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ARTICLE 9

ENERGY, UTILITIES, ENVIRONMENT, AND CLIMATE POLICY

Section 1. Minnesota Statutes 2023 Supplement, section 116C.779, subdivision 1, is amended to read:

Subdivision 1. **Renewable development account.** (a) The renewable development account is established as a separate account in the special revenue fund in the state treasury. Appropriations and transfers to the account shall be credited to the account. Earnings, such as interest, dividends, and any other earnings arising from assets of the account, shall be credited to the account. Funds remaining in the account at the end of a fiscal year are not canceled to the general fund but remain in the account until expended. The account shall be administered by the commissioner of management and budget as provided under this section.

(b) On July 1, 2017, the public utility that owns the Prairie Island nuclear generating plant must transfer all funds in the renewable development account previously established under this subdivision and managed by the public utility to the renewable development account established in paragraph (a). Funds awarded to grantees in previous grant cycles that have not yet been expended and unencumbered funds required to be paid in calendar year 2017 under paragraphs (f) and (g), and sections 116C.7792 and 216C.41, are not subject to transfer under this paragraph.

(c) Except as provided in subdivision 1a, beginning January 15, 2018, and continuing each January 15 thereafter, the public utility that owns the Prairie Island nuclear generating plant must transfer to the renewable development account $500,000 each year for each dry cask containing spent fuel that is located at the Prairie Island power plant for each year the plant is in operation, and $7,500,000 each year the plant is not in operation if ordered by the commission pursuant to paragraph (i). The fund transfer must be made if nuclear waste is stored in a dry cask at the independent spent-fuel storage facility at Prairie Island for any part of a year. The total amount transferred annually under this paragraph must be reduced by $3,750,000.

(d) Except as provided in subdivision 1a, beginning January 15, 2018, and continuing each January 15 thereafter, the public utility that owns the Monticello nuclear generating

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ARTICLE 11

GEOTHERMAL ENERGY

ARTICLE 13

SOLAR ENERGY

ARTICLE 14

MISCELLANEOUS ENERGY POLICY

Section 1. Minnesota Statutes 2023 Supplement, section 116C.779, subdivision 1, is amended to read:

Subdivision 1. **Renewable development account.** (a) The renewable development account is established as a separate account in the special revenue fund in the state treasury. Appropriations and transfers to the account shall be credited to the account. Earnings, such as interest, dividends, and any other earnings arising from assets of the account, shall be credited to the account. Funds remaining in the account at the end of a fiscal year are not canceled to the general fund but remain in the account until expended. The account shall be administered by the commissioner of management and budget as provided under this section.

(b) On July 1, 2017, the public utility that owns the Prairie Island nuclear generating plant must transfer all funds in the renewable development account previously established under this subdivision and managed by the public utility to the renewable development account established in paragraph (a). Funds awarded to grantees in previous grant cycles that have not yet been expended and unencumbered funds required to be paid in calendar year 2017 under paragraphs (f) and (g), and sections 116C.7792 and 216C.41, are not subject to transfer under this paragraph.

(c) Except as provided in subdivision 1a, beginning January 15, 2018, and continuing each January 15 thereafter, the public utility that owns the Prairie Island nuclear generating plant must transfer to the renewable development account $500,000 each year for each dry cask containing spent fuel that is located at the Prairie Island power plant for each year the plant is in operation, and $7,500,000 each year the plant is not in operation if ordered by the commission pursuant to paragraph (i). The fund transfer must be made if nuclear waste is stored in a dry cask at the independent spent-fuel storage facility at Prairie Island for any part of a year. The total amount transferred annually under this paragraph must be reduced by $3,750,000.

(d) Except as provided in subdivision 1a, beginning January 15, 2018, and continuing each January 15 thereafter, the public utility that owns the Monticello nuclear generating

plant must transfer to the renewable development account $350,000 each year for each dry cask containing spent fuel that is located at the Monticello nuclear power plant for each year the plant is in operation, and $5,250,000 each year the plant is not in operation if ordered by the commission pursuant to paragraph (i). The fund transfer must be made if nuclear waste is stored in a dry cask at the independent spent-fuel storage facility at Monticello for any part of a year.

(e) Each year, the public utility shall withhold from the funds transferred to the renewable development account under paragraphs (c) and (d) the amount necessary to pay its obligations under paragraphs (f) and (g), and sections 116C.7792 and 216C.41, for that calendar year.

(f) If the commission approves a new or amended power purchase agreement, the termination of a power purchase agreement, or the purchase and closure of a facility under section 216B.2424, subdivision 9, with an entity that uses poultry litter to generate electricity, the public utility subject to this section shall enter into a contract with the city in which the poultry litter plant is located to provide grants to the city for the purposes of economic development on the following schedule: $4,000,000 in fiscal year 2018; $6,500,000 each fiscal year in 2019 and 2020; and $3,000,000 in fiscal year 2021. The grants shall be paid by the public utility from funds withheld from the transfer to the renewable development account, as provided in paragraphs (b) and (e).

(g) If the commission approves a new or amended power purchase agreement, or the termination of a power purchase agreement under section 216B.2424, subdivision 9, with an entity owned or controlled, directly or indirectly, by two municipal utilities located north of Constitutional Route No. 8, that was previously used to meet the biomass mandate in section 216B.2424, the public utility that owns a nuclear generating plant shall enter into a grant contract with such entity to provide $6,800,000 per year for five years, commencing 30 days after the commission approves the new or amended power purchase agreement, or the termination of the power purchase agreement, and on each June 1 thereafter through 2021, to assist the transition required by the new, amended, or terminated power purchase agreement. The grant shall be paid by the public utility from funds withheld from the transfer to the renewable development account as provided in paragraphs (b) and (e).

(h) The collective amount paid under the grant contracts awarded under paragraphs (f) and (g) is limited to the amount deposited into the renewable development account, and its predecessor, the renewable development account, established under this section, that was not required to be deposited into the account under Laws 1994, chapter 641, article 1, section 10.

(i) After discontinuation of operation of the Prairie Island nuclear plant or the Monticello nuclear plant and each year spent nuclear fuel is stored in dry cask at the discontinued facility, the commission shall require the public utility to pay $7,500,000 for the discontinued Prairie Island facility and $5,250,000 for the discontinued Monticello facility for any year in which the commission finds, by the preponderance of the evidence, that the public utility did not make a good faith effort to remove the spent nuclear fuel stored at the facility to a

plant must transfer to the renewable development account $350,000 each year for each dry cask containing spent fuel that is located at the Monticello nuclear power plant for each year the plant is in operation, and $5,250,000 each year the plant is not in operation if ordered by the commission pursuant to paragraph (i). The fund transfer must be made if nuclear waste is stored in a dry cask at the independent spent-fuel storage facility at Monticello for any part of a year.

(e) Each year, the public utility shall withhold from the funds transferred to the renewable development account under paragraphs (c) and (d) the amount necessary to pay its obligations under paragraphs (f) and (g), and sections 116C.7792 and 216C.41, for that calendar year.

(f) If the commission approves a new or amended power purchase agreement, the termination of a power purchase agreement, or the purchase and closure of a facility under section 216B.2424, subdivision 9, with an entity that uses poultry litter to generate electricity, the public utility subject to this section shall enter into a contract with the city in which the poultry litter plant is located to provide grants to the city for the purposes of economic development on the following schedule: $4,000,000 in fiscal year 2018; $6,500,000 each fiscal year in 2019 and 2020; and $3,000,000 in fiscal year 2021. The grants shall be paid by the public utility from funds withheld from the transfer to the renewable development account, as provided in paragraphs (b) and (e).

(g) If the commission approves a new or amended power purchase agreement, or the termination of a power purchase agreement under section 216B.2424, subdivision 9, with an entity owned or controlled, directly or indirectly, by two municipal utilities located north of Constitutional Route No. 8, that was previously used to meet the biomass mandate in section 216B.2424, the public utility that owns a nuclear generating plant shall enter into a grant contract with such entity to provide $6,800,000 per year for five years, commencing 30 days after the commission approves the new or amended power purchase agreement, or the termination of the power purchase agreement, and on each June 1 thereafter through 2021, to assist the transition required by the new, amended, or terminated power purchase agreement. The grant shall be paid by the public utility from funds withheld from the transfer to the renewable development account as provided in paragraphs (b) and (e).

(h) The collective amount paid under the grant contracts awarded under paragraphs (f) and (g) is limited to the amount deposited into the renewable development account, and its predecessor, the renewable development account, established under this section, that was not required to be deposited into the account under Laws 1994, chapter 641, article 1, section 10.

(i) After discontinuation of operation of the Prairie Island nuclear plant or the Monticello nuclear plant and each year spent nuclear fuel is stored in dry cask at the discontinued facility, the commission shall require the public utility to pay $7,500,000 for the discontinued Prairie Island facility and $5,250,000 for the discontinued Monticello facility for any year in which the commission finds, by the preponderance of the evidence, that the public utility did not make a good faith effort to remove the spent nuclear fuel stored at the facility to a

permanent or interim storage site out of the state. This determination shall be made at least every two years.

(j) Funds in the account may be expended only for any of the following purposes:

(1) to stimulate research and development of renewable electric energy technologies;

(2) to encourage grid modernization, including, but not limited to, projects that implement electricity storage, load control, and smart meter technology; and

(3) to stimulate other innovative energy projects that reduce demand and increase system efficiency and flexibility.

Expenditures from the fund must benefit Minnesota ratepayers receiving electric service from the utility that owns a nuclear-powered electric generating plant in this state or the Prairie Island Indian community or its members.

The utility that owns a nuclear generating plant is eligible to apply for grants under this subdivision.

(k) For the purposes of paragraph (j), the following terms have the meanings given:

(1) "renewable" has the meaning given in section 216B.2422, subdivision 1, paragraph (c), clauses (1), (2), (4), and (5); and

(2) "grid modernization" means:

(i) enhancing the reliability of the electrical grid;

(ii) improving the security of the electrical grid against cyberthreats and physical threats; and

(iii) increasing energy conservation opportunities by facilitating communication between the utility and its customers through the use of two-way meters, control technologies, energy storage and microgrids, technologies to enable demand response, and other innovative technologies.

(l) A renewable development account advisory group that includes, among others, representatives of the public utility and its ratepayers, and includes at least one representative of the Prairie Island Indian community appointed by that community's tribal council, shall develop recommendations on account expenditures. The advisory group must design a request for proposal and evaluate projects submitted in response to a request for proposals. The advisory group must utilize an independent third-party expert to evaluate proposals submitted in response to a request for proposal, including all proposals made by the public utility. A request for proposal for research and development under paragraph (j), clause (1), may be limited to or include a request to higher education institutions located in Minnesota for multiple projects authorized under paragraph (j), clause (1). The request for multiple projects may include a provision that exempts the projects from the third-party expert review and instead provides for project evaluation and selection by a merit peer review grant system.

permanent or interim storage site out of the state. This determination shall be made at least every two years.

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The utility that owns a nuclear generating plant is eligible to apply for grants under this subdivision.

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(1) "renewable" has the meaning given in section 216B.2422, subdivision 1, paragraph (c), clauses (1), (2), (4), and (5); and

(2) "grid modernization" means:

(i) enhancing the reliability of the electrical grid;

(ii) improving the security of the electrical grid against cyberthreats and physical threats; and

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(l) A renewable development account advisory group that includes, among others, representatives of the public utility and its ratepayers, and includes at least one representative of the Prairie Island Indian community appointed by that community's tribal council, shall develop recommendations on account expenditures. The advisory group must design a request for proposal and evaluate projects submitted in response to a request for proposals. The advisory group must utilize an independent third-party expert to evaluate proposals submitted in response to a request for proposal, including all proposals made by the public utility. A request for proposal for research and development under paragraph (j), clause (1), may be limited to or include a request to higher education institutions located in Minnesota for multiple projects authorized under paragraph (j), clause (1). The request for multiple projects may include a provision that exempts the projects from the third-party expert review and instead provides for project evaluation and selection by a merit peer review grant system.

In the process of determining request for proposal scope and subject and in evaluating responses to request for proposals, the advisory group must strongly consider, where reasonable:

(1) potential benefit to Minnesota citizens and businesses and the utility's ratepayers; and

(2) the proposer's commitment to increasing the diversity of the proposer's workforce and vendors.

(m) The advisory group shall submit funding recommendations to the public utility, which has full and sole authority to determine which expenditures shall be submitted by the advisory group to the legislature. The commission may approve proposed expenditures, may disapprove proposed expenditures that it finds not to be in compliance with this subdivision or otherwise not in the public interest, and may, if agreed to by the public utility, modify proposed expenditures. The commission shall, by order, submit its funding recommendations to the legislature as provided under paragraph (n).

(n) The commission shall present its recommended appropriations from the account to the senate and house of representatives committees with jurisdiction over energy policy and finance annually by February 15. Expenditures from the account must be appropriated by law. In enacting appropriations from the account, the legislature:

(1) may approve or disapprove, but may not modify, the amount of an appropriation for a project recommended by the commission; and

(2) may not appropriate money for a project the commission has not recommended funding.

(o) A request for proposal for renewable energy generation projects must, when feasible and reasonable, give preference to projects that are most cost-effective for a particular energy source.

(p) The advisory group must annually, by February 15, report to the chairs and ranking minority members of the legislative committees with jurisdiction over energy policy on projects funded by the account for the prior year and all previous years. The report must, to the extent possible and reasonable, itemize the actual and projected financial benefit to the public utility's ratepayers of each project.

~~(q) By February 1, 2018, and each February 1 thereafter, the commissioner of management and budget shall submit a written report regarding the availability of funds in and obligations of the account to the chairs and ranking minority members of the senate and house committees with jurisdiction over energy policy and finance, the public utility, and the advisory group.~~

~~(r)~~ (q) A project receiving funds from the account must produce a written final report that includes sufficient detail for technical readers and a clearly written summary for nontechnical readers. The report must include an evaluation of the project's financial,

environmental, and other benefits to the state and the public utility's ratepayers. A project receiving funds from the account must submit a report that meets the requirements of section 216C.51, subdivisions 3 and 4, each year the project funded by the account is in progress.

~~(s)~~ (r) Final reports, any mid-project status reports, and renewable development account financial reports must be posted online on a public website designated by the commissioner of commerce.

~~(t)~~ (s) All final reports must acknowledge that the project was made possible in whole or part by the Minnesota renewable development account, noting that the account is financed by the public utility's ratepayers.

~~(u)~~ (t) Of the amount in the renewable development account, priority must be given to making the payments required under section 216C.417.

~~(v)~~ (u) Construction projects receiving funds from this account are subject to the requirement to pay the prevailing wage rate, as defined in section 177.42 and the requirements and enforcement provisions in sections 177.27, 177.30, 177.32, 177.41 to 177.435, and 177.45.

Sec. 2. **[216B.076] SMART METER GATEWAY DEVICE; CONSENT.**

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

(b) "Electric utility" has the meaning given in section 216B.38, subdivision 5.

(c) "Smart meter gateway device" means any electric utility meter, electric utility meter component, electric utility load control device, or device ancillary to the electric utility meter that is located at an end user's residence or business and: (1) serves as a communications gateway or portal to electrical appliances, electrical equipment, or electrical devices within the end user's residence or business; or (2) otherwise communicates with, monitors, or controls electrical appliances, electrical equipment, or electrical devices within the end user's residence or business.

Subd. 2. **Property owner consent required.** (a) An electric utility that sells or provides electricity in Minnesota is prohibited from installing a smart meter gateway device on or in a person's home or business without the written consent of the person who owns the home or business.

(b) An electric utility must create a form that the person who owns the home or business must sign to opt in to having a smart meter gateway device installed on or in the person's home or business. The form must be in 12-point, boldface type and state that:

(1) the opt-in is optional and the person's service is not affected if the person elects to not opt in; and

environmental, and other benefits to the state and the public utility's ratepayers. A project receiving funds from the account must submit a report that meets the requirements of section 216C.51, subdivisions 3 and 4, each year the project funded by the account is in progress.

~~(s)~~ (r) Final reports, any mid-project status reports, and renewable development account financial reports must be posted online on a public website designated by the commissioner of commerce.

~~(t)~~ (s) All final reports must acknowledge that the project was made possible in whole or part by the Minnesota renewable development account, noting that the account is financed by the public utility's ratepayers.

~~(u)~~ (t) Of the amount in the renewable development account, priority must be given to making the payments required under section 216C.417.

~~(v)~~ (u) Construction projects receiving funds from this account are subject to the requirement to pay the prevailing wage rate, as defined in section 177.42 and the requirements and enforcement provisions in sections 177.27, 177.30, 177.32, 177.41 to 177.435, and 177.45.

(2) the device is a smart meter gateway device, and include the definition in subdivision 1, paragraph (c).

Subd. 3. **Smart meter gateway device; disclosure.** When an electric utility enrolls a homeowner or business owner for electrical service at the person's home or business, the electric utility must: (1) disclose in writing whether a smart meter gateway device has been installed; and (2) upon written request of the homeowner or business owner, remove or allow the removal of all smart meter gateway devices.

Sec. 3. Minnesota Statutes 2022, section 216B.098, is amended by adding a subdivision to read:

Subd. 7. **Social Security number and individual taxpayer identification number.** If a utility requires a new customer to provide a Social Security number on an application for utility service, the utility must accept an individual taxpayer identification number in lieu of a Social Security number. The utility application must indicate that the utility accepts an individual taxpayer identification number.

Sec. 4. Minnesota Statutes 2022, section 216B.16, subdivision 6c, is amended to read:

Subd. 6c. **Incentive plan for energy conservation and efficient fuel-switching improvement.** (a) The commission may order public utilities to develop and submit for commission approval incentive plans that describe the method of recovery and accounting for utility conservation and efficient fuel-switching expenditures and savings. For public utilities that provide electric service, the commission must develop and implement incentive plans designed to promote energy conservation separately from the plans designed to promote efficient fuel-switching. In developing the incentive plans the commission shall ensure the effective involvement of interested parties.

