to the fuel that is being displaced, meets the following criteria:

1. results in a net reduction in the cost and amount of source energy consumed for a particular use, measured on a fuel-neutral basis;

2. results in a net reduction of statewide greenhouse gas emissions as defined in section 216H.01, subdivision 2. For an efficient fuel-switching improvement affecting a customer's use of electricity, the change in emissions must be measured based on the hourly emission profile of the electric utility that controls the system where the electric technology is installed, using the most recent resource plan approved by the commission under section 216B.2422;

3. is cost-effective from a societal perspective, considering the costs associated with both the fuel that was used and the fuel that will be used; and

4. is installed and operated in a manner that does not unduly increase the utility's system peak demand or require significant new investment in utility infrastructure.
Sec. 30. Minnesota Statutes 2018, 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) "Clean energy resource" means renewable energy, an energy storage system, or energy conservation as defined in section 216B.241, subdivision 1.

(g) "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.
(h) "Energy storage system" means a commercially available technology that:

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

(ii) store energy and deliver the stored energy for use at a later time; or

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

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

(3) achieves any of the following:

(i) reduces peak 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;

or

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

(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 employment opportunities for local workers.

(k) "Local workers" means workers employed to construct and maintain energy infrastructure 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. 31. 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. 32. 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. In evaluating resource options, the commission must include and consider the environmental cost values adopted under this subdivision.

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

Subd. 3a. Favored energy 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 recognizing the significant and continuing reductions in the cost of wind, solar, and energy storage systems, and demand-response technologies, the favored method for meeting energy demand in this state is a combination of clean energy resources.

EFFECTIVE DATE. This section is effective the day following final enactment.
Sec. 34. Minnesota Statutes 2018, section 216B.2422, is amended by adding a subdivision to read:

Subd. 3b. Nonrenewable energy facility; required analysis. (a) In its application requesting commission approval of 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 for meeting 50, 75, and 100 percent of the energy or capacity to be provided by the proposed nonrenewable energy facility by means of the least cost combination of clean energy resources.

(c) In 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, as required under subdivision 3, using both the low and high ends of any cost range adopted by the commission.

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

Sec. 35. 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 carbon-free standard under section 216B.1691, the commission shall not approve a new or refurbished nonrenewable energy facility in an integrated resource plan or a certificate of need, pursuant to section 216B.243, or in any proceeding in which a utility seeks to construct an electric generating facility or procure electricity or capacity, nor shall the commission approve a power purchase agreement for power with a nonrenewable energy facility, or allow rate recovery pursuant to 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, on the basis of 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 shall consider utility and ratepayer effects resulting from:

(1) 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;

(2) reduced exposure to fuel price volatility, 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 shall 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 take into account only non-zero values for the environmental costs required to 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...
help the state achieve the greenhouse gas reduction goals under section 216H.02, and the
utility to 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 shall own 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 standards described below:

(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 thereafter, and 100 percent of
its electric supply by the year 2045, from 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 thereafter, and 100
percent of its electric supply by the year 2050, from resources that do not contribute to
statewide greenhouse gas emissions, as defined in section 216H.01, subdivision 2.

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

Sec. 36. 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 a certificate of need, a power
purchase agreement, or commission approval of a new or refurbished electric generation
facility.
Sec. 37. 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. 38. Minnesota Statutes 2018, section 216B.2422, is amended by adding a subdivision to read:

Subd. 7. Energy storage systems assessment.  (a) Each public utility required to file a resource plan under subdivision 2 must include in the filing an assessment of energy storage systems that analyzes how the deployment of energy storage systems contributes to:

(1) meeting identified generation and capacity needs; and

(2) evaluating ancillary services.

(b) The assessment must employ appropriate modeling methods to enable the analysis required in paragraph (a).

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

Sec. 39. [216B.2427] ELECTRIC UTILITIES; ANCILLARY SERVICES COST REPORT.

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

(b) "Ancillary services" means services that help maintain the reliability of the electrical grid by maintaining the proper flow and direction of electricity, addressing temporary imbalances of supply and demand, and helping the electrical grid to recover after a power outage.
failure. "Ancillary services" include but are not limited to spinning reserves, nonspinning reserves, voltage regulation, load following, and black start capability.

(c) "Black start capability" means the provision of the initial energy needed to start up and begin operation of an electricity generator.

(d) "Load following" means the matching, within five minutes or less, of electricity supply to demand as demand fluctuates.

(e) "Nonspinning reserves" means electric generation capacity that is not connected to the electric grid, but is capable of:

(1) being connected, ramped to capacity, and synchronized to the electric grid within ten minutes; and

(2) maintaining a specified output level for at least two hours.

(f) "Spinning reserves" means reserve electric generation capacity that is connected and synchronized to the electric grid and can meet electric demand within ten minutes.

(g) "Voltage regulation" means the maintenance of voltage levels on the electric grid.

Subd. 2. Report. By October 1, 2019, and each April 1 thereafter, each electric utility must report to the commission, on a form developed by the commission, the total cost to purchase or self-provide ancillary services throughout the previous calendar year. For each type of ancillary service, the utility must report:

(1) the entity providing the ancillary service;

(2) the amount, duration, and frequency of the ancillary service provided; and

(3) the cost of purchasing or providing the ancillary service.

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

Sec. 40. Minnesota Statutes 2018, section 216B.243, subdivision 3, is amended to read:

Subd. 3. Showing required for construction. (a) No proposed large energy facility shall be certified for construction unless the applicant can show that demand for electricity cannot be met more cost effectively through energy conservation, energy storage, and load-management measures and unless the applicant has otherwise justified its need. In assessing need, the commission shall evaluate:

(1) the accuracy of the long-range energy demand forecasts on which the necessity for the facility is based;
(2) the effect of existing or possible energy conservation programs under sections 216C.05 to 216C.30 and this section or other federal or state legislation on long-term energy demand;

(3) the relationship of the proposed facility to overall state energy needs, as described in the most recent state energy policy and conservation report prepared under section 216C.18, or, in the case of a high-voltage transmission line, the relationship of the proposed line to regional energy needs, as presented in the transmission plan submitted under section 216B.2425;

(4) promotional activities that may have given rise to the demand for this facility;

(5) benefits of this facility, including its uses to protect or enhance environmental quality, and to increase reliability of energy supply in Minnesota and the region;

(6) possible alternatives for satisfying the energy demand or transmission needs including but not limited to potential for increased efficiency and upgrading of existing energy generation and transmission facilities, energy storage systems, load-management programs, and distributed generation;

(7) the policies, rules, and regulations of other state and federal agencies and local governments;

(8) any feasible combination of energy conservation improvements, required under section 216B.241, or energy storage systems that can (i) replace part or all of the energy to be provided by the proposed facility, and (ii) compete with it economically;

(9) with respect to a high-voltage transmission line, the benefits of enhanced regional reliability, access, or deliverability to the extent these factors improve the robustness of the transmission system or lower costs for electric consumers in Minnesota;

(10) whether the applicant or applicants are in compliance with applicable provisions of sections 216B.1691 and 216B.2425, subdivision 7, and have filed or will file by a date certain an application for certificate of need under this section or for certification as a priority electric transmission project under section 216B.2425 for any transmission facilities or upgrades identified under section 216B.2425, subdivision 7;

(11) whether the applicant has made the demonstrations required under subdivision 3a; and

(12) if the applicant is proposing a nonrenewable generating plant, the applicant's assessment of the risk of environmental costs and regulation on that proposed facility over the expected useful life of the plant, including a proposed means of allocating costs associated with that risk.
(b) "Energy storage system" means a commercially available technology that uses mechanical, chemical, or thermal processes to:

(1) store energy and deliver the stored energy for use at a later time; or

(2) 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.

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

Sec. 41. Minnesota Statutes 2018, section 216B.243, subdivision 3a, is amended to read:

Subd. 3a. **Use of renewable nonrenewable resource.** The commission may not issue a certificate of need under this section for a large energy facility that generates electric power by means of a nonrenewable energy source, or that transmits electric power generated by means of a nonrenewable energy source, unless the applicant for the certificate has demonstrated by clear and convincing evidence to the commission's satisfaction under section 216B.2422, subdivision 4, that it has conducted the analysis required under section 216B.2422, subdivision 3b, regarding generating power by means of renewable clean energy sources, as defined in section 216B.2422, subdivision 1, and has demonstrated that the alternative selected is less expensive (including environmental costs) than power generated by a renewable energy source nonrenewable energy source is in the public interest. For purposes of this subdivision, "renewable energy source" includes hydro, wind, solar, and geothermal energy and the use of trees or other vegetation as fuel.

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

Sec. 42. **[216B.247] BENEFICIAL ELECTRIFICATION.**

(a) It is the goal of the state to promote energy end uses powered by electricity that result in a net reduction in greenhouse gas emissions and improvements to public health, consistent with the goal established under section 216H.02, subdivision 1.

(b) To the maximum reasonable extent, the implementation of beneficial electrification should prioritize investment and activity in low-income and underresourced communities, maintain or improve the quality of electricity service, maximize customer savings, improve the integration of renewable and carbon-free resources, and prioritize job creation.
Sec. 43. **[216B.248] PUBLIC UTILITY BENEFICIAL ELECTRIFICATION.**

(a) A public utility may submit to the commission a plan to promote energy end uses powered by electricity within its service area. To the maximum reasonable extent, the plans must:

1. maximize consumer savings over the lifetime of the investment;
2. maintain or enhance the reliability of electricity service;
3. quantify the acres of land that will be needed for new generation, transmission, and distribution facilities to provide the additional electricity required under the plan;
4. maintain or enhance public health and safety when temperatures fall below minus 25 degrees Fahrenheit;
5. support the integration of renewable and carbon-free resources;
6. encourage load shape management and energy storage that reduce overall system costs;
7. prioritize electrification projects in economically disadvantaged communities; and
8. produce a net reduction in greenhouse gas emissions, based on the electricity generation portfolio of the public utility proposing the plan either over the lifetime of the conversion or by 2050, whichever is sooner.

(b) the commission must approve, reject, or modify the plan of a public utility, consistent with the public interest. Plans approved by the commission under this subdivision are eligible for cost recovery consistent with section 216B.1645.

Sec. 44. **[216C.375] SOLAR FOR SCHOOLS PROGRAM.**

Subdivision 1. **Definitions.** (a) For the purposes of this section and section 216C.376, the following terms have the meanings given them.

(b) "Developer" means an entity that installs a solar energy system on a school building that has been awarded a grant under this section.

c) "Energy storage system" means a commercially available technology capable of:

1. absorbing and storing electrical energy; and
2. dispatching stored electrical energy at a later time.

(d) "Photovoltaic device" has the meaning given in section 216C.06, subdivision 16.
(e) "School" means a school that operates as part of an independent or special school district.

(f) "School district" means an independent or special school district.

(g) "Solar energy system" means photovoltaic or solar thermal devices installed alone or in combination with an energy storage system.

Subd. 2. Establishment; purpose. A solar for schools program is established in the Department of Commerce. The purpose of the program is to provide grants to stimulate the installation of solar energy systems on or adjacent to school buildings by reducing their cost, and to enable schools to use the solar energy system as a teaching tool that can be integrated into the school's curriculum.

Subd. 3. Establishment of account. (a) A solar for schools program account is established in the special revenue fund. Money received from the general fund must be transferred to the commissioner of commerce and credited to the account. Money deposited in the account remains in the account until expended, and does not cancel to the general fund.

(b) When a grant is awarded under this section, the commissioner shall reserve the grant amount in the account.