(b) In approving incentive plans, the commission shall consider:

(1) whether the plan is likely to increase utility investment in cost-effective energy conservation or efficient fuel switching;

(2) whether the plan is compatible with the interest of utility ratepayers and other interested parties;

(3) whether the plan links the incentive to the utility's performance in achieving cost-effective conservation or efficient fuel switching; ~~and~~

(4) whether the plan is in conflict with other provisions of this chapter~~.~~;

(5) whether the plan conflicts with other provisions of this chapter; and

(6) the likely financial impacts of the conservation and efficient fuel-switching programs on the utility.

(c) The commission may set rates to encourage the vigorous and effective implementation of utility conservation and efficient fuel-switching programs. The commission may:

Sec. 2. Minnesota Statutes 2022, section 216B.16, subdivision 6c, is amended to read:

Subd. 6c. **Incentive plan for energy conservation and efficient fuel-switching improvement.** (a) The commission may order public utilities to develop and submit for commission approval incentive plans that describe the method of recovery and accounting for utility conservation and efficient fuel-switching expenditures and savings. For public utilities that provide electric service, the commission must develop and implement incentive plans designed to promote energy conservation separately from plans designed to promote efficient fuel-switching. In developing the incentive plans the commission shall ensure the effective involvement of interested parties.

(b) In approving incentive plans, the commission shall consider:

(1) whether the plan is likely to increase utility investment in cost-effective energy conservation or efficient fuel switching;

(2) whether the plan is compatible with the interest of utility ratepayers and other interested parties;

(3) whether the plan links the incentive to the utility's performance in achieving cost-effective conservation or efficient fuel switching; ~~and~~

(4) whether the plan is in conflict with other provisions of this chapter~~.~~;

(5) whether the plan conflicts with other provisions of this chapter; and

(6) the likely financial impacts of the conservation and efficient fuel-switching on the utility.

(c) The commission may set rates to encourage the vigorous and effective implementation of utility conservation and efficient fuel-switching programs. The commission may:

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(1) increase or decrease any otherwise allowed rate of return on net investment based upon the utility's skill, efforts, and success in ~~conserving~~ improving the efficient use of energy through energy conservation or efficient fuel switching;

(2) share between ratepayers and utilities the net savings resulting from energy conservation and efficient fuel-switching programs to the extent justified by the utility's skill, efforts, and success in ~~conserving~~ improving the efficient use of energy; and

(3) adopt any mechanism that satisfies the criteria of this subdivision, such that implementation of cost-effective conservation or efficient fuel switching is a preferred resource choice for the public utility considering the impact of conservation or efficient fuel switching on earnings of the public utility.

(d) Any incentives offered to electric utilities under this subdivision for efficient-fuel switching projects expire December 31, 2032.

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(1) increase or decrease any otherwise allowed rate of return on net investment based upon the utility's skill, efforts, and success in ~~conserving~~ improving the efficient use of energy through energy conservation or efficient fuel switching;

(2) share between ratepayers and utilities the net savings resulting from energy conservation and efficient fuel-switching programs to the extent justified by the utility's skill, efforts, and success in ~~conserving~~ improving the efficient use of energy; and

(3) adopt any mechanism that satisfies the criteria of this subdivision, such that implementation of cost-effective conservation or efficient fuel switching is a preferred resource choice for the public utility considering the impact of conservation or efficient fuel switching on earnings of the public utility.

(d) No later than March 1, 2025, and each March 1 thereafter, a public utility providing fuel-switching incentives under this subdivision must submit a written report annually to the chairs and ranking minority members of the senate and house of representatives committees with jurisdiction over energy policy containing information on:

(1) the nature and amount of fuel-switching incentives offered by the utility;

(2) the number of customers receiving fuel-switching incentives; and

(3) the amount of fuel-switching incentives paid to customers, and the specific appliance or end use whose fuel is being switched.

(e) Any incentives offered to electric utilities under this subdivision for efficient-fuel switching projects expire December 31, 2032.

Section 1. Minnesota Statutes 2022, section 216B.16, subdivision 7b, is amended to read:

Subd. 7b. **Transmission cost adjustment.** (a) Notwithstanding any other provision of this chapter, the commission may approve a tariff mechanism for the automatic annual adjustment of charges for the Minnesota jurisdictional costs net of associated revenues of:

(1) new transmission facilities that have been separately filed and reviewed and approved by the commission under section 216B.243 or new transmission or distribution facilities that are certified as a priority project or deemed to be a priority transmission project under section 216B.2425;

(2) new transmission facilities approved by the regulatory commission of the state in which the new transmission facilities are to be constructed, to the extent approval is required by the laws of that state, and determined by the Midcontinent Independent System Operator to benefit the utility or integrated transmission system; and

(3) charges incurred by a utility under a federally approved tariff that accrue from other transmission owners' regionally planned transmission projects that have been determined by the Midcontinent Independent System Operator to benefit the utility or integrated transmission system.

(b) Upon filing by a public utility or utilities providing transmission service, the commission may approve, reject, or modify, after notice and comment, a tariff that:

(1) allows the utility to recover on a timely basis the costs net of revenues of facilities approved under section 216B.243 or certified or deemed to be certified under section 216B.2425 or exempt from the requirements of section 216B.243;

(2) allows the utility to recover charges incurred under a federally approved tariff that accrue from other transmission owners' regionally planned transmission projects that have been determined by the Midcontinent Independent System Operator to benefit the utility or integrated transmission system. These charges must be reduced or offset by revenues received by the utility and by amounts the utility charges to other regional transmission owners, to the extent those revenues and charges have not been otherwise offset;

(3) allows the utility to recover on a timely basis the costs net of revenues of facilities approved by the regulatory commission of the state in which the new transmission facilities are to be constructed and determined by the Midcontinent Independent System Operator to benefit the utility or integrated transmission system;

(4) allows the utility to recover costs associated with distribution planning required under section 216B.2425;

(5) allows the utility to recover costs associated with investments in distribution facilities to modernize the utility's grid that have been certified by the commission under section 216B.2425;

(6) allows the utility to recover on a timely basis the costs of upgrades to distribution facilities that are not allocated to participating owners of distributed generation facilities under the cost-sharing interconnection process established by the commission order required under section 3 of this article;

(7) allows a return on investment at the level approved in the utility's last general rate case, unless a different return is found to be consistent with the public interest;

~~(7)~~ (8) provides a current return on construction work in progress, provided that recovery from Minnesota retail customers for the allowance for funds used during construction is not sought through any other mechanism;

~~(8)~~ (9) allows for recovery of other expenses if shown to promote a least-cost project option or is otherwise in the public interest;

~~(9)~~ (10) allocates project costs appropriately between wholesale and retail customers;

~~(10)~~ (11) provides a mechanism for recovery above cost, if necessary to improve the overall economics of the project or projects or is otherwise in the public interest; and

~~(11)~~ (12) terminates recovery once costs have been fully recovered or have otherwise been reflected in the utility's general rates.

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Sec. 5. Minnesota Statutes 2022, section 216B.16, subdivision 8, is amended to read:

Subd. 8. **Advertising expense.** (a) The commission shall disapprove the portion of any rate which makes an allowance directly or indirectly for expenses incurred by a public utility to provide a public advertisement which:

(1) is designed to influence or has the effect of influencing public attitudes toward legislation or proposed legislation, or toward a rule, proposed rule, authorization or proposed authorization of the Public Utilities Commission or other agency of government responsible for regulating a public utility;

(2) is designed to justify or otherwise support or defend a rate, proposed rate, practice or proposed practice of a public utility;

(3) is designed primarily to promote consumption of the services of the utility;

(4) is designed primarily to promote good will for the public utility or improve the utility's public image; or

(5) is designed to promote the use of nuclear power or to promote a nuclear waste storage facility.

(b) The commission may approve a rate which makes an allowance for expenses incurred by a public utility to disseminate information which:

(1) is designed to encourage ~~conservation~~ efficient use of energy supplies;

(2) is designed to promote safety; or

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(c) A public utility may file annual rate adjustments to be applied to customer bills paid under the tariff approved in paragraph (b). In its filing, the public utility shall provide:

(1) a description of and context for the facilities included for recovery;

(2) a schedule for implementation of applicable projects;

(3) the utility's costs for these projects;

(4) a description of the utility's efforts to ensure the lowest costs to ratepayers for the project; and

(5) calculations to establish that the rate adjustment is consistent with the terms of the tariff established in paragraph (b).

(d) Upon receiving a filing for a rate adjustment pursuant to the tariff established in paragraph (b), the commission shall approve the annual rate adjustments provided that, after notice and comment, the costs included for recovery through the tariff were or are expected to be prudently incurred and achieve transmission system improvements at the lowest feasible and prudent cost to ratepayers.

(3) is designed to inform and educate customers as to financial services made available to them by the public utility.

(c) The commission shall not withhold approval of a rate because it makes an allowance for expenses incurred by the utility to disseminate information about corporate affairs to its owners.

Sec. 6. Minnesota Statutes 2023 Supplement, section 216B.1691, subdivision 1, is amended to read:

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

(b) "Carbon-free" means a technology that generates electricity without emitting carbon dioxide. Carbon-free includes a technology that, as of the effective date of this act and thereafter, generates at least 50 percent of a utility's annual retail electricity sales in Minnesota by combusting wood chips derived from:

(1) limbs, branches, and other by-products of timber harvesting operations conducted to obtain wood for nonenergy purposes; or

(2) discarded wood products.

(c) 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: (i) less than 100 megawatts; or (ii) 100 megawatts or more, provided that the facility is in operation as of February 8, 2023;

(4) hydrogen 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, except as provided in subdivision 1a, 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.

(d) "Electric utility" means: (1) a public utility providing electric service; (2) a generation and transmission cooperative electric association; (3) a municipal power agency; (4) a power district; or (5) a cooperative electric association or municipal utility providing electric service that is not a member of an entity in clauses (2) to (4).

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(e) "Environmental justice area" means an area in Minnesota that, based on the most recent data published by the United States Census Bureau, meets one or more of the following criteria:

(1) 40 percent or more of the area's total population is nonwhite;

(2) 35 percent or more of households in the area have an income that is at or below 200 percent of the federal poverty level;

(3) 40 percent or more of the area's residents over the age of five have limited English proficiency; or

(4) the area is located within Indian country, as defined in United State Code, title 18, section 1151.

(f) "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.

Sec. 7. Minnesota Statutes 2022, section 216B.2402, is amended by adding a subdivision to read:

Subd. 3a. **Data mining facility.** "Data mining facility" means all buildings, structures, equipment, and installations at a single site where electricity is used primarily by computers to process transactions involving digital currency not issued by a central authority.

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Sec. 3. Minnesota Statutes 2022, section 216B.2402, is amended by adding a subdivision to read:

Subd. 3a. **Data mining facility.** "Data mining facility" means all buildings, structures, equipment, and installations at a single site where electricity is used primarily by computers to process transactions involving digital currency that is not issued by a central authority.

Sec. 4. Minnesota Statutes 2022, section 216B.2402, subdivision 4, is amended to read:

Subd. 4. **Efficient fuel-switching improvement.** "Efficient fuel-switching improvement" means a project that:

(1) replaces a fuel used by a customer with electricity or natural gas delivered at retail by a utility subject to section 216B.2403 or 216B.241;

(2) results in a net increase in the use of electricity or natural gas and a net decrease in source energy consumption on a fuel-neutral basis;

(3) otherwise meets the criteria established for consumer-owned utilities in section 216B.2403, subdivision 8, and for public utilities under section 216B.241, subdivisions 11 and 12; and

(4) requires the installation of equipment that utilizes electricity or natural gas, resulting in a reduction or elimination of the previous fuel used.

An efficient fuel-switching improvement is not an energy conservation improvement or energy efficiency even if the efficient fuel-switching improvement results in a net reduction in electricity or natural gas use. ~~An efficient fuel-switching improvement does not include, and must not count toward any energy savings goal from, energy conservation improvements~~

Sec. 8. Minnesota Statutes 2022, section 216B.2402, subdivision 10, is amended to read:

Subd. 10. **Gross annual retail energy sales.** "Gross annual retail energy sales" means a utility's annual electric sales to all Minnesota retail customers, 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 (a), 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 (b), with respect to natural gas sales made to the commercial gas customer facility;

(2) electric sales to:

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

(ii) a data mining facility, if the facility:

(A) has provided a signed letter to the utility verifying the facility meets the definition of a data mining facility; and

(B) imposes a peak electrical demand on a consumer-owned utility's system equal to or greater than 40 percent of the peak electrical demand of the system, measured in the same manner as the utility that serves the customer facility measures electric demand for billing purposes; or

(3) the amount of electric sales prior to December 31, 2032, that are associated with a utility's program, rate, or tariff for electric vehicle charging based on a methodology and assumptions developed by the department in consultation with interested stakeholders no later than December 31, 2021. After December 31, 2032, incremental sales to electric vehicles must be included in calculating a public utility's gross annual retail sales.

Sec. 9. Minnesota Statutes 2022, section 216B.2403, subdivision 2, is amended to read:

Subd. 2. **Consumer-owned utility; energy-savings goal.** (a) Each individual consumer-owned electric utility subject to this section has an annual energy-savings goal equivalent to 1.5 percent of gross annual retail energy sales and each individual

~~when fuel switching would result in an increase of greenhouse gas emissions into the atmosphere on an annual basis.~~

Sec. 5. Minnesota Statutes 2022, section 216B.2402, subdivision 10, is amended to read:

Subd. 10. **Gross annual retail energy sales.** "Gross annual retail energy sales" means a utility's annual electric sales to all Minnesota retail customers, 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 (a), 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 (b), with respect to natural gas sales made to the commercial gas customer facility;

(2) electric sales to:

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

(ii) a data mining facility, if the facility:

(A) has provided a signed letter to the utility verifying the facility meets the definition of a data mining facility; and

(B) imposes a peak electrical demand on a consumer-owned utility's system equal to or greater than 40 percent of the peak electrical demand of the system, measured in the same manner as the utility that serves the customer facility measures electric demand for billing purposes; or

(3) the amount of electric sales prior to December 31, 2032, that are associated with a utility's program, rate, or tariff for electric vehicle charging based on a methodology and assumptions developed by the department in consultation with interested stakeholders no later than December 31, 2021. After December 31, 2032, incremental sales to electric vehicles must be included in calculating a public utility's gross annual retail sales.

Sec. 6. Minnesota Statutes 2022, section 216B.2403, subdivision 2, is amended to read:

Subd. 2. **Consumer-owned utility; energy-savings goal.** (a) Each individual consumer-owned electric utility subject to this section has an annual energy-savings goal equivalent to 1.5 percent of gross annual retail energy sales and each individual

consumer-owned natural gas utility subject to this section has an annual energy-savings goal equivalent to one percent of gross annual retail energy sales, to be met with a minimum of energy savings from energy conservation improvements equivalent to at least ~~0.95~~ 0.90 percent of the consumer-owned utility's gross annual retail energy sales. The balance of energy savings toward the annual energy-savings goal may be achieved only by the following consumer-owned utility activities:

(1) energy savings from additional energy conservation improvements;

(2) electric utility infrastructure projects, as defined in section 216B.1636, subdivision 1, that result in increased efficiency greater than would have occurred through normal maintenance activity;

(3) net energy savings from efficient fuel-switching improvements that meet the criteria under subdivision 8, which may contribute up to ~~0.55~~ 0.60 percent of the goal; or

(4) 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.

(b) The energy-savings goals specified in this section must be calculated based on weather-normalized sales averaged over the most recent three years. A consumer-owned utility may elect to carry forward energy savings in excess of 1.5 percent for a year to the next three years, except that energy savings from electric utility infrastructure projects may be carried forward for five years. A particular energy savings can only be used to meet one year's goal.

(c) 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 that exceed the minimum level established under this subdivision if cost-effective opportunities and funding are available, considering other potential investments the consumer-owned utility intends to make to benefit customers during the term of the plan filed under subdivision 3.

(d) Notwithstanding any provision to the contrary, until July 1, 2026, spending by a consumer-owned utility subject to this section on efficient fuel-switching improvements implemented to meet the annual energy savings goal under this section must not exceed ~~0.55~~ 0.6 percent per year, averaged over a three-year period, of the consumer-owned utility's gross annual retail energy sales.

Sec. 10. Minnesota Statutes 2022, section 216B.2403, subdivision 3, is amended to read:

Subd. 3. **Consumer-owned utility; energy conservation and optimization plans.** (a) By June 1, 2022, and at least every three years thereafter, 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, load management, and other

consumer-owned natural gas utility subject to this section has an annual energy-savings goal equivalent to one percent of gross annual retail energy sales, to be met with a minimum of energy savings from energy conservation improvements equivalent to at least ~~0.95~~ 0.90 percent of the consumer-owned utility's gross annual retail energy sales. The balance of energy savings toward the annual energy-savings goal may be achieved only by the following consumer-owned utility activities:

(1) energy savings from additional energy conservation improvements;

(2) electric utility infrastructure projects, as defined in section 216B.1636, subdivision 1, that result in increased efficiency greater than would have occurred through normal maintenance activity;

(3) net energy savings from efficient fuel-switching improvements that meet the criteria under subdivision 8, which may contribute up to ~~0.55~~ 0.60 percent of the goal; or

(4) 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.

(b) The energy-savings goals specified in this section must be calculated based on weather-normalized sales averaged over the most recent three years. A consumer-owned utility may elect to carry forward energy savings in excess of 1.5 percent for a year to the next three years, except that energy savings from electric utility infrastructure projects may be carried forward for five years. A particular energy savings can only be used to meet one year's goal.

(c) 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 that exceed the minimum level established under this subdivision if cost-effective opportunities and funding are available, considering other potential investments the consumer-owned utility intends to make to benefit customers during the term of the plan filed under subdivision 3.

~~(d) Notwithstanding any provision to the contrary, until July 1, 2026, spending by a consumer-owned utility subject to this section on efficient fuel-switching improvements implemented to meet the annual energy savings goal under this section must not exceed 0.55 percent per year, averaged over a three-year period, of the consumer-owned utility's gross annual retail energy sales.~~

Sec. 7. Minnesota Statutes 2022, section 216B.2403, subdivision 3, is amended to read:

Subd. 3. **Consumer-owned utility; energy conservation and optimization plans.** (a) By June 1, 2022, and at least every three years thereafter, 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, load management, and other

measures the consumer-owned utility intends to offer to achieve the utility's energy savings goal.