Subd. 4. Expenditures. (a) Money in the account may be used only:

(1) for grant awards made under this section; and

(2) to pay the reasonable costs incurred by the department to administer this section.

(b) Grant awards made with funds in the account are to be used only for grants for solar energy systems installed on or adjacent to school buildings receiving retail electric service from a utility that is not subject to section 116C.779, subdivision 1.

Subd. 5. Eligible system. (a) A grant may be awarded to a school under this section only if the solar energy system that is the subject of the grant:

(1) is installed on or adjacent to the school building that will consume the electricity generated by the solar energy system, on property within the service territory of the utility currently providing electric service to the school building; and

(2) has a capacity that does not exceed the lesser of 40 kilowatts or 120 percent of the estimated annual electricity consumption of the school building at which the solar energy system is proposed to be installed.
(b) A school district that receives a rebate or other financial incentive under section 216B.241 for a solar energy system and that demonstrates considerable need for financial assistance, as determined by the commissioner, is eligible for a grant under this section for the same solar energy system.

Subd. 6. Application process. (a) The commissioner shall issue a request for proposals to utilities, schools, and developers who may wish to apply for a grant under this section on behalf of a school.

(b) A utility or developer must submit an application to the commissioner on behalf of a school on a form prescribed by the commissioner. The form must include, at a minimum, the following information:

1. the capacity of the proposed solar energy system and the amount of electricity that is expected to be generated;
2. the current energy demand of the school building on which the solar energy generating system is to be installed, and information regarding any distributed energy resource, including subscription to a community solar garden, that currently provides electricity to the school building;
3. the size of any energy storage system that is proposed to be installed as part of a solar energy system;
4. a description of any solar thermal devices proposed as part of the solar energy system;
5. the total cost of purchasing and installing the solar energy system, and its life-cycle cost, including removal and disposal of system at the end of its life;
6. a copy of the proposed contract agreement between the school and the public utility or developer that includes provisions addressing responsibility for maintenance of the solar energy system;
7. the school's plan to make the solar energy system serve as a visible learning tool for students, teachers, and visitors to the school, including how the solar energy system may be integrated into the school's curriculum;
8. information that demonstrates the level of need of the school district for financial assistance available under this section; (9) information that demonstrates the readiness of the school to implement the project, including, but not limited to, the availability of the site on which the solar energy system is to be installed, and the level of the school's engagement with the utility providing electric service to the school building on which the solar energy
system is to be installed on issues relevant to the implementation of the project, including
metering and other issues;

(9) with respect to the installation and operation of the solar energy system, the
willingness and ability of the developer or the public utility to:

(i) pay employees and contractors a prevailing wage rate, as defined in section 177.42,
subdivision 6; and

(ii) adhere to the provisions of section 177.43;

(10) how the developer or public utility plans to reduce the school's initial capital expense
for the purchase and installation of the solar energy system, and to provide financial benefits
to the school from the utilization of federal and state tax credits, utility incentives, and other
financial incentives; and

(11) any other information deemed relevant by the commissioner.

(c) The commissioner shall administer an open application process under this section at
least twice annually.

(d) The commissioner shall develop administrative procedures governing the application
and grant award process.

Subd. 8. **Technical assistance.** The commissioner shall provide technical assistance to
schools to develop and execute projects under this section.

Subd. 9. **Grant payments.** The commissioner shall award a grant from the account
established under subdivision 3 to a school for the necessary costs associated with the
purchase and installation of a solar energy system. The amount of the grant shall be based
on the commissioner's assessment of the school's need for financial assistance.

Subd. 10. **Limitations.** (a) No more than 50 percent of the grant payments awarded to
schools under this section may be awarded to schools where the proportion of students
eligible for free and reduced-price lunch under the National School Lunch Program is less
than 50 percent.
(b) No more than ten percent of the total amount of grants awarded under this section may be awarded to schools that are part of the same school district.

Subd. 11. Application deadline. No application may be submitted under this section after December 31, 2023.

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

Sec. 45. [216C.376] SOLAR FOR SCHOOLS PROGRAM FOR CERTAIN UTILITY SERVICE TERRITORY.

Subdivision 1. Establishment; purpose. The utility subject to section 116C.779 shall operate a program to develop, and to supplement with additional funding, financial arrangements that allow schools to benefit from state and federal tax and other financial incentives that schools are ineligible to receive directly in order to enable schools to install and operate solar energy systems that can be used as teaching tools and integrated into the school curriculum.

Subd. 2. Required plan. (a) By October 1, 2019, the public utility must file a plan for the solar for schools program with the commissioner. The plan must contain but is not limited to the following elements:

(1) a description of how entities that are eligible to take advantage of state and federal tax and other financial incentives that reduce the cost of purchasing, installing, and operating a solar energy system that schools are ineligible to take advantage of directly, can share a portion of those financial benefits with schools at which a solar energy system will be installed;

(2) a description of how the public utility will utilize funds appropriated to the program under this section to provide additional financial assistance to schools at which a solar energy system will be installed;

(3) certification that the financial assistance provided under this section to a school by the public utility must include the full value of the renewable energy certificates associated with the generation of electricity by the solar energy system receiving financial assistance under this section over the lifetime of the solar energy system;

(4) an estimate of the amount of financial assistance that the public utility will provide to a school under clauses (1) to (3) on a per kilowatt-hour produced basis, and the length of time financial assistance will be provided;
(5) certification that the transaction between the public utility and the school for electricity is the buy-all/sell-all method by which the public utility will charge the school for all electricity the school consumes at the applicable retail rate schedule for sales to the school based on the school's customer class, and shall credit or pay the school at the rate established in subdivision 5;

(6) administrative procedures governing the application and financial benefit award process, and the costs the public utility and the department are projected to incur to administer the program;

(7) the public utility's proposed process for periodic reevaluation and modification of the program; and

(8) any additional information required by the commissioner.