(b) A plan's term may extend up to three years. A multiyear plan must identify the total energy savings and energy savings resulting from energy conservation improvements that are projected to be achieved in each year of the plan. A multiyear plan that does not, in each year of the plan, meet both the minimum energy savings goal from energy conservation improvements and the total energy savings goal of 1.5 percent, or lower goals adjusted by the commissioner under paragraph (k), must:

(1) state why each goal is projected to be unmet; and

(2) demonstrate how the consumer-owned utility proposes to meet both goals on an average basis over the duration of the plan.

(c) A plan filed under this subdivision must provide:

(1) for existing programs, 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; and

(2) for new programs, a preliminary analysis upon which the program will proceed, in parallel with further development of assumptions and standards.

(d) The commissioner must evaluate a plan filed under this subdivision based on the plan's likelihood to achieve the energy-savings goals established in subdivision 2. The commissioner may make recommendations to a consumer-owned utility regarding ways to increase the effectiveness of the consumer-owned utility's energy conservation activities and programs under this subdivision. The commissioner may recommend that a consumer-owned utility implement a cost-effective energy conservation or efficient fuel-switching program~~, including an energy conservation program~~ suggested by an outside source such as a political subdivision, nonprofit corporation, or community organization.

(e) Beginning June 1, 2023, and every June 1 thereafter, each consumer-owned utility must file: (1) an annual update identifying the status of the plan filed under this subdivision, including: (i) total expenditures and investments made to date under the plan; and (ii) any intended changes to the plan; and (2) a summary of the annual energy-savings achievements under a plan. An annual filing made in the last year of a plan must contain a new plan that complies with this section.

(f) When evaluating the cost-effectiveness of a consumer-owned utility's energy conservation programs, the consumer-owned utility and the commissioner must consider the costs and benefits to ratepayers, the utility, participants, and society. The commissioner must also consider the rate at which the consumer-owned utility is increasing energy savings and expenditures on energy conservation, and lifetime energy savings and cumulative energy savings.

measures the consumer-owned utility intends to offer to achieve the utility's energy savings goal.

(b) A plan's term may extend up to three years. A multiyear plan must identify the total energy savings and energy savings resulting from energy conservation improvements that are projected to be achieved in each year of the plan. A multiyear plan that does not, in each year of the plan, meet both the minimum energy savings goal from energy conservation improvements and the total energy savings goal of 1.5 percent, or lower goals adjusted by the commissioner under paragraph (k), must:

(1) state why each goal is projected to be unmet; and

(2) demonstrate how the consumer-owned utility proposes to meet both goals on an average basis over the duration of the plan.

(c) A plan filed under this subdivision must provide:

(1) for existing programs, 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; and

(2) for new programs, a preliminary analysis upon which the program will proceed, in parallel with further development of assumptions and standards.

(d) The commissioner must evaluate a plan filed under this subdivision based on the plan's likelihood to achieve the energy-savings goals established in subdivision 2. The commissioner may make recommendations to a consumer-owned utility regarding ways to increase the effectiveness of the consumer-owned utility's energy conservation activities and programs under this subdivision. The commissioner may recommend that a consumer-owned utility implement a cost-effective energy conservation or efficient fuel-switching program~~, including an energy conservation program~~ suggested by an outside source such as a political subdivision, nonprofit corporation, or community organization.

(e) Beginning June 1, 2023, and every June 1 thereafter, each consumer-owned utility must file: (1) an annual update identifying the status of the plan filed under this subdivision, including: (i) total expenditures and investments made to date under the plan; and (ii) any intended changes to the plan; and (2) a summary of the annual energy-savings achievements under a plan. An annual filing made in the last year of a plan must contain a new plan that complies with this section.

(f) When evaluating the cost-effectiveness of a consumer-owned utility's energy conservation programs, the consumer-owned utility and the commissioner must consider the costs and benefits to ratepayers, the utility, participants, and society. The commissioner must also consider the rate at which the consumer-owned utility is increasing energy savings and expenditures on energy conservation, and lifetime energy savings and cumulative energy savings.

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(g) A consumer-owned utility may annually spend and invest up to ten percent of the total amount spent and invested on energy conservation, efficient fuel-switching, or load management improvements on research and development projects that meet the applicable definition of energy conservation, efficient fuel-switching, or load management improvement.

(h) A generation and transmission cooperative electric association or municipal power agency that provides energy services to consumer-owned utilities may file a plan under this subdivision on behalf of the consumer-owned utilities to which the association or agency provides energy services and may make investments, offer conservation programs, and otherwise fulfill the energy-savings goals and reporting requirements of this subdivision for those consumer-owned utilities on an aggregate basis.

(i) A consumer-owned 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 the commissioner has exempted under section 216B.241, subdivision 1a.

(j) The energy conservation and optimization plan of a consumer-owned utility may include activities to improve energy efficiency in the public schools served by the utility. These activities may include programs to:

(1) increase the efficiency of the school's lighting and heating and cooling systems;

(2) recommission buildings;

(3) train building operators; and

(4) provide opportunities to educate students, teachers, and staff regarding energy efficiency measures implemented at the school.

(k) A consumer-owned utility may request that the commissioner adjust the consumer-owned utility's minimum goal for energy savings from energy conservation improvements under subdivision 2, paragraph (a), for the duration of the plan filed under this subdivision. The request must be made by January 1 of the year when the consumer-owned utility must file a plan under this subdivision. 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 consumer-owned utility's service territory;

(5) the cost-effectiveness and quality of the energy conservation programs offered by the consumer-owned utility; and

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(g) A consumer-owned utility may annually spend and invest up to ten percent of the total amount spent and invested on energy conservation, efficient fuel-switching, or load management improvements on research and development projects that meet the applicable definition of energy conservation, efficient fuel-switching, or load management improvement.

(h) A generation and transmission cooperative electric association or municipal power agency that provides energy services to consumer-owned utilities may file a plan under this subdivision on behalf of the consumer-owned utilities to which the association or agency provides energy services and may make investments, offer conservation programs, and otherwise fulfill the energy-savings goals and reporting requirements of this subdivision for those consumer-owned utilities on an aggregate basis.

(i) A consumer-owned 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 the commissioner has exempted under section 216B.241, subdivision 1a.

(j) The energy conservation and optimization plan of a consumer-owned utility may include activities to improve energy efficiency in the public schools served by the utility. These activities may include programs to:

(1) increase the efficiency of the school's lighting and heating and cooling systems;

(2) recommission buildings;

(3) train building operators; and

(4) provide opportunities to educate students, teachers, and staff regarding energy efficiency measures implemented at the school.

(k) A consumer-owned utility may request that the commissioner adjust the consumer-owned utility's minimum goal for energy savings from energy conservation improvements under subdivision 2, paragraph (a), for the duration of the plan filed under this subdivision. The request must be made by January 1 of the year when the consumer-owned utility must file a plan under this subdivision. 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 consumer-owned utility's service territory;

(5) the cost-effectiveness and quality of the energy conservation programs offered by the consumer-owned utility; and

(6) other factors the commissioner and consumer-owned utility determine warrant an adjustment.

The commissioner must adjust the energy 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 an average of 0.95 percent per year over the consecutive years of the plan's duration, including the year the minimum energy savings goal is adjusted.

(l) A consumer-owned utility filing a conservation and optimization plan that includes an efficient fuel-switching program ~~to achieve the utility's energy savings goal~~ must, as part of the filing, demonstrate ~~by a comparison of greenhouse gas emissions between the fuels~~ that the requirements of subdivision 8 are met, using a full fuel-cycle energy analysis.

Sec. 11. Minnesota Statutes 2022, section 216B.2403, subdivision 5, is amended to read:

Subd. 5. **Energy conservation programs for low-income households.** (a) A consumer-owned utility subject to this section must provide energy conservation programs to low-income households. The commissioner must evaluate a consumer-owned utility's plans under this section by considering the consumer-owned utility's historic spending on energy conservation programs directed to low-income households, the rate of customer participation in and the energy savings resulting from those programs, and the number of low-income persons residing in the consumer-owned utility's service territory. A municipal utility that furnishes natural gas service must spend at least 0.2 percent of the municipal utility's most recent three-year average gross operating revenue from residential customers in Minnesota on energy conservation programs for low-income households. A consumer-owned utility that furnishes electric service must spend at least 0.2 percent of the consumer-owned utility's gross operating revenue from residential customers in Minnesota on energy conservation programs for low-income households. The requirement under this paragraph applies to each generation and transmission cooperative association's aggregate gross operating revenue from the sale of electricity to residential customers in Minnesota by all of the association's member distribution cooperatives.

(b) To meet all or part of the spending requirements of paragraph (a), a consumer-owned utility may contribute money to the energy and conservation account established in section 216B.241, subdivision 2a. An energy conservation optimization plan must state the amount of contributions the consumer-owned utility plans to make to the energy and conservation account. Contributions to the account must be used for energy conservation programs serving low-income households, including renters, located in the service area of the consumer-owned utility making the contribution. Contributions must be remitted to the commissioner by February 1 each year.

(c) The commissioner must establish energy conservation programs for low-income households funded through contributions to the energy and conservation account under paragraph (b). When establishing energy conservation programs for low-income households,

(6) other factors the commissioner and consumer-owned utility determine warrant an adjustment.

The commissioner must adjust the energy 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 an average of 0.95 percent per year over the consecutive years of the plan's duration, including the year the minimum energy savings goal is adjusted.

(l) A consumer-owned utility filing a conservation and optimization plan that includes an efficient fuel-switching program ~~to achieve the utility's energy savings goal~~ must, as part of the filing, demonstrate ~~by a comparison of greenhouse gas emissions between the fuels~~ that the requirements of subdivision 8 are met~~, using a full fuel-cycle energy analysis~~.

Sec. 8. Minnesota Statutes 2022, section 216B.2403, subdivision 5, is amended to read:

Subd. 5. **Energy conservation programs for low-income households.** (a) A consumer-owned utility subject to this section must provide energy conservation programs to low-income households. The commissioner must evaluate a consumer-owned utility's plans under this section by considering the consumer-owned utility's historic spending on energy conservation programs directed to low-income households, the rate of customer participation in and the energy savings resulting from those programs, and the number of low-income persons residing in the consumer-owned utility's service territory. A municipal utility that furnishes natural gas service must spend at least 0.2 percent of the municipal utility's most recent three-year average gross operating revenue from residential customers in Minnesota on energy conservation programs for low-income households. Except as provided in paragraph (j), a consumer-owned utility that furnishes electric service must spend at least 0.2 percent of the consumer-owned utility's gross operating revenue from residential customers in Minnesota on energy conservation programs for low-income households. The requirement under this paragraph applies to each generation and transmission cooperative association's aggregate gross operating revenue from the sale of electricity to residential customers in Minnesota by all of the association's member distribution cooperatives.

(b) To meet all or part of the spending requirements of paragraph (a), a consumer-owned utility may contribute money to the energy and conservation account established in section 216B.241, subdivision 2a. An energy conservation optimization plan must state the amount of contributions the consumer-owned utility plans to make to the energy and conservation account. Contributions to the account must be used for energy conservation programs serving low-income households, including renters, located in the service area of the consumer-owned utility making the contribution. Contributions must be remitted to the commissioner by February 1 each year.

(c) The commissioner must establish energy conservation programs for low-income households funded through contributions to the energy and conservation account under paragraph (b). When establishing energy conservation programs for low-income households,

the commissioner must consult political subdivisions, utilities, and nonprofit and community organizations, including organizations providing energy and weatherization assistance to low-income households. The commissioner must record and report expenditures and energy savings achieved as a result of energy conservation programs for low-income households funded through the energy and conservation account in the report required under section 216B.241, subdivision 1c, paragraph (f). The commissioner may contract with a political subdivision, nonprofit or community organization, public utility, municipality, or consumer-owned utility to implement low-income programs funded through the energy and conservation account.

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

(e) The commissioner must develop and establish guidelines for determining the eligibility of multifamily buildings to participate in energy conservation programs provided to low-income households. Notwithstanding the definition of low-income household in section 216B.2402, a consumer-owned utility or association may apply the most recent guidelines published by the department for purposes of determining the eligibility of multifamily buildings to participate in low-income programs. The commissioner must convene a stakeholder group to review and update these guidelines by August 1, 2021, and at least once every five years thereafter. The stakeholder group must include but is not limited to representatives of public utilities; municipal electric or gas utilities; electric cooperative associations; multifamily housing owners and developers; and low-income advocates.

(f) Up to 15 percent of a consumer-owned utility's spending on low-income energy conservation programs may be spent on preweatherization measures. A consumer-owned utility is prohibited from claiming energy savings from preweatherization measures toward the consumer-owned utility's energy savings goal.

(g) The commissioner must, by order, establish a list of preweatherization measures eligible for inclusion in low-income energy conservation programs no later than March 15, 2022.

(h) A Healthy AIR (Asbestos Insulation Removal) account is established as a separate account in the special revenue fund in the state treasury. A consumer-owned utility may elect to contribute money to the Healthy AIR account to provide preweatherization measures for households eligible for weatherization assistance from the state weatherization assistance program in section 216C.264. Remediation activities must be executed in conjunction with federal weatherization assistance program services. Money contributed to the account by a consumer-owned utility counts toward: (1) the minimum low-income spending requirement under paragraph (a); and (2) the cap on preweatherization measures under paragraph (f). Money in the account is annually appropriated to the commissioner of commerce to pay for Healthy AIR-related activities.

the commissioner must consult political subdivisions, utilities, and nonprofit and community organizations, including organizations providing energy and weatherization assistance to low-income households. The commissioner must record and report expenditures and energy savings achieved as a result of energy conservation programs for low-income households funded through the energy and conservation account in the report required under section 216B.241, subdivision 1c, paragraph (f). The commissioner may contract with a political subdivision, nonprofit or community organization, public utility, municipality, or consumer-owned utility to implement low-income programs funded through the energy and conservation account.

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

(e) The commissioner must develop and establish guidelines for determining the eligibility of multifamily buildings to participate in energy conservation programs provided to low-income households. Notwithstanding the definition of low-income household in section 216B.2402, a consumer-owned utility or association may apply the most recent guidelines published by the department for purposes of determining the eligibility of multifamily buildings to participate in low-income programs. The commissioner must convene a stakeholder group to review and update these guidelines by August 1, 2021, and at least once every five years thereafter. The stakeholder group must include but is not limited to representatives of public utilities; municipal electric or gas utilities; electric cooperative associations; multifamily housing owners and developers; and low-income advocates.

(f) Up to 15 percent of a consumer-owned utility's spending on low-income energy conservation programs may be spent on preweatherization measures. A consumer-owned utility is prohibited from claiming energy savings from preweatherization measures toward the consumer-owned utility's energy savings goal.

(g) The commissioner must, by order, establish a list of preweatherization measures eligible for inclusion in low-income energy conservation programs no later than March 15, 2022.

(h) A Healthy AIR (Asbestos Insulation Removal) account is established as a separate account in the special revenue fund in the state treasury. A consumer-owned utility may elect to contribute money to the Healthy AIR account to provide preweatherization measures for households eligible for weatherization assistance from the state weatherization assistance program in section 216C.264. Remediation activities must be executed in conjunction with federal weatherization assistance program services. Money contributed to the account by a consumer-owned utility counts toward: (1) the minimum low-income spending requirement under paragraph (a); and (2) the cap on preweatherization measures under paragraph (f). Money in the account is annually appropriated to the commissioner of commerce to pay for Healthy AIR-related activities.

(i) This paragraph applies to a consumer-owned utility that supplies electricity to a low-income household whose primary heating fuel is supplied by an entity other than a public utility. Any spending on space and water heating energy conservation improvements and efficient fuel-switching by the consumer-owned utility on behalf of the low-income household may be applied to the consumer owned utility's spending requirement under paragraph (a). To the maximum extent possible, a consumer-owned utility providing services under this paragraph must offer the services in conjunction with weatherization services provided under section 216C.264.

Sec. 12. Minnesota Statutes 2022, section 216B.2403, subdivision 8, is amended to read:

Subd. 8. **Criteria for efficient fuel-switching improvements.** (a) A fuel-switching improvement is deemed efficient if, applying the technical criteria established under section 216B.241, subdivision 1d, paragraph (e), the improvement, relative to the fuel being displaced:

(1) results in a net reduction in the amount of source energy consumed for a particular use, measured on a fuel-neutral basis, using (i) the consumer-owned utility's or the utility's electricity supplier's annual system average efficiency, or (ii) if the utility elects, a seasonal, monthly, or more granular level of analysis for the electric utility system over the measure's life;

(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 fuel-switching improvement installed by an electric consumer-owned utility, the reduction in emissions must be measured ~~based on the hourly emissions profile of the consumer-owned utility or the utility's electricity supplier, as reported in the most recent resource plan approved by the commission under section 216B.2422. If the hourly emissions profile is not available, the commissioner must develop a method consumer-owned utilities must use to estimate that value~~ using (i) the consumer-owned utility's or the utility's electricity supplier's annual average emissions factor, or (ii) if the utility elects, the seasonal, monthly, or more granular level of analysis for the electric utility system over the measure's life; and

(3) is cost-effective, considering the costs and benefits from the perspective of the consumer-owned utility, participants, and society~~; and~~.

~~(4) is installed and operated in a manner that improves the consumer-owned utility's system load factor.~~

(b) For purposes of this subdivision, "source energy" means the total amount of primary energy required to deliver energy services, adjusted for losses in generation, transmission, and distribution, and expressed on a fuel-neutral basis.

(i) This paragraph applies to a consumer-owned utility that supplies electricity to a low-income household whose primary heating fuel is supplied by an entity other than a public utility. Any spending on space and water heating energy conservation improvements and efficient fuel-switching by the consumer-owned utility on behalf of the low-income household may be applied to the consumer owned utility's spending requirement in paragraph (a). To the maximum extent possible, a consumer-owned utility providing services under this paragraph must offer the services in conjunction with weatherization services provided under section 216C.264.