(b) The public utility may not implement the program until the commissioner approves the public utility's plan submitted under this subdivision. The commissioner shall approve a plan under this subdivision that the commissioner determines to be in the public interest no later than December 31, 2019. Any proposed modifications to the plan approved under this subdivision must be approved by the commissioner.

Subd. 3. System eligibility. A solar energy system is eligible to receive financial benefits under this section if it meets all of the following conditions:

(1) the solar energy system must be located on or adjacent to a school building receiving retail electric service from the public utility and completely located within the public utility's electric service territory, provided that any land situated between the school building and the site where the solar energy system is installed is owned by the school district in which the school building operates;

(2) any energy storage system that is part of a solar energy system may only store energy generated by an existing solar energy system serving the school or the solar energy system receiving financial assistance under this section; and

(3) the total aggregate nameplate capacity of all distributed generation serving the school building, including any subscriptions to a community solar garden under section 216B.1641, may not exceed the lesser of one megawatt (alternating current) or 120 percent of the average annual electric energy consumption of the school building.

Subd. 4. Application process. (a) A school seeking financial assistance under this section must submit an application to the public utility, including a plan for how the school will
use the solar energy system as a visible learning tool for students, teachers, and visitors to
the school, and how the solar energy system may be integrated into the school's curriculum.

(b) The public utility shall award financial assistance under this section on a first-come,
first-served basis.

c) The public utility shall discontinue accepting applications under this section after all
funds appropriated under subdivision 5 are allocated to program participants, including
funds from canceled projects.

Subd. 5. Benefits information. Before signing an agreement with the public utility to
receive financial assistance under this section, a school must obtain from the developer and
provide to the public utility information the developer shared with potential investors in the
project regarding future financial benefits to be realized from installation of a solar energy
system at the school, and potential financial risks.

Subd. 6. Purchase rate; cost recovery; renewable energy credits. (a) The public utility
shall purchase all of the electricity generated by a solar energy system receiving financial
assistance under this section at a rate of $0.105 per kilowatt-hour generated.

(b) Payments by the public utility of the rate established under this subdivision to a
school receiving financial assistance under this section are fully recoverable by the public
utility through the public utility's fuel clause adjustment.

(c) The renewable energy credits associated with the electricity generated by a solar
energy system installed under this section are the property of the public utility that is subject
to this section.

Subd. 7. Limitation. (a) No more than 50 percent of the financial assistance provided
by the public utility to schools under this section may be provided to schools where the
proportion of students eligible for free and reduced-price lunch under the National School
Lunch Program is less than 50 percent.

(b) No more than ten percent of the total amount of financial assistance provided by the
public utility to schools under this section may be provided to schools that are part of the
same school district.

Subd. 8. Technical assistance. The commissioner shall provide technical assistance to
schools to develop and execute projects under this section.

Subd. 9. Application deadline. No application may be submitted under this section
EFFECTIVE DATE. This section is effective the day following final enactment.

Sec. 46. [216C.401] ELECTRIC VEHICLE REBATES.

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

(b) "Electric vehicle" has the meaning given in section 169.011, subdivision 26a, paragraphs (a) and (b), clause (3).

(c) "New eligible electric vehicle" means an eligible electric vehicle that has not been registered in any state.

(d) "Used eligible electric vehicle" means an eligible electric vehicle that has previously been registered in a state.

Subd. 2. Eligibility. The purchaser of an electric vehicle is eligible for a rebate, subject to the amounts and limits in subdivisions 3 and 4, if:

(1) the electric vehicle:

(i) has not been modified from the original manufacturer's specifications; and

(ii) is purchased after the effective date of this act for use by the purchaser and not for resale;

(2) the purchaser:

(i) is a resident of Minnesota, as defined in section 290.01, subdivision 7, paragraph (a), when the electric vehicle is purchased;

(ii) is a business that has a valid address in Minnesota from which business is conducted;

(iii) is a nonprofit corporation incorporated under chapter 317A; or

(iv) is a political subdivision of the state; and

(3) the purchaser:

(i) has not received a rebate or tax credit for the purchase of an electric vehicle from Minnesota; and

(ii) registers the electric vehicle in Minnesota.

Subd. 3. Rebate amounts. (a) A $2,500 rebate may be issued under this section to an eligible purchaser for the purchase of a new eligible electric vehicle.
(b) A $500 rebate may be issued under this section to an eligible purchaser for the purchase of a used eligible electric vehicle, provided the electric vehicle has not previously been registered in Minnesota.

Subd. 4. Limits. (a) The number of rebates allowed under this section are limited to:

(1) no more than one rebate per resident per household; and

(2) no more than one rebate per business entity per year.

(b) A rebate must not be issued under this section for an electric vehicle with a manufacturer's suggested retail price that exceeds $60,000.

Subd. 5. Program administration. (a) Rebate applications under this section must be filed with the commissioner on a form developed by the commissioner.

(b) The commissioner must develop administrative procedures governing the application and rebate award process. Applications must be reviewed and rebates awarded by the commissioner on a first-come, first-served basis.

(c) The commissioner may reduce the rebate amounts provided under subdivision 3 or restrict program eligibility based on fund availability or other factors.

Subd. 6. Expiration. This section expires June 30, 2024.

Sec. 47. [216C.402] ELECTRIC VEHICLE PUBLIC CHARGING GRANT PROGRAM.

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

(b) "Electric vehicle" has the meaning given in section 169.011, subdivision 26a.

(c) "Electric vehicle charging station" means infrastructure that recharges an electric vehicle's batteries by connecting the electric vehicle to:

(1) a level two charger that provides a 208- or 240-volt alternating current power source;

or

(2) a DC fast charger that has an electric output of 20 kilowatts or greater.

(d) "Park-and-ride facility" has the meaning given in section 174.256, subdivision 2.