(j) An electric cooperative's spending on efficient fuel-switching improvements made in low-income households may be applied to the electric cooperative's low-income conservation spending requirement in paragraph (a).

Sec. 9. Minnesota Statutes 2022, section 216B.2403, subdivision 8, is amended to read:

Subd. 8. **Criteria for efficient fuel-switching improvements.** (a) A fuel-switching improvement is deemed efficient if, applying the technical criteria established under section 216B.241, subdivision 1d, paragraph (e), the improvement, relative to the fuel being displaced:

(1) results in a net reduction in the amount of source energy consumed for a particular use, measured on a fuel-neutral basis, using (i) the consumer-owned utility's or the utility's electricity supplier's annual system average efficiency, or (ii) if the utility elects, a seasonal, monthly, or more granular level of analysis for the electric utility system over the measure's life;

(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 fuel-switching improvement installed by an electric consumer-owned utility, the reduction in emissions must be measured ~~based on the hourly emissions profile of the consumer-owned utility or the utility's electricity supplier, as reported in the most recent resource plan approved by the commission under section 216B.2422. If the hourly emissions profile is not available, the commissioner must develop a method consumer-owned utilities must use to estimate that value~~ using (i) the consumer-owned utility's or the utility's electricity supplier's annual average emissions factor, or (ii) if the utility elects, a seasonal, monthly, or more granular level of analysis for the electric utility system over the measure's life; and

(3) is cost-effective, considering the costs and benefits from the perspective of the consumer-owned utility, participants, and society~~; and~~.

~~(4) is installed and operated in a manner that improves the consumer-owned utility's system load factor.~~

(b) For purposes of this subdivision, "source energy" means the total amount of primary energy required to deliver energy services, adjusted for losses in generation, transmission, and distribution, and expressed on a fuel-neutral basis.

Sec. 10. Minnesota Statutes 2022, 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 improvements and shall evaluate an energy conservation improvement program on how well it meets the goals set.

(b) A public utility providing electric service has an annual energy-savings goal equivalent to 1.75 percent of gross annual retail energy sales unless modified by the commissioner under paragraph (c). A public utility providing natural gas service has an annual energy-savings goal equivalent to one percent of gross annual retail energy sales, which cannot be lowered by the commissioner. The savings goals must be calculated based on the most recent three-year weather-normalized average. A public utility providing electric service may elect to carry forward energy savings in excess of 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 only be used to meet one year's goal.

(c) In its energy conservation and optimization plan filing, a public utility 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.

(d) 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.

The balance of the 1.75 percent annual energy savings goal may be achieved through energy savings from:

(1) additional energy conservation improvements;

(2) electric utility infrastructure projects approved by the commission under section 216B.1636 that result in increased efficiency greater than would have occurred through normal maintenance activity; or

(3) 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.

(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: (1) the costs and benefits to ratepayers, the utility, participants, and society; (2) the rate at which a public utility is

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Sec. 13. Minnesota Statutes 2022, section 216B.241, subdivision 2, is amended to read:

Subd. 2. **Public utility; energy conservation and optimization plans.** (a) The commissioner may require a public utility 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.

(b) A public utility shall file an energy conservation and optimization plan by June 1, on a schedule determined by order of the commissioner, but at least every three years. As provided in subdivisions 11 to 13, 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. The plan must estimate the lifetime energy savings and cumulative lifetime energy savings projected to be achieved under the plan. A plan filed by a public utility by June 1 must be approved or approved as modified by the commissioner by December 1 of that same year.

(c) The commissioner shall evaluate the plan 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 an energy conservation 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.

(d) The commissioner may require a utility subject to subdivision 1c to make an energy conservation improvement investment or expenditure whenever the commissioner finds

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increasing both its energy savings and its expenditures on energy conservation; and (3) the public utility's lifetime energy savings and cumulative energy savings.

(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 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 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 estimate progress made toward the statewide energy-savings goal under section 216B.2401.

~~(g) Notwithstanding any provision to the contrary, until July 1, 2026, spending by a public utility subject to this section on efficient fuel-switching improvements to meet energy savings goals under this section must not exceed 0.35 percent per year, averaged over three years, of the public utility's gross annual retail energy sales.~~

Sec. 11. Minnesota Statutes 2022, section 216B.241, subdivision 2, is amended to read:

Subd. 2. **Public utility; energy conservation and optimization plans.** (a) The commissioner may require a public utility 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.

(b) A public utility shall file an energy conservation and optimization plan by June 1, on a schedule determined by order of the commissioner, but at least every three years. As provided in subdivisions 11 to 13, 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. The plan must estimate the lifetime energy savings and cumulative lifetime energy savings projected to be achieved under the plan. A plan filed by a public utility by June 1 must be approved or approved as modified by the commissioner by December 1 of that same year.

(c) The commissioner shall evaluate the plan 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 an energy conservation 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.

(d) 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.

(e) Each public utility subject to this subdivision may spend and invest annually up to ten percent of the total amount ~~spent and invested~~ that the public utility spends and invests on energy conservation, efficient fuel-switching, or load management improvements under this section ~~by the public utility~~ on research and development projects that meet the applicable definition of energy conservation, efficient fuel-switching, or load management improvement.

(f) The commissioner shall consider and may require a public utility to undertake an energy conservation ~~program~~ or efficient fuel-switching program, subject to the requirements of subdivisions 11 and 12, that is suggested by an outside source, including a political subdivision, a nonprofit corporation, or community organization. In approving a proposal under this paragraph, the commissioner must consider the qualifications and experience of the entity proposing the program and any other criteria the commissioner deems relevant.

(g) A public utility, a political subdivision, or a nonprofit or community organization that has suggested an energy conservation program, the attorney general acting on behalf of consumers and small business interests, or a public utility customer that has suggested an energy conservation 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 energy conservation 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 an energy conservation program is not in the public interest.

(h) The commissioner may order a public utility to include, with the filing of the public utility's annual status report, the results of an independent audit of the public 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 public utility. The audit must specify the energy savings or increased efficiency in the use of energy within the service territory of the public utility that is the result of the public utility's spending and investments. The audit must evaluate the cost-effectiveness of the public utility's conservation programs.

(i) The energy conservation and optimization plan of each public utility subject to this section must include activities to improve energy efficiency in public schools served by the utility. As applicable to each public utility, at a minimum the activities must include programs to increase the efficiency of the school's lighting and heating and cooling systems, and to provide for building recommissioning, building operator training, and opportunities to educate students, teachers, and staff regarding energy efficiency measures implemented at the school.

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.

(e) Each public utility subject to this subdivision may spend and invest annually up to ten percent of the total amount ~~spent and invested~~ that the public utility spends and invests on energy conservation, efficient fuel-switching, or load management improvements under this section ~~by the public utility~~ on research and development projects that meet the applicable definition of energy conservation, efficient fuel-switching, or load management improvement.

(f) The commissioner shall consider and may require a public utility to undertake an energy conservation ~~program~~ or efficient fuel-switching program, subject to the requirements of subdivisions 11 and 12, that is suggested by an outside source, including a political subdivision, a nonprofit corporation, or community organization. In approving a proposal under this paragraph, the commissioner must consider the qualifications and experience of the entity proposing the program and any other criteria the commissioner deems relevant.

(g) A public utility, a political subdivision, or a nonprofit or community organization that has suggested an energy conservation program, the attorney general acting on behalf of consumers and small business interests, or a public utility customer that has suggested an energy conservation 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 energy conservation 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 an energy conservation program is not in the public interest.

(h) The commissioner may order a public utility to include, with the filing of the public utility's annual status report, the results of an independent audit of the public 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 public utility. The audit must specify the energy savings or increased efficiency in the use of energy within the service territory of the public utility that is the result of the public utility's spending and investments. The audit must evaluate the cost-effectiveness of the public utility's conservation programs.

(i) The energy conservation and optimization plan of each public utility subject to this section must include activities to improve energy efficiency in public schools served by the utility. As applicable to each public utility, at a minimum the activities must include programs to increase the efficiency of the school's lighting and heating and cooling systems, and to provide for building recommissioning, building operator training, and opportunities to educate students, teachers, and staff regarding energy efficiency measures implemented at the school.

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

(k) A public utility filing a conservation and optimization plan that includes an efficient fuel-switching program ~~to achieve the utility's energy savings goal~~ must, as part of the filing, demonstrate ~~by a comparison of greenhouse gas emissions between the fuels~~ that the requirements of subdivisions 11 or 12 are met, as applicable, using a full fuel-cycle energy analysis.

Sec. 14. Minnesota Statutes 2022, section 216B.241, subdivision 11, is amended to read:

Subd. 11. **Programs for efficient fuel-switching improvements; electric utilities.** (a) A public utility providing electric service at retail may include in the plan required under subdivision 2 a proposed goal for efficient fuel-switching improvements that the utility expects to achieve under the plan and the programs to implement efficient fuel-switching improvements or combinations of energy conservation improvements, fuel-switching improvements, and load management. For each program, the public utility must provide a proposed budget, an analysis of the program's cost-effectiveness, and estimated net energy and demand savings.

(b) The department may approve proposed programs for efficient fuel-switching improvements if the department determines the improvements meet the requirements of paragraph (d). ~~For fuel-switching improvements that require 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, if the department determines the primary purpose and effect of the program is energy efficiency.~~

(c) A public utility may file a rate schedule with the commission that provides for annual cost recovery of reasonable and prudent costs to implement and promote efficient fuel-switching programs. The utility, department, or other entity may propose, and the commission may ~~not~~ approve, modify, or reject, a proposal for a financial incentive to encourage efficient fuel-switching programs operated by a public utility providing electric service approved under this subdivision. When making a decision on the financial incentive proposal, the commission must apply the considerations established in section 216B.16, subdivision 6c, paragraphs (b) and (c).

(d) A fuel-switching improvement is deemed efficient if, applying the technical criteria established under section 216B.241, subdivision 1d, paragraph (e), the improvement meets the following criteria, relative to the fuel that is being displaced:

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

(k) A public utility filing a conservation and optimization plan that includes an efficient fuel-switching program ~~to achieve the utility's energy savings goal~~ must, as part of the filing, demonstrate ~~by a comparison of greenhouse gas emissions between the fuels~~ that the requirements of subdivisions 11 or 12 are met, as applicable~~, using a full fuel-cycle energy analysis~~.

Sec. 12. Minnesota Statutes 2022, section 216B.241, subdivision 11, is amended to read:

Subd. 11. **Programs for efficient fuel-switching improvements; electric utilities.** (a) A public utility providing electric service at retail may include in the plan required under subdivision 2 a proposed goal for efficient fuel-switching improvements that the utility expects to achieve under the plan and the programs to implement efficient fuel-switching improvements or combinations of energy conservation improvements, fuel-switching improvements, and load management. For each program, the public utility must provide a proposed budget, an analysis of the program's cost-effectiveness, and estimated net energy and demand savings.

(b) The department may approve proposed programs for efficient fuel-switching improvements if the department determines the improvements meet the requirements of paragraph (d). ~~For fuel-switching improvements that require 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, if the department determines the primary purpose and effect of the program is energy efficiency.~~

(c) A public utility may file a rate schedule with the commission that provides for annual cost recovery of reasonable and prudent costs to implement and promote efficient fuel-switching programs. The utility, department, or other entity may propose, and the commission may ~~not~~ approve, modify, or reject, a proposal for a financial incentive to encourage efficient fuel-switching programs operated by a public utility providing electric service approved under this subdivision. When making a decision on the financial incentive proposal, the commission must apply the considerations established in section 216B.16, subdivision 6c, paragraphs (b) and (c).

(d) A fuel-switching improvement is deemed efficient if, applying the technical criteria established under section 216B.241, subdivision 1d, paragraph (e), the improvement meets the following criteria, relative to the fuel that is being displaced:

(1) results in a net reduction in the amount of source energy consumed for a particular use, measured on a fuel-neutral basis, using (i) the utility's annual system average efficiency, or (ii) if the utility elects, a seasonal, monthly, or more granular level of analysis for the electric utility system over the measure's life;

(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 fuel-switching improvement installed by an electric utility, the reduction in emissions must be measured ~~based on the hourly emission profile of the electric utility, using the hourly emissions profile in the most recent resource plan approved by the commission under section 216B.2422~~ using (i) the utility's annual average emissions factor, or (ii) if the utility elects, a seasonal, monthly, or more granular level of analysis for the electric utility system over the measure's life; and

(3) is cost-effective, considering the costs and benefits from the perspective of the utility, participants, and society~~; and~~.

~~(4) is installed and operated in a manner that improves the utility's system load factor.~~

(e) For purposes of this subdivision, "source energy" means the total amount of primary energy required to deliver energy services, adjusted for losses in generation, transmission, and distribution, and expressed on a fuel-neutral basis.

Sec. 15. Minnesota Statutes 2022, section 216B.241, subdivision 12, is amended to read:

Subd. 12. **Programs for efficient fuel-switching improvements; natural gas utilities.** (a) As part of a public utility's plan filed under subdivision 2, a public utility that provides natural gas service to Minnesota retail customers may propose one or more programs to install electric technologies that reduce the consumption of natural gas by the utility's retail customers as an energy conservation improvement. The commissioner may approve a proposed program if the commissioner, applying the technical criteria developed under section 216B.241, subdivision 1d, paragraph (e), determines that:

(1) the electric technology to be installed meets the criteria established under section 216B.241, subdivision 11, paragraph (d), clauses (1) and (2); and

(2) the program is cost-effective, considering the costs and benefits to ratepayers, the utility, participants, and society.

(b) If a program is approved by the commission under this subdivision, the public utility may count the program's energy savings toward its energy savings goal under section 216B.241, subdivision 1c. Notwithstanding section 216B.2402, subdivision 4, efficient fuel-switching achieved through programs approved under this subdivision is energy conservation.

(c) A public utility may file rate schedules with the commission that provide annual cost-recovery for programs approved by the department under this subdivision, including reasonable and prudent costs to implement and promote the programs.

(1) results in a net reduction in the amount of source energy consumed for a particular use, measured on a fuel-neutral basis, using (i) the utility's annual system average efficiency, or (ii) if the utility elects, a seasonal, monthly, or more granular level of analysis for the electric utility system over the measure's life;

(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 fuel-switching improvement installed by an electric utility, the reduction in emissions must be measured ~~based on the hourly emission profile of the electric utility, using the hourly emissions profile in the most recent resource plan approved by the commission under section 216B.2422~~ using (i) the utility's annual average emissions factor, or (ii) if the utility elects, a seasonal, monthly or more granular level of analysis, for the electric utility system over the measure's life; and

(3) is cost-effective, considering the costs and benefits from the perspective of the utility, participants, and society~~; and~~.

~~(4) is installed and operated in a manner that improves the utility's system load factor.~~

(e) For purposes of this subdivision, "source energy" means the total amount of primary energy required to deliver energy services, adjusted for losses in generation, transmission, and distribution, and expressed on a fuel-neutral basis.

Sec. 13. Minnesota Statutes 2022, section 216B.241, subdivision 12, is amended to read:

Subd. 12. **Programs for efficient fuel-switching improvements; natural gas utilities.** (a) As part of a public utility's plan filed under subdivision 2, a public utility that provides natural gas service to Minnesota retail customers may propose one or more programs to install electric technologies that reduce the consumption of natural gas by the utility's retail customers as an energy conservation improvement. The commissioner may approve a proposed program if the commissioner, applying the technical criteria developed under section 216B.241, subdivision 1d, paragraph (e), determines that:

(1) the electric technology to be installed meets the criteria established under section 216B.241, subdivision 11, paragraph (d), clauses (1) and (2); and

(2) the program is cost-effective, considering the costs and benefits to ratepayers, the utility, participants, and society.

(b) If a program is approved by the commission under this subdivision, the public utility may count the program's energy savings toward its energy savings goal under section 216B.241, subdivision 1c. Notwithstanding section 216B.2402, subdivision 4, efficient fuel-switching achieved through programs approved under this subdivision is energy conservation.

(c) A public utility may file rate schedules with the commission that provide annual cost-recovery for programs approved by the department under this subdivision, including reasonable and prudent costs to implement and promote the programs.

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(d) The commission may approve, modify, or reject a proposal made by the department or a utility for an incentive plan to encourage efficient fuel-switching programs approved under this subdivision, applying the considerations established under section 216B.16, subdivision 6c, paragraphs (b) and (c). The commission may approve a financial incentive mechanism that is calculated based on the combined energy savings and net benefits that the commission has determined have been achieved by a program approved under this subdivision, provided the commission determines that the financial incentive mechanism is in the ratepayers' interest.

~~(e) A public utility is not eligible for a financial incentive for an efficient fuel-switching program under this subdivision in any year in which the utility achieves energy savings below one percent of gross annual retail energy sales, excluding savings achieved through fuel-switching programs.~~

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(d) The commission may approve, modify, or reject a proposal made by the department or a utility for an incentive plan to encourage efficient fuel-switching programs approved under this subdivision, applying the considerations established under section 216B.16, subdivision 6c, paragraphs (b) and (c). The commission may approve a financial incentive mechanism that is calculated based on the combined energy savings and net benefits that the commission has determined have been achieved by a program approved under this subdivision, provided the commission determines that the financial incentive mechanism is in the ratepayers' interest.

~~(e) A public utility is not eligible for a financial incentive for an efficient fuel-switching program under this subdivision in any year in which the utility achieves energy savings below one percent of gross annual retail energy sales, excluding savings achieved through fuel-switching programs.~~

Section 1. Minnesota Statutes 2022, section 216B.2427, subdivision 1, is amended to read:

Subdivision 1. **Definitions.** (a) For the purposes of this section and section 216B.2428, the following terms have the meanings given.

(b) "Biogas" means gas produced by the anaerobic digestion of biomass, gasification of biomass, or other effective conversion processes.

(c) "Carbon capture" means the capture of greenhouse gas emissions that would otherwise be released into the atmosphere.

(d) "Carbon-free resource" means an electricity generation facility whose operation does not contribute to statewide greenhouse gas emissions, as defined in section 216H.01, subdivision 2.