(e) "Public electric vehicle charging station" means an electric charging station located at a publicly available parking space.
Subd. 2. Program. (a) The commissioner must award grants to help fund the installation of a network of public electric vehicle charging stations in Minnesota including locations in state and regional parks and park-and-ride facilities. The commissioner must issue a request for proposals to entities that have experience installing, owning, operating, and maintaining electric vehicle charging stations. The request for proposal must establish technical specifications that electric vehicle charging stations are required to meet.

(b) The commissioner shall consult with the commissioner of natural resources to develop optimal locations for electric vehicle charging stations in state and regional parks, and with the commissioner of transportation to develop optimal locations for electric vehicle charging stations at park-and-ride facilities.

Subd. 3. Electricity supplier. Electricity dispensed from an electric vehicle charging station funded under this act must be purchased from the public utility subject to section 116C.779, subdivision 1.

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

Sec. 48. Minnesota Statutes 2018, section 216C.435, subdivision 3a, is amended to read:

Subd. 3a. Cost-effective energy improvements. "Cost-effective energy improvements" mean:

(1) any new construction, renovation, or retrofitting of

(i) qualifying commercial real property to improve energy efficiency that is permanently affixed to the property, results in a net reduction in energy consumption without altering the principal source of energy, and has been identified in an energy audit as repaying the purchase and installation costs in 20 years or less, based on the amount of future energy saved and estimated future energy prices; or

(ii) (2) any renovation or retrofitting of qualifying residential real property that is permanently affixed to the property and is eligible to receive an incentive through a program offered by the electric or natural gas utility that provides service under section 216B.241 to the property or is otherwise determined to be a cost-effective energy improvement by the commissioner under section 216B.241, subdivision 1d, paragraph (a);

(2) (3) permanent installation of new or upgraded electrical circuits and related equipment to enable electrical vehicle charging; or

(3) (4) a solar voltaic or solar thermal energy system attached to, installed within, or proximate to a building that generates electrical or thermal energy from a renewable energy
source that has been identified in an energy audit or renewable energy system feasibility study as repaying their purchase and installation costs in 20 years or less, based on the amount of future energy saved and estimated future energy prices.

Sec. 49. Minnesota Statutes 2018, section 216C.435, subdivision 8, is amended to read:

Subd. 8. Qualifying commercial real property. "Qualifying commercial real property" means a multifamily residential dwelling, or a commercial or industrial building, that the implementing entity has determined, after review of an energy audit or renewable energy system feasibility study, can be benefited by installation of cost-effective energy improvements. Qualifying commercial real property includes new construction.

Sec. 50. Minnesota Statutes 2018, section 216C.436, subdivision 4, is amended to read:

Subd. 4. Financing terms. Financing provided under this section must have:

(1) a cost-weighted average maturity not exceeding the useful life of the energy improvements installed, as determined by the implementing entity, but in no event may a term exceed 20 years;

(2) a principal amount not to exceed the lesser of:

(i) the greater of 20 percent of the assessed value of the real property on which the improvements are to be installed or 20 percent of the real property's appraised value, accepted or approved by the mortgage lender; or

(ii) the actual cost of installing the energy improvements, including the costs of necessary equipment, materials, and labor, the costs of each related energy audit or renewable energy system feasibility study, and the cost of verification of installation; and

(3) an interest rate sufficient to pay the financing costs of the program, including the issuance of bonds and any financing delinquencies.

Sec. 51. Minnesota Statutes 2018, section 216C.436, is amended by adding a subdivision to read:

Subd. 10. Improvements; real property or fixture. A cost-effective energy improvement financed under a PACE loan program, including all equipment purchased in whole or in part with loan proceeds under a loan program, is deemed real property or a fixture attached to the real property.
Sec. 52. 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.

(c) The commission may require, as a condition of permit issuance, that the recipient of a site permit to construct an LWECS with a nameplate capacity above 25,000 kilowatts and all of the permit recipient's construction contractors and subcontractors on the project pay the prevailing wage rate, as defined in section 177.42. The commission may also require, as a condition of modifying a site permit for an LWECS repowering project as defined in section 216B.243, subdivision 8, paragraph (b), that the recipient of the site permit and all of the recipient's construction contractors and subcontractors on the repowering project pay the prevailing wage rate as defined in section 177.42.

Sec. 53. Minnesota Statutes 2018, section 216F.08, is amended to read:

216F.08 PERMIT AUTHORITY; ASSUMPTION BY COUNTIES.

(a) A county board may, by resolution and upon written notice to the Public Utilities Commission, assume responsibility for processing applications for permits required under this chapter for LWECS with a combined nameplate capacity of less than 25,000 kilowatts. The responsibility for permit application processing, if assumed by a county, may be delegated by the county board to an appropriate county officer or employee. Processing by a county shall be done in accordance with procedures and processes established under chapter 394.

(b) A county board that exercises its option under paragraph (a) may issue, deny, modify, impose conditions upon, or revoke permits pursuant to this section. The action of the county board about a permit application is final, subject to appeal as provided in section 394.27.
69.1 (c) The commission shall, by order, establish general permit standards, including
appropriate property line set-backs, governing site permits for LWECS under this section.
The order must consider existing and historic commission standards for wind permits issued
by the commission. The general permit standards shall apply to permits issued by counties
and to permits issued by the commission for LWECS with a combined nameplate capacity
of less than 25,000 kilowatts. The commission or a county may grant a variance from a
general permit standard if the variance is found to be in the public interest, provided all
LWECS site permits issued by the commission or a county and all modifications of site
permits issued by the commission or a county for repowering projects comply with the
prevailing wage rate requirements under section 216F.04, paragraph (e).

69.11 (d) The commission and the commissioner of commerce shall provide technical assistance
to a county with respect to the processing of LWECS site permit applications.