(e) "Disadvantaged community" means a community in Minnesota that is:

(1) defined as disadvantaged by the federal agency disbursing federal funds, when the federal agency is providing funds for an innovative resource; or

(2) an environmental justice area, as defined under section 216B.1691, subdivision 1.

~~(e)~~ (f) "District energy" means a heating or cooling system that is solar thermal powered or that uses the constant temperature of the earth or underground aquifers as a thermal exchange medium to heat or cool multiple buildings connected through a piping network.

~~(f)~~ (g) "Energy efficiency" has the meaning given in section 216B.241, subdivision 1, paragraph (f), but does not include energy conservation investments that the commissioner determines could reasonably be included in a utility's conservation improvement program.

~~(g)~~ (h) "Greenhouse gas emissions" means emissions of carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride emitted by anthropogenic sources within Minnesota and from the generation of electricity imported from outside the state and consumed in Minnesota, excluding carbon dioxide that is injected

into geological formations to prevent its release to the atmosphere in compliance with applicable laws.

~~(h)~~ (i) "Innovative resource" means biogas, renewable natural gas, power-to-hydrogen, power-to-ammonia, carbon capture, strategic electrification, district energy, and energy efficiency.

~~(i)~~ (j) "Lifecycle greenhouse gas emissions" means the aggregate greenhouse gas emissions resulting from the production, processing, transmission, and consumption of an energy resource.

~~(j)~~ (k) "Lifecycle greenhouse gas emissions intensity" means lifecycle greenhouse gas emissions per unit of energy delivered to an end user.

~~(k)~~ (l) "Nonexempt customer" means a utility customer that has not been included in a utility's innovation plan under subdivision 3, paragraph (f).

~~(l)~~ (m) "Power-to-ammonia" means the production of ammonia from hydrogen produced via power-to-hydrogen using a process that has a lower lifecycle greenhouse gas intensity than does natural gas produced from conventional geologic sources.

~~(m)~~ (n) "Power-to-hydrogen" means the use of electricity generated by a carbon-free resource to produce hydrogen.

~~(n)~~ (o) "Renewable energy" has the meaning given in section 216B.2422, subdivision 1.

~~(o)~~ (p) "Renewable natural gas" means biogas that has been processed to be interchangeable with, and that has a lower lifecycle greenhouse gas intensity than, natural gas produced from conventional geologic sources.

~~(p)~~ (q) "Solar thermal" has the meaning given to qualifying solar thermal project in section 216B.2411, subdivision 2, paragraph (d).

~~(q)~~ (r) "Strategic electrification" means the installation of electric end-use equipment in an existing building in which natural gas is a primary or back-up fuel source, or in a newly constructed building in which a customer receives natural gas service for one or more end-uses, provided that the electric end-use equipment:

(1) results in a net reduction in statewide greenhouse gas emissions, as defined in section 216H.01, subdivision 2, over the life of the equipment when compared to the most efficient commercially available natural gas alternative; and

(2) is installed and operated in a manner that improves the load factor of the customer's electric utility.

Strategic electrification does not include investments that the commissioner determines could reasonably be included in the natural gas utility's conservation improvement program under section 216B.241.

(s) "Thermal energy network" means a project that provides heating and cooling to multiple buildings connected via underground piping containing fluids that, in concert with heat pumps, exchange thermal energy from the earth, underground or surface waters, wastewater, or other heat sources.

~~(r)~~ (t) "Total incremental cost" means the calculation of the following components of a utility's innovation plan approved by the commission under subdivision 2:

(1) the sum of:

(i) return of and on capital investments for the production, processing, pipeline interconnection, storage, and distribution of innovative resources;

(ii) incremental operating costs associated with capital investments in infrastructure for the production, processing, pipeline interconnection, storage, and distribution of innovative resources;

(iii) incremental costs to procure innovative resources from third parties;

(iv) incremental costs to develop and administer programs; and

(v) incremental costs for research and development related to innovative resources;

(2) less the sum of:

(i) value received by the utility upon the resale of innovative resources or innovative resource by-products, including any environmental credits included with the resale of renewable gaseous fuels or value received by the utility when innovative resources are used as vehicle fuel;

(ii) cost savings achieved through avoidance of purchases of natural gas produced from conventional geologic sources, including but not limited to avoided commodity purchases and avoided pipeline costs; and

(iii) other revenues received by the utility that are directly attributable to the utility's implementation of an innovation plan.

~~(s)~~ (u) "Utility" means a public utility, as defined in section 216B.02, subdivision 4, that provides natural gas sales or natural gas transportation services to customers in Minnesota.

Sec. 2. Minnesota Statutes 2022, section 216B.2427, is amended by adding a subdivision to read:

Subd. 9a. **Thermal energy networks.** Innovation plans filed after July 1, 2024, under this section by a utility with more than 800,000 customers must include spending of at least 15 percent of the utility's proposed total incremental costs over the five-year term of the proposed innovation plan for thermal energy networks projects. If the utility has developed or is developing thermal energy network projects outside of an approved innovation plan, the utility may apply the budget for the projects toward the 15 percent minimum requirement

without counting the costs against the limitations on utility customer costs under subdivision 3.

Sec. 2. Minnesota Statutes 2022, section 216B.2425, subdivision 1, is amended to read:

Subdivision 1. **List.** The commission shall maintain a list of certified high-voltage transmission line and grid enhancing technology projects.

EFFECTIVE DATE. This section is effective June 1, 2025.

Sec. 3. Minnesota Statutes 2022, section 216B.2425, is amended by adding a subdivision to read:

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

(b) "Capacity" means the maximum amount of electricity that can flow through a transmission line while observing industry safety standards.

(c) "Congestion" means a condition in which a lack of transmission line capacity prevents the delivery of the lowest-cost electricity dispatched to meet load at a specific location.

(d) "Dynamic line rating" means hardware or software used to calculate the thermal limit of existing transmission lines at a specific point in time by incorporating information on real-time and forecasted weather conditions.

(e) "Grid enhancing technology" means hardware or software that reduces congestion or enhances the flexibility of the transmission system by increasing the capacity of a high-voltage transmission line or rerouting electricity from overloaded to uncongested lines, while maintaining industry safety standards. Grid enhancing technologies include but are not limited to dynamic line rating, advanced power flow controllers, and topology optimization.

(f) "Power flow controller" means hardware and software used to reroute electricity from overloaded transmission lines to underutilized transmission lines.

(g) "Thermal limit" means the temperature a transmission line reaches when heat from the electric current flow within the transmission line causes excessive sagging of the transmission line.

(h) "Topology optimization" means a software technology that uses mathematical models to identify reconfigurations in the transmission grid in order to reroute electricity from overloaded transmission lines to underutilized transmission lines.

(i) "Transmission line" has the meaning given to "high-voltage transmission line" in section 216E.01. subdivision 4.

(j) "Transmission system" means a network of high-voltage transmission lines owned or operated by an entity subject to this section that transports electricity to Minnesota customers.

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

Sec. 4. Minnesota Statutes 2022, section 216B.2425, subdivision 2, is amended to read:

Subd. 2. **List development; transmission and grid enhancing technology projects report.** (a) By November 1 of each odd-numbered year, a transmission projects report must be submitted to the commission by each utility, organization, or company that:

(1) is a public utility, a municipal utility, a cooperative electric association, the generation and transmission organization that serves each utility or association, or a transmission company; and

(2) owns or operates electric transmission lines in Minnesota, except a company or organization that owns a transmission line that serves a single customer or interconnects a single generating facility.

(b) The report may be submitted jointly or individually to the commission.

(c) The report must:

(1) list specific present and reasonably foreseeable future inadequacies in the transmission system in Minnesota;

(2) identify alternative means of addressing each inadequacy listed, including grid enhancing technologies such as dynamic line rating, power flow controllers, topology optimization, and other hardware or software that reduce congestion or enhance the flexibility of the transmission system;

(3) identify general economic, environmental, and social issues associated with each alternative; and

(4) provide a summary of public input related to the list of inadequacies and the role of local government officials and other interested persons in assisting to develop the list and analyze alternatives.

(d) To meet the requirements of this subdivision, reporting parties may rely on available information and analysis developed by a regional transmission organization or any subgroup of a regional transmission organization and may develop and include additional information as necessary.

(e) In addition to providing the information required under this subdivision, a utility operating under a multiyear rate plan approved by the commission under section 216B.16, subdivision 19, shall identify in its report investments that it considers necessary to modernize the transmission and distribution system by enhancing reliability, improving security against cyber and physical threats, and by increasing energy conservation opportunities by facilitating

Sec. 16. Minnesota Statutes 2022, section 216B.243, subdivision 3b, is amended to read:

Subd. 3b. **Nuclear power plant; certain new construction prohibited; relicensing.** (a) Except as provided in paragraph (c), the commission may not issue a certificate of need for the construction of a new nuclear-powered electric generating plant.

(b) Any certificate of need for additional storage of spent nuclear fuel for a facility seeking a license extension shall address the impacts of continued operations over the period for which approval is sought.

(c) The commission may issue a certificate of need to construct a new nuclear-powered generating plant with a maximum generation capacity of 300 megawatts.

Sec. 17. Minnesota Statutes 2023 Supplement, section 216C.08, is amended to read:

216C.08 JURISDICTION.

(a) The commissioner has sole authority and responsibility ~~for the administration of sections 216C.05 to 216C.30 and 216C.375~~ to administer this chapter. Other laws notwithstanding, the authority granted to the commissioner ~~shall supersede~~ under this section supersedes the authority given any other agency whenever overlapping, duplication, or additional administrative or legal procedures might occur in ~~the administration of sections 216C.05 to 216C.30 and 216C.375~~ administering this chapter. The commissioner shall consult with other state departments or agencies in matters related to energy and shall contract with ~~them~~ the other state departments or agencies to provide appropriate services to effectuate the purposes of ~~sections 216C.05 to 216C.30 and 216C.375~~ this chapter. Any other department, agency, or official of this state or political subdivision thereof which would in any way affect the administration or enforcement of ~~sections 216C.05 to 216C.30 and 216C.375~~ this chapter shall cooperate and coordinate all activities with the commissioner to assure orderly and efficient administration and enforcement of ~~sections 216C.05 to 216C.30 and 216C.375~~ this chapter.

(b) The commissioner shall designate a liaison officer whose duty shall be to insure the maximum possible consistency in procedures and to eliminate duplication between the commissioner and the other agencies that may be involved in energy.

Sec. 18. Minnesota Statutes 2023 Supplement, section 216C.09, is amended to read:

216C.09 COMMISSIONER DUTIES.

(a) The commissioner shall:

communication between the utility and its customers through the use of two-way meters, control technologies, energy storage and microgrids, technologies to enable demand response, and other innovative technologies.

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

Sec. 14. Minnesota Statutes 2023 Supplement, section 216C.08, is amended to read:

216C.08 JURISDICTION.

(a) The commissioner has sole authority and responsibility ~~for the administration of sections 216C.05 to 216C.30 and 216C.375~~ to administer this chapter. Other laws notwithstanding, the authority granted to the commissioner ~~shall supersede~~ under this section supersedes the authority given any other agency whenever overlapping, duplication, or additional administrative or legal procedures might occur in ~~the administration of sections 216C.05 to 216C.30 and 216C.375~~ administering this chapter. The commissioner shall consult with other state departments or agencies in matters related to energy and shall contract with ~~them~~ the other state departments or agencies to provide appropriate services to effectuate the purposes of ~~sections 216C.05 to 216C.30 and 216C.375~~ this chapter. Any other department, agency, or official of this state or political subdivision thereof which would in any way affect the administration or enforcement of ~~sections 216C.05 to 216C.30 and 216C.375~~ this chapter shall cooperate and coordinate all activities with the commissioner to assure orderly and efficient administration and enforcement of ~~sections 216C.05 to 216C.30 and 216C.375~~ this chapter.

(b) The commissioner shall designate a liaison officer whose duty shall be to insure the maximum possible consistency in procedures and to eliminate duplication between the commissioner and the other agencies that may be involved in energy.

Sec. 15. Minnesota Statutes 2023 Supplement, section 216C.09, is amended to read:

216C.09 COMMISSIONER DUTIES.

(a) The commissioner shall:

(1) manage the department as the central repository within the state government for the collection of data on energy;

(2) prepare and adopt an emergency allocation plan specifying actions to be taken in the event of an impending serious shortage of energy, or a threat to public health, safety, or welfare;

(3) undertake a continuing assessment of trends in the consumption of all forms of energy and analyze the social, economic, and environmental consequences of these trends;

(4) carry out energy ~~conservation~~ measures as specified by the legislature and recommend to the governor and the legislature additional energy policies and conservation measures as required to meet the objectives of ~~sections 216C.05 to 216C.30 and 216C.375~~ this chapter;

(5) collect and analyze data relating to present and future demands and resources for all sources of energy;

(6) evaluate policies governing the establishment of rates and prices for energy as related to energy conservation, and other goals and policies of ~~sections 216C.05 to 216C.30 and 216C.375~~ this chapter, and make recommendations for changes in energy pricing policies and rate schedules;

(7) study the impact and relationship of the state energy policies to international, national, and regional energy policies;

(8) design and implement a state program for the conservation of energy; this program shall include but not be limited to, general commercial, industrial, and residential, and transportation areas; such program shall also provide for the evaluation of energy systems as they relate to lighting, heating, refrigeration, air conditioning, building design and operation, and appliance manufacturing and operation;

(9) inform and educate the public about the sources and uses of energy and the ways in which persons can conserve energy;

(10) dispense funds made available for the purpose of research studies and projects of professional and civic orientation, which are related to either energy conservation, resource recovery, or the development of alternative energy technologies which conserve nonrenewable energy resources while creating minimum environmental impact;

(11) charge other governmental departments and agencies involved in energy-related activities with specific information gathering goals and require that those goals be met;

(12) design a comprehensive program for the development of indigenous energy resources. The program shall include, but not be limited to, providing technical, informational, educational, and financial services and materials to persons, businesses, municipalities, and organizations involved in the development of solar, wind, hydropower, peat, fiber fuels, biomass, and other alternative energy resources. The program shall be evaluated by the alternative energy technical activity; and

(1) manage the department as the central repository within the state government for the collection of data on energy;

(2) prepare and adopt an emergency allocation plan specifying actions to be taken in the event of an impending serious shortage of energy, or a threat to public health, safety, or welfare;

(3) undertake a continuing assessment of trends in the consumption of all forms of energy and analyze the social, economic, and environmental consequences of these trends;

(4) carry out energy ~~conservation~~ measures as specified by the legislature and recommend to the governor and the legislature additional energy policies and conservation measures as required to meet the objectives of ~~sections 216C.05 to 216C.30 and 216C.375~~ this chapter;

(5) collect and analyze data relating to present and future demands and resources for all sources of energy;

(6) evaluate policies governing the establishment of rates and prices for energy as related to energy conservation, and other goals and policies of ~~sections 216C.05 to 216C.30 and 216C.375~~ this chapter, and make recommendations for changes in energy pricing policies and rate schedules;

(7) study the impact and relationship of the state energy policies to international, national, and regional energy policies;

(8) design and implement a state program for the conservation of energy; this program shall include but not be limited to, general commercial, industrial, and residential, and transportation areas; such program shall also provide for the evaluation of energy systems as they relate to lighting, heating, refrigeration, air conditioning, building design and operation, and appliance manufacturing and operation;

(9) inform and educate the public about the sources and uses of energy and the ways in which persons can conserve energy;

(10) dispense funds made available for the purpose of research studies and projects of professional and civic orientation, which are related to either energy conservation, resource recovery, or the development of alternative energy technologies which conserve nonrenewable energy resources while creating minimum environmental impact;

(11) charge other governmental departments and agencies involved in energy-related activities with specific information gathering goals and require that those goals be met;

(12) design a comprehensive program for the development of indigenous energy resources. The program shall include, but not be limited to, providing technical, informational, educational, and financial services and materials to persons, businesses, municipalities, and organizations involved in the development of solar, wind, hydropower, peat, fiber fuels, biomass, and other alternative energy resources. The program shall be evaluated by the alternative energy technical activity; and

(13) dispense loans, grants, or other financial aid from money received from litigation or settlement of alleged violations of federal petroleum-pricing regulations made available to the department for that purpose.

(b) Further, the commissioner may participate fully in hearings before the Public Utilities Commission on matters pertaining to rate design, cost allocation, efficient resource utilization, utility conservation investments, small power production, cogeneration, and other rate issues. The commissioner shall support the policies stated in section 216C.05 and shall prepare and defend testimony proposed to encourage energy conservation improvements as defined in section 216B.241.

Sec. 19. Minnesota Statutes 2022, section 216C.10, is amended to read:

216C.10 COMMISSIONER POWERS.

(a) The commissioner may:

(1) adopt rules under chapter 14 as necessary to carry out the purposes of ~~sections 216C.05 to 216C.30~~ this chapter;

(2) make all contracts under ~~sections 216C.05 to 216C.30~~ this chapter and do all things necessary to cooperate with the United States government, and to qualify for, accept, and disburse any grant intended ~~for the administration of sections 216C.05 to 216C.30~~ to administer this chapter;

(3) provide on-site technical assistance to units of local government in order to enhance local capabilities for dealing with energy problems;

(4) administer for the state, energy programs under federal law, regulations, or guidelines, and coordinate the programs and activities with other state agencies, units of local government, and educational institutions;

(5) develop a state energy investment plan with yearly energy conservation and alternative energy development goals, investment targets, and marketing strategies;

(6) perform market analysis studies relating to conservation, alternative and renewable energy resources, and energy recovery;

(7) assist with the preparation of proposals for innovative conservation, renewable, alternative, or energy recovery projects;

(8) manage and disburse funds made available for the purpose of research studies or demonstration projects related to energy conservation or other activities deemed appropriate by the commissioner;

(9) intervene in certificate of need proceedings before the Public Utilities Commission;

(10) collect fees from recipients of loans, grants, or other financial aid from money received from litigation or settlement of alleged violations of federal petroleum-pricing

(13) dispense loans, grants, or other financial aid from money received from litigation or settlement of alleged violations of federal petroleum-pricing regulations made available to the department for that purpose.

(b) Further, the commissioner may participate fully in hearings before the Public Utilities Commission on matters pertaining to rate design, cost allocation, efficient resource utilization, utility conservation investments, small power production, cogeneration, and other rate issues. The commissioner shall support the policies stated in section 216C.05 and shall prepare and defend testimony proposed to encourage energy conservation improvements as defined in section 216B.241.

Sec. 16. Minnesota Statutes 2022, section 216C.10, is amended to read:

216C.10 COMMISSIONER POWERS.

(a) The commissioner may:

(1) adopt rules under chapter 14 as necessary to carry out the purposes of ~~sections 216C.05 to 216C.30~~ this chapter;

(2) make all contracts under ~~sections 216C.05 to 216C.30~~ this chapter and do all things necessary to cooperate with the United States government, and to qualify for, accept, and disburse any grant intended ~~for the administration of sections 216C.05 to 216C.30~~ to administer this chapter;

(3) provide on-site technical assistance to units of local government in order to enhance local capabilities for dealing with energy problems;

(4) administer for the state, energy programs under federal law, regulations, or guidelines, and coordinate the programs and activities with other state agencies, units of local government, and educational institutions;

(5) develop a state energy investment plan with yearly energy conservation and alternative energy development goals, investment targets, and marketing strategies;

(6) perform market analysis studies relating to conservation, alternative and renewable energy resources, and energy recovery;

(7) assist with the preparation of proposals for innovative conservation, renewable, alternative, or energy recovery projects;

(8) manage and disburse funds made available for the purpose of research studies or demonstration projects related to energy conservation or other activities deemed appropriate by the commissioner;

(9) intervene in certificate of need proceedings before the Public Utilities Commission;

(10) collect fees from recipients of loans, grants, or other financial aid from money received from litigation or settlement of alleged violations of federal petroleum-pricing

regulations, which fees must be used to pay the department's costs in administering those financial aids; and

(11) collect fees from proposers and operators of conservation and other energy-related programs that are reviewed, evaluated, or approved by the department, other than proposers that are political subdivisions or community or nonprofit organizations, to cover the department's cost in making the reviewal, evaluation, or approval and in developing additional programs for others to operate.

(b) Notwithstanding any other law, the commissioner is designated the state agent to apply for, receive, and accept federal or other funds made available to the state for the purposes of ~~sections 216C.05 to 216C.30~~ this chapter.

regulations, which fees must be used to pay the department's costs in administering those financial aids; and

(11) collect fees from proposers and operators of conservation and other energy-related programs that are reviewed, evaluated, or approved by the department, other than proposers that are political subdivisions or community or nonprofit organizations, to cover the department's cost in making the reviewal, evaluation, or approval and in developing additional programs for others to operate.

(b) Notwithstanding any other law, the commissioner is designated the state agent to apply for, receive, and accept federal or other funds made available to the state for the purposes of ~~sections 216C.05 to 216C.30~~ this chapter.

Sec. 17. Minnesota Statutes 2023 Supplement, section 216C.331, subdivision 1, is amended to read:

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

(b) "Aggregated customer energy use data" means customer energy use data that is combined into one collective data point per time interval. Aggregated customer energy use data is data with any unique identifiers or other personal information removed that a qualifying utility collects and aggregates in at least monthly intervals for an entire building on a covered property.

(c) "Benchmark" means to electronically input into a benchmarking tool ~~the total~~ whole building energy use data and other descriptive information about a building that is required by a benchmarking tool.

(d) "Benchmarking information" means data related to a building's energy use generated by a benchmarking tool, and other information about the building's physical and operational characteristics. Benchmarking information includes but is not limited to the building's:

(1) address;

(2) owner and, if applicable, the building manager responsible for operating the building's physical systems;

(3) total floor area, expressed in square feet;

(4) energy use intensity;

(5) greenhouse gas emissions; and

(6) energy performance score comparing the building's energy use with that of similar buildings.

(e) "Benchmarking tool" means the United States Environmental Protection Agency's Energy Star Portfolio Manager tool or an equivalent tool determined by the commissioner.

(f) "Covered property" means any property that is served by an investor-owned utility in Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, or Washington County, or in any city outside the metropolitan area with a population of over 50,000 residents, as determined by the Minnesota State Demographic Center, served by a municipal energy utility or investor-owned utility, and that has one or more buildings containing in sum 50,000 gross square feet or greater. Covered property does not include:

(1) a residential property containing fewer than five dwelling units;

(2) a property that is: (i) classified as manufacturing under the North American Industrial Classification System; (ii) an energy-intensive trade-exposed customer, as defined in section 216B.1696; (iii) an electric power generation facility; (iv) a mining facility; or (v) an industrial building otherwise incompatible with benchmarking in the benchmarking tool, as determined by the commissioner;

(3) an agricultural building;

(4) a multitenant building that is served by a utility that ~~cannot supply~~ is not supplying aggregated customer usage data under subdivision 8 or is not using a customer usage data aggregation program to supply aggregated customer usage data to the benchmarking tool; or

(5) other property types that do not meet the purposes of this section, as determined by the commissioner.

(g) "Customer energy use data" means data collected from utility customer meters that reflect the quantity, quality, or timing of customers' energy use.

(h) "Energy" means electricity, natural gas, steam, or another product used to: (1) provide heating, cooling, lighting, or water heating; or (2) power other end uses in a building.

(i) "Energy performance score" means a numerical value from one to 100 that the Energy Star Portfolio Manager tool calculates to rate a building's energy efficiency against that of comparable buildings nationwide.

(j) "Energy Star Portfolio Manager" means an interactive resource management tool developed by the United States Environmental Protection Agency that (1) enables the periodic entry of a building's energy use data and other descriptive information about a building, and (2) rates a building's energy efficiency against that of comparable buildings nationwide.

(k) "Energy use intensity" means the total annual energy consumed in a building divided by the building's total floor area.

(l) "Financial distress" means a covered property that, at the time benchmarking is conducted:

(1) is the subject of a qualified tax lien sale or public auction due to property tax arrearages;

(2) is controlled by a court-appointed receiver based on financial distress;

(3) is owned by a financial institution through default by the borrower;

(4) has been acquired by deed in lieu of foreclosure; or

(5) has a senior mortgage that is subject to a notice of default.

(m) "Local government" means a statutory or home rule municipality or county.

(n) "Owner" means:

(1) an individual or entity that possesses title to a covered property; or

(2) an agent authorized to act on behalf of the covered property owner.

(o) "Qualifying utility" means ~~a utility serving the covered property, including~~:

(1) an electric or gas utility, including:

(i) an investor-owned electric or gas utility serving customers in Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, or Washington County, or in any city outside the metropolitan area with a population of over 50,000 residents, as determined by the Minnesota State Demographic Center, and serving properties with one or more buildings containing in sum 50,000 gross square feet or greater; or

(ii) a municipally owned electric or gas utility serving customers in any city with a population of over 50,000 residents, as determined by the Minnesota State Demographic Center, and serving properties with one or more buildings containing in sum 50,000 gross square feet or greater;

(2) a natural gas supplier with five or more active commercial connections, accounts, or customers in the state and serving customers in Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, or Washington County, or in any city outside the metropolitan area with a population of over 50,000 residents, as determined by the Minnesota State Demographic Center, and serving properties with one or more buildings containing in sum 50,000 gross square feet or greater; or

(3) a district steam, hot water, or chilled water provider serving customers in Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, or Washington County, or in any city outside the metropolitan area with a population of over 50,000 residents, as determined by the Minnesota State Demographic Center, and serving properties with one or more buildings containing in sum 50,000 gross square feet or greater.

(p) "Tenant" means a person that occupies or holds possession of a building or part of a building or premises pursuant to a lease agreement.

Sec. 20. Minnesota Statutes 2022, section 216C.435, subdivision 3a, is amended to read:

Subd. 3a. **~~Cost-effective~~ Energy improvements.** "~~Cost-effective~~ Energy improvements" means:

(1) any new construction, renovation, or retrofitting of qualifying commercial real property to improve energy efficiency that: (i) is permanently affixed to the property~~,~~; and (ii) results in a net reduction in energy consumption ~~without altering the principal source of energy, and has been identified~~ or greenhouse gas emissions, as documented 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 emissions avoided;

(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~~ an eligible energy improvement by the commissioner under section 216B.241, subdivision 1d, paragraph (a);

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

(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~~ documented 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~~, along with the estimated amount of related renewable energy production.

Sec. 21. Minnesota Statutes 2022, section 216C.435, subdivision 3b, is amended to read:

Subd. 3b. **Commercial PACE loan contractor.** "Commercial PACE loan contractor" means a person or entity that installs ~~cost-effective energy~~ eligible improvements financed under a commercial PACE loan program.

(q) "Total floor area" means the sum of gross square footage inside a building's envelope, measured between the outside exterior walls of the building. Total floor area includes covered parking structures.

(r) "Utility customer" means the building owner or tenant listed on the utility's records as the customer liable for payment of the utility service or additional charges assessed on the utility account.

(s) "Whole building energy use data" means all energy consumed in a building, whether purchased from a third party or generated at the building site or from any other source.

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

Sec. 18. Minnesota Statutes 2022, section 216C.435, subdivision 3a, is amended to read:

Subd. 3a. **~~Cost-effective~~ Energy improvements.** "~~Cost-effective~~ Energy improvements" means:

(1) any new construction, renovation, or retrofitting of qualifying commercial real property to improve energy efficiency that: (i) is permanently affixed to the property~~,~~; and (ii) results in a net reduction in energy consumption ~~without altering the principal source of energy, and has been identified~~ or greenhouse gas emissions, as documented 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 emissions avoided;

(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~~ an eligible energy improvement by the commissioner under section 216B.241, subdivision 1d, paragraph (a);

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

(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~~ documented 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~~, along with the estimated amount of related renewable energy production.

Sec. 19. Minnesota Statutes 2022, section 216C.435, subdivision 3b, is amended to read:

Subd. 3b. **Commercial PACE loan contractor.** "Commercial PACE loan contractor" means a person or entity that installs ~~cost-effective energy~~ eligible improvements financed under a commercial PACE loan program.

Sec. 22. Minnesota Statutes 2022, section 216C.435, is amended by adding a subdivision to read:

Subd. 3e. **Eligible improvement.** "Eligible improvement" means one or more energy improvements, resiliency improvements, or water improvements made to qualifying real property.

Sec. 23. Minnesota Statutes 2022, section 216C.435, subdivision 4, is amended to read:

Subd. 4. **Energy audit.** "Energy audit" means a formal evaluation of the energy consumption of a building by a certified energy auditor, whose certification is approved by the commissioner, for the purpose of identifying appropriate energy improvements that could be made to the building and including an estimate of the ~~length of time a specific energy improvement will take to repay its purchase and installation costs, based on the amount of energy saved and estimated future energy prices~~ effective useful life, the reduction of energy consumption, and the related avoided greenhouse gas emissions resulting from the proposed eligible improvements.

Sec. 24. Minnesota Statutes 2023 Supplement, section 216C.435, subdivision 8, is amended to read:

Subd. 8. **Qualifying commercial real property.** "Qualifying commercial real property" means a multifamily residential dwelling, a commercial or industrial building, or farmland, as defined in section 216C.436, subdivision 1b, that the implementing entity has determined, after review of an energy audit, renewable energy system feasibility study, water improvement study, resiliency improvement study, or agronomic assessment, as defined in section 216C.436, subdivision 1b, can benefit from ~~the installation of cost-effective energy~~ installing eligible improvements or land and water improvements, as defined in section 216C.436, subdivision 1b. Qualifying commercial real property includes new construction.

Sec. 25. Minnesota Statutes 2022, section 216C.435, subdivision 10, is amended to read:

Subd. 10. **Renewable energy system feasibility study.** "Renewable energy system feasibility study" means a written study, conducted by a contractor trained to perform that analysis, for the purpose of determining the feasibility of installing a renewable energy system in a building, including an estimate of the ~~length of time a specific~~ effective useful life, the production of renewable energy, and any related avoided greenhouse gas emissions of the proposed renewable energy system ~~will take to repay its purchase and installation costs, based on the amount of energy saved and estimated future energy prices. For a geothermal energy improvement, the feasibility study must calculate net savings in terms of nongeothermal energy and costs~~.

Sec. 20. Minnesota Statutes 2022, section 216C.435, is amended by adding a subdivision to read:

Subd. 3e. **Eligible improvement.** "Eligible improvement" means one or more energy improvements, resiliency improvements, or water improvements made to qualifying real property.

Sec. 21. Minnesota Statutes 2022, section 216C.435, subdivision 4, is amended to read:

Subd. 4. **Energy audit.** "Energy audit" means a formal evaluation of the energy consumption of a building by a certified energy auditor, whose certification is approved by the commissioner, for the purpose of identifying appropriate energy improvements that could be made to the building and including an estimate of the ~~length of time a specific energy improvement will take to repay its purchase and installation costs, based on the amount of energy saved and estimated future energy prices~~ effective useful life, the reduction of energy consumption, and the related avoided greenhouse gas emissions resulting from the proposed eligible improvements.

Sec. 22. Minnesota Statutes 2023 Supplement, section 216C.435, subdivision 8, is amended to read:

Subd. 8. **Qualifying commercial real property.** "Qualifying commercial real property" means a multifamily residential dwelling, a commercial or industrial building, or farmland, as defined in section 216C.436, subdivision 1b, that the implementing entity has determined, after review of an energy audit, renewable energy system feasibility study, water improvement study, resiliency improvement study, or agronomic assessment, as defined in section 216C.436, subdivision 1b, can benefit from ~~the installation of cost-effective energy~~ installing eligible improvements or land and water improvements, as defined in section 216C.436, subdivision 1b. Qualifying commercial real property includes new construction.

Sec. 23. Minnesota Statutes 2022, section 216C.435, subdivision 10, is amended to read:

Subd. 10. **Renewable energy system feasibility study.** "Renewable energy system feasibility study" means a written study, conducted by a contractor trained to perform that analysis, for the purpose of determining the feasibility of installing a renewable energy system in a building, including an estimate of the ~~length of time a specific~~ effective useful life, the production of renewable energy, and any related avoided greenhouse gas emissions of the proposed renewable energy system ~~will take to repay its purchase and installation costs, based on the amount of energy saved and estimated future energy prices. For a geothermal energy improvement, the feasibility study must calculate net savings in terms of nongeothermal energy and costs~~.

Senate Language S4942-3

Sec. 26. Minnesota Statutes 2022, section 216C.435, is amended by adding a subdivision to read:

Subd. 11a. **Resiliency improvement.** "Resiliency improvement" means one or more installations or modifications to eligible commercial real property that are designed to improve a property's resiliency by improving the eligible real property's:

(1) structural integrity for seismic events;

(2) indoor air quality;

(3) durability to resist wind, fire, and flooding;

(4) ability to withstand an electric power outage;

(5) stormwater control measures, including structural and nonstructural measures to mitigate stormwater runoff;

(6) ability to mitigate the impacts of extreme temperatures; or

(7) ability to mitigate greenhouse gas embodied emissions from the eligible real property.

Sec. 27. Minnesota Statutes 2022, section 216C.435, is amended by adding a subdivision to read:

Subd. 11b. **Resiliency improvement feasibility study.** "Resiliency improvement feasibility study" means a written study that is conducted by a contractor trained to perform the analysis to: (1) determine the feasibility of installing a resiliency improvement; (2) document the improved resiliency capabilities of the property; and (3) estimate the effective useful life of the proposed resiliency improvements.

Sec. 28. Minnesota Statutes 2022, section 216C.435, is amended by adding a subdivision to read:

Subd. 14. **Water improvement.** "Water improvement" means one or more installations or modifications to qualifying commercial real property that are designed to improve water efficiency or water quality by:

(1) reducing water consumption;

(2) improving the quality, potability, or safety of water for the qualifying property; or

(3) conserving or remediating water, in whole or in part, on qualifying real property.

House Language UES4942-1

Sec. 24. Minnesota Statutes 2022, section 216C.435, is amended by adding a subdivision to read:

Subd. 11a. **Resiliency improvement.** "Resiliency improvement" means one or more installations or modifications to eligible commercial real property that are designed to improve a property's resiliency by improving the eligible real property's:

(1) structural integrity for seismic events;

(2) indoor air quality;

(3) durability to resist wind, fire, and flooding;

(4) ability to withstand an electric power outage;

(5) stormwater control measures, including structural and nonstructural measures to mitigate stormwater runoff;

(6) ability to mitigate the impacts of extreme temperatures; or

(7) ability to mitigate greenhouse gas embodied emissions from the eligible real property.

Sec. 25. Minnesota Statutes 2022, section 216C.435, is amended by adding a subdivision to read:

Subd. 11b. **Resiliency improvement feasibility study.** "Resiliency improvement feasibility study" means a written study that is conducted by a contractor trained to perform the analysis to:

(1) determine the feasibility of installing a resiliency improvement;

(2) document the improved resiliency capabilities of the property; and

(3) estimate the effective useful life of the proposed resiliency improvements.

Sec. 26. Minnesota Statutes 2022, section 216C.435, is amended by adding a subdivision to read:

Subd. 14. **Water improvement.** "Water improvement" means one or more installations or modifications to qualifying commercial real property that are designed to improve water efficiency or water quality by:

(1) reducing water consumption;

(2) improving the quality, potability, or safety of water for the qualifying property; or

(3) conserving or remediating water, in whole or in part, on qualifying real property.

Sec. 29. Minnesota Statutes 2022, section 216C.435, is amended by adding a subdivision to read:

Subd. 15. **Water improvement feasibility study.** "Water improvement feasibility study" means a written study that is conducted by a contractor trained to perform the analysis to: (1) determine the appropriate water improvements that could be made to the building; and (2) estimate the effective useful life, the reduction of water consumption, and any improvement in water quality resulting from the proposed water improvements.

Sec. 30. Minnesota Statutes 2022, section 216C.436, subdivision 1, is amended to read:

Subdivision 1. **Program purpose and authority.** An implementing entity may establish a commercial PACE loan program to finance ~~cost-effective~~ energy, water, and resiliency improvements to enable owners of qualifying commercial real property to pay for ~~the cost-effective energy~~ eligible improvements to the qualifying real property with the net proceeds and interest earnings of revenue bonds authorized in this section. An implementing entity may limit the number of qualifying commercial real properties for which a property owner may receive program financing.