69.13 Sec. 54. Minnesota Statutes 2018, section 326B.106, is amended by adding a subdivision
to read:

Subd. 16. Voluntary adoption of stretch code. The Construction Codes Advisory
Council shall establish a voluntary code of standards for the construction, reconstruction,
and alteration of public and private commercial and multifamily residential buildings, as
an appendix of the State Building Code. This voluntary code of standards must conform to
Sustainable Building 2030 standards, as defined in section 216B.241, subdivision 9, which
applies additional performance requirements without altering any underlying codes or safety
standards. The code sections contained in this appendix may be adopted by a local jurisdiction
at its election and become an official addendum to the baseline energy code in the
jurisdictions adopting them. In adopting the code sections contained in this appendix, the
local jurisdiction may not amend them, but may specify a minimum size for the buildings
this stretch code will apply to. This minimum size must be no less than 10,000 square feet.

69.26 Sec. 55. METROPOLITAN COUNCIL; ELECTRIC BUS PURCHASES.

69.27 After the effective date of this act and until the appropriation made in section 2 is
exhausted, any bus purchased by the Metropolitan Council for Metro Transit bus service
must operate solely on electricity provided by rechargeable on-board batteries. The
appropriation in section 2 must be used to pay the incremental cost of buses that operate
solely on electricity provided by rechargeable on-board batteries over diesel-operated buses
that are otherwise comparable in size, features, and performance.

69.33 EFFECTIVE DATE. This section is effective the day following final enactment.
Sec. 56. RESIDENTIAL ENERGY CONSERVATION FINANCIAL INCENTIVE.

(a) In addition to any financial incentive approved under Minnesota Statutes, section 216B.16, subdivision 6c, the Public Utilities Commission must approve a financial incentive designed to encourage a public utility to continue investing in cost-effective conservation measures that result in energy savings to residential customers after the public utility has achieved annual energy savings for all customers equivalent to 1.75 percent of gross retail electric energy sales or 1.2 percent of gross annual retail natural gas sales. A public utility is eligible to receive the new incentive developed under this section if the amount of energy savings by residential customers contributing to the 1.75 or 1.2 percent level, as applicable, equals or exceeds the average amount residential customers saved over the most recent three-year period, not counting any savings resulting from the new incentive developed under this section. When reviewing and approving the incentive, the Public Utilities Commission must ensure the effective involvement of interested parties and must apply the criteria established in Minnesota Statutes, section 216B.16, subdivision 6c, paragraph (b).

(b) By November 1, 2019, the commissioner of commerce must develop and submit to the Public Utilities Commission for approval a financial incentive that meets the requirements under paragraph (a). The Public Utilities Commission may modify the financial incentive submitted under this paragraph.

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

Sec. 57. ELECTRIC SCHOOL BUS DEMONSTRATION GRANT.

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

(b) "Electric school bus" means a school bus powered solely by an electric motor drawing current from rechargeable storage batteries, fuel cells, or other portable sources of electric current.

(c) "Electric vehicle charging station" means infrastructure that recharges an electric vehicle's batteries by connecting the electric vehicle to:

(1) a level 2 charger that provides a 240-volt alternating current power source; or

(2) a DC fast charger that has an electric output of 20 kilowatts or greater.

(d) "Private school bus contractor" means a person who contracts with a school district to transport school district students to and from school and school activities on school buses owned and operated by the person.
"School bus" has the meaning given in Minnesota Statutes, section 169.011, subdivision 71, but does not include a Type III vehicle, as defined in paragraph (h) of that subdivision.

School district" means an independent or special school district.

Subd. 2. **Purpose.** The commissioner of education shall award a grant to a school district for the purchase of an electric school bus as a demonstration project to enable the school district, the electric utility serving the school district, and, if applicable, the private school bus contractor providing transportation services to the school district to gain experience operating an electric school bus and to assess its performance.

Subd. 3. **Eligibility.** A school district located within the electric retail service area of the public utility subject to section 116C.779, subdivision 1, that owns and operates school buses or contracts with a private school bus contractor is eligible to apply for a grant under this section.

Subd. 4. **Application process.** An eligible applicant must submit an application to the commissioner of education on a form designed by the commissioner of education. The commissioner of education shall develop administrative procedures governing the application and grant award process.

Subd. 5. **Application content.** An application for a grant under this section must include:

1. the name of the school district or districts in which the electric school bus will operate;
2. a description of the route, timing of operation, number of students to be transported, and other factors affecting the performance characteristics that an electric school bus performance will be required to meet;
3. certification from the electric utility serving the school district, and, if applicable, the private school bus contractor providing transportation services to the school district, that they fully support and will be full partners in implementing the demonstration project, including a list of tasks they commit to conduct, and any voluntary financial contributions they will make to the project;
4. certification from the electric utility serving the school district that it will pay the costs to purchase and install an electric vehicle charging station in a convenient location to recharge the batteries of the electric school bus;
5. evidence that the electric school bus will have access to an electric vehicle charging station at a convenient location;
(6) if the school district contracts with a private school bus contractor:

(i) a copy of a signed agreement between the school district and the private school bus contractor that protects the state's interest in the electric school bus purchased with the grant in the case of the termination of the private school bus contractor's contract with the school district or other contingencies; and

(ii) written certification that any revenues paid to the private school bus contractor by the utility providing retail electric service to the private school bus contractor that result from the purchase of or access to the electricity stored in the batteries of the electric school bus purchased with a grant under this section will be forwarded to the school district; and

(6) any additional information required by the commissioner of education.

Subd. 6. Eligible expenditures. Grant funds awarded under this section may be expended on:

(1) the purchase of an electric school bus;

(2) the cost of electricity to charge the batteries of the electric school bus; and

(3) repair and maintenance costs for the electric school bus.