Sec. 31. Minnesota Statutes 2023 Supplement, section 216C.436, subdivision 1b, is amended to read:

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

(b) "Agronomic assessment" means a study by an independent third party that assesses the environmental impacts of proposed land and water improvements on farmland.

(c) "Farmland" means land classified as 2a, 2b, or 2c for property tax purposes under section 273.13, subdivision 23.

(d) "Land and water improvement" means:

(1) an improvement to farmland that:

(i) is permanent;

(ii) results in improved agricultural profitability or resiliency;

(iii) reduces the environmental impact of agricultural production; and

(iv) if the improvement affects drainage, complies with the most recent versions of the applicable following conservation practice standards issued by the United States Department of Agriculture's Natural Resources Conservation Service: Drainage Water Management (Code 554), Saturated Buffer (Code 604), Denitrifying Bioreactor (Code 605), and Constructed Wetland (Code 656); or

Sec. 27. Minnesota Statutes 2022, section 216C.435, is amended by adding a subdivision to read:

Subd. 15. **Water improvement feasibility study.** "Water improvement feasibility study" means a written study that is conducted by a contractor trained to perform the analysis to:

(1) determine the appropriate water improvements that could be made to the building; and

(2) estimate the effective useful life, the reduction of water consumption, and any improvement in water quality resulting from the proposed water improvements.

Sec. 28. Minnesota Statutes 2022, section 216C.436, subdivision 1, is amended to read:

Subdivision 1. **Program purpose and authority.** An implementing entity may establish a commercial PACE loan program to finance ~~cost-effective~~ energy, water, and resiliency improvements to enable owners of qualifying commercial real property to pay for ~~the cost-effective energy~~ eligible improvements to the qualifying real property with the net proceeds and interest earnings of revenue bonds authorized in this section. An implementing entity may limit the number of qualifying commercial real properties for which a property owner may receive program financing.

Sec. 29. Minnesota Statutes 2023 Supplement, section 216C.436, subdivision 1b, is amended to read:

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

(b) "Agronomic assessment" means a study by an independent third party that assesses the environmental impacts of proposed land and water improvements on farmland.

(c) "Farmland" means land classified as 2a, 2b, or 2c for property tax purposes under section 273.13, subdivision 23.

(d) "Land and water improvement" means:

(1) an improvement to farmland that:

(i) is permanent;

(ii) results in improved agricultural profitability or resiliency;

(iii) reduces the environmental impact of agricultural production; and

(iv) if the improvement affects drainage, complies with the most recent versions of the applicable following conservation practice standards issued by the United States Department of Agriculture's Natural Resources Conservation Service: Drainage Water Management (Code 554), Saturated Buffer (Code 604), Denitrifying Bioreactor (Code 605), and Constructed Wetland (Code 656); or

(2) water conservation and quality measures, which include permanently affixed equipment, appliances, or improvements that reduce a property's water consumption or that enable water to be managed more efficiently.

(e) "Resiliency" means:

(1) the ability of farmland to maintain and enhance profitability, soil health, and water quality~~.~~;

(2) the ability to mitigate greenhouse gas embodied emissions from an eligible real property; or

(3) an increase in building resilience through flood mitigation, stormwater management, wildfire and wind resistance, energy storage use, or microgrid use.

Sec. 32. Minnesota Statutes 2023 Supplement, section 216C.436, subdivision 2, is amended to read:

Subd. 2. **Program requirements.** A commercial PACE loan program must:

(1) impose requirements and conditions on financing arrangements to ensure timely repayment;

(2) require an energy audit, renewable energy system feasibility study, resiliency improvement study, water improvement study, or agronomic or soil health assessment to be conducted on the qualifying commercial real property and reviewed by the implementing entity prior to approval of the financing;

(3) require the inspection or verification of all ~~installations and a performance verification of at least ten percent of the cost-effective energy~~ eligible improvements or land and water improvements financed by the program;

(4) not prohibit the financing of all ~~cost-effective energy~~ eligible improvements or land and water improvements not otherwise prohibited by this section;

(5) require that all ~~cost-effective energy~~ eligible improvements or land and water improvements be made to a qualifying commercial real property prior to, or in conjunction with, an applicant's repayment of financing for ~~cost-effective energy~~ eligible improvements or land and water improvements for ~~that~~ the qualifying commercial real property;

(6) have ~~cost-effective energy~~ eligible improvements or land and water improvements financed by the program performed by a licensed contractor as required by chapter 326B or other law or ordinance;

(7) require disclosures in the loan document to borrowers by the implementing entity of: (i) the risks involved in borrowing, including the risk of foreclosure if a tax delinquency results from a default; and (ii) all the terms and conditions of the commercial PACE loan and the installation of ~~cost-effective energy~~ eligible improvements or land and water improvements, including the interest rate being charged on the loan;

(8) provide financing only to those who demonstrate an ability to repay;

(9) not provide financing for a qualifying commercial real property in which the owner is not current on mortgage or real property tax payments;

(10) require a petition to the implementing entity by all owners of the qualifying commercial real property requesting collections of repayments as a special assessment under section 429.101;

(11) provide that payments and assessments are not accelerated due to a default and that a tax delinquency exists only for assessments not paid when due;

(12) require that liability for special assessments related to the financing runs with the qualifying commercial real property; and

(13) prior to financing any improvements to or imposing any assessment upon qualifying commercial real property, require notice to and written consent from the mortgage lender of any mortgage encumbering or otherwise secured by the qualifying commercial real property.

Sec. 33. Minnesota Statutes 2022, 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~~ eligible improvements installed, as determined by the implementing entity, but in no event may a term exceed ~~20~~ 30 years;

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

(i) the greater of ~~20~~ 30 percent of the assessed value of the real property on which the improvements are to be installed or ~~20~~ 30 percent of the real property's appraised value, accepted or approved by the mortgage lender; or

(ii) the actual cost of installing the ~~energy~~ eligible improvements, including the costs of necessary equipment, materials, and labor~~,~~; the costs of each related energy audit ~~or~~, renewable energy system feasibility study, water improvement study, or resiliency improvement 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. 34. Minnesota Statutes 2022, section 216C.436, subdivision 7, is amended to read:

Subd. 7. **Repayment.** An implementing entity that finances an ~~energy~~ eligible improvement under this section must:

(1) secure payment with a lien against the qualifying commercial real property; and

(8) provide financing only to those who demonstrate an ability to repay;

(9) not provide financing for a qualifying commercial real property in which the owner is not current on mortgage or real property tax payments;

(10) require a petition to the implementing entity by all owners of the qualifying commercial real property requesting collections of repayments as a special assessment under section 429.101;

(11) provide that payments and assessments are not accelerated due to a default and that a tax delinquency exists only for assessments not paid when due;

(12) require that liability for special assessments related to the financing runs with the qualifying commercial real property; and

(13) prior to financing any improvements to or imposing any assessment upon qualifying commercial real property, require notice to and written consent from the mortgage lender of any mortgage encumbering or otherwise secured by the qualifying commercial real property.

Sec. 31. Minnesota Statutes 2022, 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~~ eligible improvements installed, as determined by the implementing entity, but in no event may a term exceed ~~20~~ 30 years;

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

(i) the greater of ~~20~~ 30 percent of the assessed value of the real property on which the improvements are to be installed or ~~20~~ 30 percent of the real property's appraised value, accepted or approved by the mortgage lender; or

(ii) the actual cost of installing the ~~energy~~ eligible improvements, including the costs of necessary equipment, materials, and labor~~,~~; the costs of each related energy audit ~~or~~, renewable energy system feasibility study, water improvement study, or resiliency improvement 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. 32. Minnesota Statutes 2022, section 216C.436, subdivision 7, is amended to read:

Subd. 7. **Repayment.** An implementing entity that finances an ~~energy~~ eligible improvement under this section must:

(1) secure payment with a lien against the qualifying commercial real property; and

(2) collect repayments as a special assessment as provided for in section 429.101 or by charter, provided that special assessments may be made payable in up to ~~20~~ 30 equal annual installments.

If the implementing entity is an authority, the local government that authorized the authority to act as implementing entity shall impose and collect special assessments necessary to pay debt service on bonds issued by the implementing entity under subdivision 8, and shall transfer all collections of the assessments upon receipt to the authority.

Sec. 35. Minnesota Statutes 2022, section 216C.436, subdivision 8, is amended to read:

Subd. 8. **Bond issuance; repayment.** (a) An implementing entity may issue revenue bonds as provided in chapter 475 for the purposes of this section and section 216C.437, provided the revenue bond must not be payable more than ~~20~~ 30 years from the date of issuance.

(b) The bonds must be payable as to both principal and interest solely from the revenues from the assessments established in subdivision 7 and section 216C.437, subdivision 28.

(c) No holder of bonds issued under this subdivision may compel any exercise of the taxing power of the implementing entity that issued the bonds to pay principal or interest on the bonds, and if the implementing entity is an authority, no holder of the bonds may compel any exercise of the taxing power of the local government. Bonds issued under this subdivision are not a debt or obligation of the issuer or any local government that issued them, nor is the payment of the bonds enforceable out of any money other than the revenue pledged to the payment of the bonds.

Sec. 36. Minnesota Statutes 2022, section 216C.436, subdivision 10, is amended to read:

Subd. 10. **Improvements; real property or fixture.** ~~A cost-effective energy~~ An eligible 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. 3. **[216C.47] GEOTHERMAL HEAT EXCHANGE SYSTEM REBATE PROGRAM.**

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

(b) "Eligible applicant" means a person, business, nonprofit, government entity, federally recognized Tribe in Minnesota, or religious institution who provides evidence to the commissioner's satisfaction demonstrating that the person has received or has applied for a geothermal heat exchange system rebate available from the federal Department of Treasury under the Inflation Reduction Act of 2022, Public Law 117-189, for a commercial or multifamily building located in Minnesota.

(2) collect repayments as a special assessment as provided for in section 429.101 or by charter, provided that special assessments may be made payable in up to ~~20~~ 30 equal annual installments.

If the implementing entity is an authority, the local government that authorized the authority to act as implementing entity shall impose and collect special assessments necessary to pay debt service on bonds issued by the implementing entity under subdivision 8, and shall transfer all collections of the assessments upon receipt to the authority.

Sec. 33. Minnesota Statutes 2022, section 216C.436, subdivision 8, is amended to read:

Subd. 8. **Bond issuance; repayment.** (a) An implementing entity may issue revenue bonds as provided in chapter 475 for the purposes of this section and section 216C.437, provided the revenue bond must not be payable more than ~~20~~ 30 years from the date of issuance.

(b) The bonds must be payable as to both principal and interest solely from the revenues from the assessments established in subdivision 7 and section 216C.437, subdivision 28.

(c) No holder of bonds issued under this subdivision may compel any exercise of the taxing power of the implementing entity that issued the bonds to pay principal or interest on the bonds, and if the implementing entity is an authority, no holder of the bonds may compel any exercise of the taxing power of the local government. Bonds issued under this subdivision are not a debt or obligation of the issuer or any local government that issued them, nor is the payment of the bonds enforceable out of any money other than the revenue pledged to the payment of the bonds.

Sec. 34. Minnesota Statutes 2022, section 216C.436, subdivision 10, is amended to read:

Subd. 10. **Improvements; real property or fixture.** ~~A cost-effective energy~~ An eligible 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.

(c) "Geothermal heat exchange system" means a heating or cooling exchange mechanism composed of a mechanism to collect or reject heat from or to the underground.

(d) "Commissioner" means the commissioner of the Department of Commerce.

Subd. 2. **Establishment.** A geothermal heat exchange system rebate program is established in the department to provide financial assistance to eligible applicants that install geothermal heat exchange technology in the applicant's building.

Subd. 3. **Application.** (a) An application for a rebate under this section must be made to the commissioner on a form developed by the commissioner. The application must be accompanied by documentation, as required by the commissioner, demonstrating:

(1) that the applicant is an eligible applicant;

(2) that the applicant owns the Minnesota building in which the geothermal exchange system is to be installed;

(3) that an energy audit of the building in which the geothermal exchange system is to be installed has been conducted within the 18 months preceding the application date by a person with a building analyst technician certification issued by the Building Performance Institute, Inc., or an equivalent certification as determined by the commissioner;

(4) that the applicant has installed a geothermal heat exchange system of the capacity recommended by the auditor or contractor, and has had the heat pump installed by a contractor with sufficient training and experience in installing heat pumps, as determined by the commissioner; and

(5) the total cost to install the geothermal heat exchange system in the applicant's building and the associated geothermal loop installed and located outside of the building.

(b) The commissioner must develop administrative procedures governing the application and rebate award processes.

(c) The commissioner may modify program requirements under this section when necessary to align with comparable federal programs administered by the department under the federal Inflation Reduction Act of 2022, Public Law 117-189.

Subd. 4. **Rebate amount.** A rebate awarded under this section must not exceed the lower of:

(1) ten percent of geothermal heat exchange system costs, not to exceed $100,000 for a single project; or

(2) the total cost to purchase and install the heat exchange system in an eligible applicant's building net of any financial support received for the system from other federal, state, or utility programs.

Subd. 5. **Prioritization.** In evaluating applications under this program, the commissioner must give priority to applications that:

(1) are located in environmental justice communities, as defined by section 115A.03, subdivision 10b;

(2) have submitted a workforce plan demonstrating the intention to use registered apprenticeships; or

(3) are multifamily housing or commercial buildings that:

(i) are owned by a non-profit or government entity; and

(ii) meet the definition of low-income rental property under section 273.128.

Subd. 6. **Account established.** (a) The geothermal heat exchange system rebate account is established as a separate account in the special revenue fund in the state treasury. The commissioner must credit appropriations and transfers to the account. Earnings, including interest, dividends, and any other earnings arising from assets of the account, must be credited to the account. Money remaining in the account at the end of a fiscal year does not cancel to the general fund, but remains in the account until expended. The commissioner must manage the account.

(b) Money in the account is appropriated to the commissioner for the purposes of this section and to reimburse the reasonable costs incurred by the department to administer this section. Any money remaining in the account on January 1, 2033, cancels to the renewable development account.

Sec. 3. **[216C.47] GEOTHERMAL PLANNING GRANTS.**

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

(b) "Eligible applicant" means a county, city, town, or the Metropolitan Council.

(c) "Geothermal energy system" means a system that heats and cools one or more buildings by using the constant temperature of the earth as both a heat source and heat sink, and a heat exchanger consisting of an underground closed loop system of piping containing a liquid to absorb and relinquish heat within the earth. Geothermal energy system includes:

(1) a bored geothermal heat exchanger, as defined in section 103I.005;

(2) a groundwater thermal exchange device, as defined in section 103I.005; and

(3) a submerged closed loop heat exchanger, as defined in section 103I.005.

Subd. 2. **Establishment.** A geothermal planning grant program is established in the department to provide financial assistance to eligible applicants to examine the technical and economic feasibility of installing geothermal energy systems.

Subd. 3. **Account established.** (a) The geothermal planning grant account is established as a separate account in the special revenue fund in the state treasury. The commissioner must credit to the account appropriations and transfers to the account. Earnings, including interest, dividends, and any other earnings arising from assets of the account, must be credited to the account. Money remaining in the account at the end of a fiscal year does not cancel to the general fund, but remains in the account until June 30, 2029. The commissioner must manage the account.

(b) Money in the account is appropriated to the commissioner to (1) award geothermal planning grants to eligible applicants, and (2) reimburse the reasonable costs incurred by the department to administer this section.

Subd. 4. **Application process.** An applicant seeking a grant under this section must submit an application to the commissioner on a form developed by the commissioner. The commissioner must develop administrative procedures to govern the application and grant award process. The commissioner may contract with a third party to conduct some or all of the program's operations.

Subd. 5. **Grant awards.** (a) A grant awarded under this process may be used to pay the total cost of the activities eligible for funding under subdivision 6, up to a limit of $150,000.

(b) The commissioner must endeavor to award grants to eligible applicants in all regions of Minnesota.

(c) Grants may be awarded under this section only to projects whose work is completed after July 1, 2024.

Subd. 6. **Eligible grant expenditures.** Activities that may be funded with a grant awarded under this section include:

(1) analysis of the heating and cooling demand of the building or buildings that consume energy from the geothermal energy system;

(2) evaluation of equipment that could be combined with a geothermal energy system to meet the building's heating and cooling requirement;

(3) analysis of the geologic conditions of the earth in which a geothermal energy system operates, including the drilling of one or more test wells to characterize geologic materials and to measure properties of the earth and aquifers that impact the feasibility of installing and operating a geothermal energy system; and

(4) preparation of a financial analysis of the project.

Subd. 7. **Contractor and subcontractor requirements.** Contractors and subcontractors performing work funded with a grant awarded under this section must have experience installing geothermal energy systems.

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

Sec. 2. **[216C.48] STANDARDIZED SOLAR PLAN REVIEW SOFTWARE; TECHNICAL ASSISTANCE; FINANCIAL INCENTIVE.**

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

(b) "Energy storage system" has the meaning given in section 216B.2422, subdivision 1.

(c) "Permitting authority" means a unit of local government in Minnesota that has authority to review and issue permits to install residential solar projects and solar plus energy storage system projects within the unit of local government's jurisdiction.

(d) "Photovoltaic device" has the meaning given in section 216C.06, subdivision 16.

(e) "Residential solar project" means the installation of a photovoltaic device at a residence located in Minnesota.

(f) "SolarAPP+" means the most recent version of the Solar Automated Permit Processing Plus software, developed by the National Renewable Energy Laboratory and available free to permitting authorities from the United States Department of Energy, that uses a web-based portal to automate the solar project plan review and permit issuance processes for residential solar projects that are compliant with applicable building and electrical codes.

(g) "Solar plus energy storage system project" means a residential solar project installed in conjunction with an energy storage system at the same residence.

Subd. 2. **Program establishment.** A program is established in the department to provide technical assistance and financial incentives to local units of government that issue permits for residential solar projects and solar plus energy storage system projects in order to incentivize a permitting authority to adopt the SolarAPP+ software to standardize, automate, and streamline the review and permitting process.