Subd. 7. Reports. On or before the first anniversary of the initial operation of a school bus funded by a grant under this section, and on or before the same date in each of the following two years, the school district awarded the grant, in collaboration with the electric utility serving the school district, and, if applicable, the private school bus contractor providing transportation services to the school district, shall submit a report describing the performance of the electric school bus to the chairs and ranking minority members of the senate and house of representatives committees with primary jurisdiction over energy policy, transportation policy, and education policy, and to the commissioner of education. At a minimum, the report must contain the following information on the performance of the electric school bus:

(1) the number of miles traveled per day and per year;

(2) the cost of recharging, and any steps taken to minimize those costs by charging at off-peak times;

(3) operating costs per mile;

(4) miles driven per kWh;

(5) the number of days the electric school bus was out of service for repairs;
(6) discussion of the qualitative aspects of performance, including the impact of extreme
cold on bus performance; and

(7) any other information deemed relevant by the school district.

Sec. 58. GREENHOUSE GAS EMISSIONS REDUCTION STRATEGY; REPORT.

(a) The commissioner of commerce shall develop benchmarks and strategies designed
to significantly accelerate the reduction in greenhouse gas emissions in the state by 2030,
including strategies to:

(1) increase energy efficiency in all buildings, including residential;

(2) provide consumers with tools they can use to manage their own energy use
automatically, remotely, and electronically;

(3) present consumers with financial incentives to shift their energy use to periods when
systemwide demand and the cost of generation are low;

(4) work toward electrifying all sectors of the economy currently powered by fossil
fuels;

(5) increase carbon sequestration in Minnesota lands and wetlands;

(6) incentivize the adoption of energy storage systems to accelerate the use of wind and
solar resources; and

(7) modernize the electric grid and promote the use of distributed energy resources.

(b) By November 30, 2019, the commissioner shall submit a report containing the
benchmarks and strategies to the chairs and ranking minority members of the senate and
house committees with primary jurisdiction over energy policy.

Sec. 59. PRAIRIE ISLAND RENEWABLE ENERGY.

Subdivision 1. Program established. The Prairie Island Renewable Energy Project is
established to enable the Prairie Island Indian Community to develop renewable energy
systems.

Subd. 2. Grant. The commissioner of employment and economic development must
enter into a grant contract with the Prairie Island Indian Community to provide funding to
stimulate implementation of renewable energy projects benefiting the Prairie Island Indian
Community or its members. Any examination conducted by the commissioner of employment
and economic development to determine the sufficiency of the financial stability and capacity
of the Prairie Island Indian Community to carry out the purposes of this grant is limited to
the Community Services Department of the Prairie Island Indian Community.

Subd. 3. Report. The Prairie Island Indian Community must file a report on July 1,
2020, and each July 1 thereafter until the project is complete, describing the progress made
in implementing the project and the uses of expended funds. A final report must be completed
within 90 days of the date the project is complete.

**EFFECTIVE DATE.** This section is effective June 1, 2019.

**Sec. 60. COORDINATED ELECTRIC TRANSMISSION STUDY.**

(a) Each entity subject to Minnesota Statutes, section 216B.2425, must participate in a
coordinated engineering study to identify transmission network enhancements necessary to
maintain system reliability in the event large generation resources are retired. Specifically,
the study must evaluate what enhancements are necessary in the event large generation
resources that reach the end of the large generation resource's depreciation term or operating
license term within 20 years of the effective date of this section are retired. The study must
also evaluate what transmission enhancements may be necessary to interconnect replacement
generation and renewable resource additions, including generation tie lines, anticipated by
2035 in any utility's integrated resource plan filed with or approved by the Public Utilities
Commission.

(b) When setting the scope for the study and as needed while the study is being conducted,
utilities must consult with the commissioner of commerce, technical representatives of
renewable energy resource developers, and other interested entities to discuss and identify
needed generation tie lines to support the continued orderly development of renewable
resources in Minnesota. The study must include any analysis performed by the Midcontinent
Independent System Operator.

(c) A report on the study must be completed and submitted to the Public Utilities
Commission by November 1, 2020, and include a preliminary plan to build the needed
transmission network enhancements. Reasonable and prudent costs for the study are
recoverable through the mechanism provided under Minnesota Statutes, section 216B.1645,
subsection 2.

**Sec. 61. APPROPRIATION.**

Subdivision 1. *University of Minnesota renewable energy transition. (a)*
Notwithstanding Minnesota Statutes, section 116C.779, subdivision 1, paragraph (j),
$6,000,000 in fiscal year 2020 is appropriated from the renewable development account established under Minnesota Statutes, section 116C.779, subdivision 1, to the Board of Regents of the University of Minnesota to establish goals and benchmarks and implement a rapid transition toward the use of renewable fuels for electricity and thermal energy in campus buildings by 2030. This appropriation may only be expended on activities located within the electric service area of the public utility subject to Minnesota Statutes, section 116C.779, subdivision 1.

(b) As a condition of receiving the appropriation under paragraph (a), the Board of Regents of the University of Minnesota must submit a report by January 15, 2020, and biennially thereafter until January 15, 2030, on the progress made toward the goals and benchmarks established under paragraph (a) to the chairs and ranking minority members of the senate and house of representatives committees and divisions with jurisdiction over energy, climate, the environment, and natural resources.

Subd. 2. Minnesota State Colleges and Universities renewable energy transition. (a)

Notwithstanding Minnesota Statutes, section 116C.779, subdivision 1, paragraph (j), $6,000,000 in fiscal year 2020 is appropriated from the renewable development fund established in Minnesota Statutes, section 116C.779, subdivision 1, to the Board of Trustees of the Minnesota State Colleges and Universities to establish goals and benchmarks and implement a rapid transition toward the use of renewable fuels for electricity and thermal energy in campus buildings by 2030. This appropriation may only be expended on activities located within the electric service area of the public utility subject to Minnesota Statutes, section 116C.779, subdivision 1.

(b) As a condition of receiving the appropriation provided under paragraph (a), the Board of Trustees of the Minnesota State Colleges and Universities must submit a report by January 15, 2020, and biennially thereafter until January 15, 2030, on the steps taken and progress made toward achieving the goals and benchmarks established under paragraph (a) to the chairs and ranking minority members of the senate and house of representatives committees and divisions with jurisdiction over energy, climate, the environment, and natural resources.

Subd. 3. Solar devices. Notwithstanding Minnesota Statutes, section 116C.779, subdivision 1, paragraph (j), $2,000,000 in fiscal year 2020 is appropriated from the renewable development account established in Minnesota Statutes, section 116C.779, subdivision 1, to the commissioner of natural resources to install and expand solar photovoltaic or solar thermal energy devices in state parks served with electricity by the public utility subject to Minnesota Statutes, section 116C.779, subdivision 1.
Subd. 4. Solar for schools. (a) Notwithstanding section 116C.779, subdivision 1, paragraph (j), $16,000,000 in fiscal year 2020 is appropriated from the renewable development account established under section 116C.779, subdivision 1, to the commissioner of commerce for transfer to the public utility that is subject to section 216C.376, for the purposes of awarding grants and financial assistance to schools under the solar for schools program under section 216C.376.

(b) This appropriation may be used by the commissioner to reimburse the reasonable costs incurred by the public utility to administer the solar for schools program under section 216C.375, and the reasonable costs of the department to review and approve the public utility's plan, and any proposed modifications to that plan and to provide technical assistance, under section 216C.376, subdivisions 2 and 8.

Subd. 5. Metropolitan Council; electric buses. Notwithstanding Minnesota Statutes, section 116C.779, subdivision 1, paragraph (j), $8,800,000 in fiscal year 2019 is appropriated from the renewable development account under Minnesota Statutes, section 116C.779, subdivision 1, to the Metropolitan Council to defray the cost of purchasing electric buses, as described in section 1. Any funds remaining from this appropriation that are insufficient to fully fund the incremental cost of purchasing an electric bus rather than a diesel-operated bus cancel back to the renewable development account.

Subd. 6. Electric school bus grant. Notwithstanding Minnesota Statutes, section 116C.779, subdivision 1, paragraph (j), $500,000 in fiscal year 2020 is appropriated from the renewable development account under Minnesota Statutes, section 116C.779, subdivision 1, to the commissioner of education for the purpose of awarding a grant to a school district located within the retail electric service area of the public utility subject to section 116C.779, subdivision 1, for the purchase of an electric school bus.

Subd. 7. Community solar garden administration. (a) Notwithstanding Minnesota Statutes, section 116C.779, subdivision 1, paragraph (j), $750,000 in fiscal year 2020 and $750,000 in fiscal year 2021 are appropriated from the renewable development account established in Minnesota Statutes, section 116C.779, subdivision 1, to the commissioner of commerce for the purpose of funding the Department of Commerce's administrative and enforcement activities under Minnesota Statutes, section 216B.1641, subdivision 4.

(b) Notwithstanding Minnesota Statutes, section 116C.779, subdivision 1, paragraph (j), $1,000,000 in fiscal year 2020 and $1,000,000 in fiscal year 2021 are appropriated from the renewable development account established in Minnesota Statutes, section 116C.779, subdivision 1, to the commissioner of commerce for grants to owners of Low-Income Home Sec. 61.
Energy Assistance Program community solar gardens under Minnesota Statutes, section 216B.1643. The base for this program in fiscal year 2030 is zero.

(c) Up to three percent of the appropriation made in paragraph (b) is available to the commissioner of commerce for the reasonable costs of administering the grant program in Minnesota Statutes, section 216B.1643.

Subd. 8. Prairie Island Renewable Energy project. Notwithstanding Minnesota Statutes, section 116C.779, subdivision 1, paragraph (j), $2,000,000 in fiscal year 2020 and $3,000,000 in fiscal year 2021 are appropriated from the renewable development account under Minnesota Statutes, section 116C.779, subdivision 1, to the commissioner of employment and economic development for a grant to the Prairie Island Indian Community to implement the Prairie Island Renewable Energy project under section 1.

Subd. 9. Electric vehicle rebates. Notwithstanding Minnesota Statutes, section 116C.779, subdivision 1, paragraph (j), $3,100,000 in fiscal year 2020 is appropriated from the renewable development account established in Minnesota Statutes, section 116C.779, subdivision 1, to the commissioner of commerce to award rebates to eligible electric vehicle purchasers under Minnesota Statutes, section 216C.401. Appropriations from this paragraph must be used to award rebates to eligible purchasers who reside within the retail electric service area of the public utility subject to Minnesota Statutes, section 116C.779, subdivision 1.

Subd. 10. Electric vehicle charging stations. Notwithstanding Minnesota Statutes, section 116C.779, subdivision 1, paragraph (j), $2,500,000 in fiscal year 2020 is appropriated from the renewable development account established in Minnesota Statutes, section 116C.779, subdivision 1, to the commissioner of commerce to award grants to install electric vehicle charging stations under Minnesota Statutes, section 216C.402. Appropriations from this paragraph must be used to award grants to install electric vehicle charging stations within the retail electric service area of the public utility subject to Minnesota Statutes, section 116C.779, subdivision 1. Up to $600,000 of this appropriation may be used to fund electric vehicle charging stations in state and regional parks and up to $100,000 may be used to fund electric vehicle charging stations in park-and-ride facilities. Unexpended funds from this $700,000 may be used for funding electric vehicle charging stations in either location.

Subd. 11. Stretch code. Notwithstanding Minnesota Statutes, section 116C.779, subdivision 1, paragraph (j), $100,000 in fiscal year 2020 is appropriated from the renewable development account established in Minnesota Statutes, section 116C.779, subdivision 1,
to the commissioner of commerce for transfer to the Center for Sustainable Building Research
at the University of Minnesota for the purpose of providing technical assistance to local
jurisdictions that adopt a voluntary stretch code, as provided for in section 1. This is a
onetime appropriation.

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

Sec. 62. **REPEALER.**

Minnesota Statutes 2018, section 216B.241, subdivisions 1, 2c, 4, and 5, are repealed.