Subd. 3. **Eligibility.** An incentive may be awarded under this section to a permitting authority that has deployed SolarAPP+ and made SolarAPP+ available on the permitting authority's website.

Subd. 4. **Application.** (a) A permitting authority must submit an application for a financial incentive under this section to the commissioner on a form developed by the commissioner.

(b) An application may be submitted for a financial incentive under this section after SolarAPP+ has become operational in the permitting authority's jurisdiction.

Subd. 5. **Review and grant award process.** The commissioner must develop administrative procedures to govern the application review and incentive award process under this section.

Subd. 6. **Incentive awards.** Beginning no later than March 1, 2025, the commissioner may award a financial incentive to a permitting authority under this section only if the commissioner has determined that the permitting authority meets verification requirements established by the commissioner that ensure a permitting authority has made SolarAPP+ operational within the permitting authority's jurisdiction and that SolarAPP+ is available on the permitting authority's website.

Subd. 7. **Incentive amount.** (a) An incentive awarded under this section must be no less than $5,000 and no greater than $20,000.

(b) The commissioner may vary the amount of an incentive awarded under this section by considering the following factors:

(1) the population of the permitting authority;

(2) the number of permits for solar projects issued by the permitting authority using conventional review processes;

(3) whether the SolarAPP+ software has been adopted on a stand-alone basis or has been integrated with other permit management software utilized by the permitting authority; and

(4) whether the permitting jurisdiction has participated in other sustainability programs, including but not limited to GreenStep Cities and the United States Department of Energy's SolSmart and Charging Smart programs.

Subd. 8. **Technical assistance.** The department must provide technical assistance to eligible permitting authorities seeking to apply for an incentive under this section.

Subd. 9. **Program promotion.** The department must develop an education and outreach program to make permitting authorities aware of the incentive offered under this section, including by convening workshops, producing educational materials, and using other mechanisms to promote the program, including but not limited to utilizing the efforts of the League of Minnesota Cities, the Association of Minnesota Counties, the Community Energy Resource Teams established under section 216C.385, and similar organizations to reach permitting authorities.

Subd. 10. **Account established.** (a) The SolarAPP+ program account is established in the special revenue account in the state treasury. The commissioner must credit to the account appropriations and transfers to the account. Earnings, including interest, dividends, and any other earnings arising from assets of the account, must be credited to the account. Money remaining in the account at the end of a fiscal year does not cancel to the general fund but remains in the account until June 30, 2028. The commissioner must manage the account.

Sec. 4. **ULTRAEFFICIENT VEHICLE DEVELOPMENT GRANTS.**

Subdivision 1. **Program establishment.** (a) A grant program is established in the Department of Commerce to provide financial assistance to developers and producers of ultraefficient vehicles that use proprietary technology.

(b) For purposes of this section, "ultraefficient vehicle" means a fully closed compartment vehicle designed to carry at least one adult passenger that achieves:

(1) at least 75 miles per gallon while operating on gasoline;

(2) at least 75 miles per gallon equivalent while operating as a hybrid electric-gasoline; or

(3) at least 75 miles per gallon equivalent while operating as a fully electric vehicle.

Subd. 2. **Application process.** Applicants seeking a grant under this section must submit an application to the commissioner of commerce on a form developed by the commissioner. The commissioner is responsible for receiving and reviewing grant applications and awarding grants under this subdivision. The commissioner must develop administrative procedures to govern the application, evaluation, and grant-award process.

Subd. 3. **Grant awards.** (a) The maximum grant award for each eligible applicant awarded a grant under this section is $250,000. In awarding grants under this section, the department must:

(1) give priority to ultraefficient vehicle projects that are deemed to be near production ready; and

(2) give priority to ultraefficient vehicle projects that maximize the use of electricity to charge and run the vehicle.

(b) Grant recipients must demonstrate that the grant will be matched by an equal amount of nonstate money before receiving any grant money.

Subd. 4. **Account established.** An ultraefficient vehicle development grant account is established in the special revenue fund in the state treasury. The commissioner of commerce must credit to the account appropriations made for ultraefficient vehicle development grants. Earnings, including interest, arising from assets in the account, must be credited to the account. Money in the account is available until June 30, 2028. Any amount in the account after June 30, 2028, cancels to the renewable development account. The commissioner of commerce must manage the account.

(b) Money in the account is appropriated to the commissioner for the purposes of this section and to reimburse the reasonable costs incurred by the department to administer this section.

Subd. 5. **Appropriation; expenditures.** Money in the account established in subdivision 4 is appropriated to the commissioner of commerce and must be used only:

(1) to make grant awards under this section; and

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

Subd. 6. **Report.** On January 15, 2026, and on January 15, 2029, the commissioner of commerce must submit a report to the chairs and ranking minority members of the legislative committees with jurisdiction over energy policy and finance on the grant awards under this section.

Sec. 37. **ADVANCED NUCLEAR TECHNOLOGIES STUDY.**

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

(1) "advanced nuclear reactor" means a small modular reactor or a molten sodium reactor;

(2) "molten sodium reactor" means a nuclear fission reactor that uses a fluid fuel in the form of very hot fluoride or chloride salt; and

(3) "small modular reactor" means a nuclear fission reactor that (i) has a capacity of 300 megawatts or less, and (ii) can be factory assembled and transported as a unit.

Subd. 2. **Study required.** (a) The commissioner of commerce must conduct a study evaluating the potential costs, benefits, and impacts of advanced nuclear reactors operating in Minnesota.

(b) At a minimum, the study must analyze the impacts the operation of advanced nuclear reactors have on:

(1) air emissions from electric generating facilities in Minnesota;

(2) retail electricity prices;

(3) reliability of Minnesota's electric grid;

(4) the state's air resources, water resources, land resources, and public health, including the impact of any waste material generated by the reactors;

(5) new employment opportunities for Minnesota workers;

(6) local economic development;

(7) Minnesota's eligible energy technology standard under Minnesota Statutes, section 216B.1691, subdivision 2a; and

(8) Minnesota's carbon-free standard under Minnesota Statutes, section 216B.1691, subdivision 2g.

(c) The study must also identify Minnesota statutes and administrative rules that would require modifications in order to enable the construction and operation of advanced nuclear reactors.

(d) The study must evaluate the technologies and methods most likely to minimize the environmental impacts of nuclear waste and the costs of managing nuclear waste.

Subd. 3. **Report.** The commissioner of commerce must submit the results of the study under subdivision 2 to the chairs and ranking minority members of the legislative committees having jurisdiction over energy finance and policy no later than January 31, 2025.

Sec. 35. **DECOMMISSIONING AND REPURPOSING PLAN.**

A public utility that owns an electric generation facility powered by coal that the public utility has scheduled for retirement must include, in the public utility's next integrated resource plan filed under Minnesota Statutes, section 216B.2422, subdivision 2, a schedule for the retirement and a plan for the repurposing of each coal-powered facility. The public utility must provide a copy of the plan and schedule to the governing body of the municipality where the electric generation facility is located on the same date the plan is submitted to the Public Utilities Commission. If a resource plan is not filed or required before February 1, 2026, the plan and schedule must be submitted to the Public Utilities Commission as a separate filing and to the municipality by February 1, 2026.

Sec. 38. **THERMAL ENERGY NETWORK DEPLOYMENT WORK GROUP.**

Subdivision 1. **Direction.** The Public Utilities Commission must establish and appoint a thermal energy network deployment work group to examine the potential regulatory opportunities for regulated natural gas utilities to deploy thermal energy networks and potential barriers to development. The work group must examine the public benefits, costs, and impacts of deployment of thermal energy networks, as well as examine rate design options.

Subd. 2. **Membership.** (a) The work group consists of at least the following:

(1) representatives of the Department of Commerce;

(2) representatives of the Department of Health;

(3) representatives of the Pollution Control Agency;

(4) representatives of the Department of Natural Resources;

(5) representatives of the Office of the Attorney General;

(6) representatives from utilities;

(7) representatives from clean energy advocacy organizations;

Sec. 4. **THERMAL ENERGY NETWORK DEPLOYMENT WORK GROUP.**

Subdivision 1. **Direction.** The Public Utilities Commission must establish and appoint a thermal energy network deployment work group to examine (1) the potential regulatory opportunities for regulated natural gas utilities to deploy thermal energy networks, and (2) potential barriers to development. The work group must examine the public benefits, costs, and impacts of deployment of thermal energy networks, as well as examine rate design options.

Subd. 2. **Membership.** (a) The work group consists of at least the following:

(1) representatives of the Department of Commerce;

(2) representatives of the Department of Health;

(3) representatives of the Pollution Control Agency;

(4) representatives of the Department of Natural Resources;

(5) representatives of the Office of the Attorney General;

(6) representatives from utilities;

(7) representatives from clean energy advocacy organizations;

(8) representatives from labor organizations;

(9) geothermal technology providers;

(10) representatives from consumer protection organizations;

(11) representatives from cities; and

(12) representatives from low-income communities.

(b) The executive director may invite others to participate in one or more meetings of the work group.

Subd. 3. **Duties.** The work group must prepare a report containing findings and recommendations regarding how to deploy thermal energy networks within a regulated context in a manner that protects the public interest and considers reliability, affordability, environmental impacts, and socioeconomic impacts.

Subd. 4. **Report to legislature.** The work group must submit a report detailing the work group's findings and recommendations to the chairs and ranking minority members of the legislative committees and divisions with jurisdiction over energy policy and finance by December 31, 2025. The work group terminates the day after the report under this subdivision is submitted.

Subd. 5. **Notice and comment period.** The executive secretary of the Public Utilities Commission must file the completed report in Public Utilities Commission Docket No. G-999/CI-21-565 and provide notice to all docket participants and other interested persons that comments on the findings and recommendations may be filed in the docket.

Subd. 6. **Definition.** For the purposes of this section, "thermal energy network" means a project that provides heating and cooling to multiple buildings connected via underground piping containing fluids that, in concert with heat pumps, exchange thermal energy from the earth and underground or surface waters.

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

Sec. 39. **THERMAL ENERGY NETWORK SITE SUITABILITY STUDY.**

(a) The Department of Commerce must conduct or contract for a study to determine the suitability of sites to deploy thermal energy networks statewide.

(b) The study must:

(1) identify areas more and less suitable for deployment of thermal energy networks statewide; and

(8) representatives from labor organizations;

(9) geothermal technology providers;

(10) representatives from consumer protection organizations;

(11) representatives from cities; and

(12) representatives from low-income communities.

(b) The executive secretary of the Public Utilities Commission may invite others to participate in one or more meetings of the work group.

(c) In appointing members to the work group, the Public Utilities Commission shall endeavor to ensure that all geographic regions of Minnesota are represented.

Subd. 3. **Duties.** The work group must prepare a report containing findings and recommendations regarding how to deploy thermal energy networks within a regulated context in a manner that protects the public interest and considers reliability, affordability, environmental impacts, and socioeconomic impacts.

Subd. 4. **Report to legislature.** The work group must submit a report detailing the work group's findings and recommendations to the chairs and ranking minority members of the legislative committees and divisions with jurisdiction over energy policy and finance by December 31, 2025. The work group terminates the day after the report under this subdivision is submitted.

Subd. 5. **Notice and comment period.** The executive secretary of the Public Utilities Commission must file the completed report in Public Utilities Commission Docket No. G-999/CI-21-565 and provide notice to all docket participants and other interested persons that comments on the findings and recommendations may be filed in the docket.

Subd. 6. **Definition.** For the purposes of this section, "thermal energy network" means a project that provides heating and cooling to multiple buildings connected via underground piping containing fluids that, in concert with heat pumps, exchange thermal energy from the earth, underground or surface waters, wastewater, or other heat sources.

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

Sec. 5. **THERMAL ENERGY NETWORK SITE SUITABILITY STUDY.**

(a) The Department of Commerce shall conduct or contract for a study to determine the suitability of sites to deploy thermal energy networks statewide.

(b) The study must:

(1) identify areas more and less suitable for deployment of thermal energy networks statewide; and

(2) identify potential barriers to thermal energy networks and potential ways to address the barriers.

(c) In determining site suitability, the study must consider:

(1) geologic or hydrologic access to thermal storage;

(2) existing built environment, including but not limited to age, density, building uses, existing heating and cooling systems, and existing electrical services;

(3) the condition of existing natural gas infrastructure;

(4) road and street conditions, including planned replacement or maintenance;

(5) local land use regulation;

(6) area permitting requirements; and

(7) whether the area is an environmental justice area, as defined in Minnesota Statutes, section 116.065, subdivision 1, paragraph (e).

(c) No later than January 15, 2026, the Department of Commerce must submit a written report documenting the study's findings to the chairs and ranking minority members of the senate and house of representatives committees with jurisdiction over energy policy and finance.

(2) identify potential barriers to the deployment of thermal energy networks and potential ways to address the barriers.

(c) In determining site suitability, the study must consider:

(1) geologic or hydrologic access to thermal storage;

(2) the existing built environment, including but not limited to age, density, building uses, existing heating and cooling systems, and existing electrical services;

(3) the condition of existing natural gas infrastructure;

(4) road and street conditions, including planned replacement or maintenance;

(5) local land use regulations;

(6) area permitting requirements; and

(7) whether the area is an environmental justice area, as defined in section 116.065, subdivision 1, paragraph (e).

(d) No later than January 15, 2026, the Department of Commerce must submit a written report documenting the study's findings to the chairs and ranking minority members of the senate and house of representatives committees with jurisdiction over energy policy and finance.

(e) For the purposes of this section, "thermal energy network" means a project that provides heating and cooling to multiple buildings connected via underground piping containing fluids that, in concert with heat pumps, exchange thermal energy from the earth, underground or surface waters, wastewater, or other heat sources.

Sec. 19. **GRID ENHANCING TECHNOLOGIES REPORT; PUBLIC UTILITIES COMMISSION ORDER.**

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

(b) "Capacity" means the maximum amount of electricity that can flow through a transmission line while observing industry safety standards.

(c) "Congestion" means a condition in which a lack of transmission line capacity prevents the delivery of the lowest-cost electricity dispatched to meet load at a specific location.

(d) "Dynamic line rating" means hardware or software used to calculate the thermal limit of existing transmission lines at a specific point in time by incorporating information on real-time and forecasted weather conditions.

(e) "Grid enhancing technology" means hardware or software that reduces congestion or enhances the flexibility of the transmission system by increasing the capacity of a high-voltage transmission line or rerouting electricity from overloaded to uncongested lines,

while maintaining industry safety standards. Grid enhancing technologies include but are not limited to dynamic line rating, advanced power flow controllers, and topology optimization.

(f) "Line rating methodology" means a methodology used to calculate the maximum amount of electricity that can be carried by a transmission line without exceeding thermal limits designed to ensure safety.

(g) "Power flow controller" means hardware and software used to reroute electricity from overloaded transmission lines to underutilized transmission lines.

(h) "Thermal limit" means the temperature a transmission line reaches when heat from the electric current flow within the transmission line causes excessive sagging of the transmission line.

(i) "Topology optimization" means a software technology that uses mathematical models to identify reconfigurations in the transmission grid in order to reroute electricity from overloaded transmission lines to underutilized transmission lines.

(j) "Transmission line" has the meaning given to "high-voltage transmission line" in section 216E.01. subdivision 4.

(k) "Transmission system" means a network of high-voltage transmission lines owned or operated by an entity subject to this section that transports electricity to Minnesota customers.

Subd. 2. **Report; content.** An entity that owns more than 750 miles of transmission lines in Minnesota, as reported in the state transmission report submitted to the Public Utilities Commission under Minnesota Statutes, section 216B.2425, by November 1, 2025, must include in that report information that:

(1) identifies, during each of the last three years, locations that experienced 168 hours or more of congestion, or the ten locations at which the most costly congestion occurred, whichever measure produces the greater number of locations;

(2) estimates the frequency of congestion at each location and the increased cost to ratepayers resulting from the substitution of higher-priced electricity;

(3) identifies locations on each transmission system that are likely to experience high levels of congestion during the next five years;

(4) evaluates the technical feasibility and estimates the cost of installing one or more grid enhancing technologies to address each instance of grid congestion identified in clause (1), and projects the grid enhancing technology's efficacy in reducing congestion;

(5) analyzes the cost-effectiveness of installing grid enhancing technologies to address each instance of congestion identified in clause (1) by using the information developed in

clause (2) to calculate the payback period of each installation, using a methodology developed by the commission;

(6) proposes an implementation plan, including a schedule and cost estimate, to install grid enhancing technologies at each congestion point identified in clause (1) at which the payback period is less than or equal to a value determined by the commission, in order to maximize transmission system capacity; and

(7) explains the transmission owner's current line rating methodology.

Subd. 3. **Commission review; order.** (a) The commission shall review the implementation plans proposed by each reporting entity as required in subdivision 2, clause (6), and must:

(1) review, and may approve, reject, or modify, the plan; and

(2) issue an order requiring implementation of an approved plan.

(b) Within 90 days of the commission's issuance of an order under this subdivision each public utility shall file with the commission a plan containing a workplan, cost estimate, and schedule for implementing the elements of the plan approved by the commission that are located within the public utility's electric service area. For each entity required to report under this section that is not a public utility, the commission's order is advisory.

Subd. 4. **Cost recovery.** Notwithstanding any other provision of this chapter, the commission may approve cost recovery under Minnesota Statutes, section 216B.16, including an appropriate rate of return, of any prudent and reasonable investments made or expenses incurred by a public utility to administer and implement a grid enhancing technologies plan approved by the commission under this section.

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

Sec. 3. **INTERCONNECTION DOCKET; PUBLIC UTILITIES COMMISSION.**

(a) No later than September 1, 2024, the commission must initiate a proceeding to establish by order generic standards for the sharing of utility costs necessary to upgrade a utility's distribution system by increasing hosting capacity or applying other necessary distribution system upgrades at a congested or constrained location in order to allow for the interconnection of distributed generation facilities at the congested or constrained location and to advance the achievement of the state's renewable and carbon-free energy goals in Minnesota Statutes, section 216B.1691 and greenhouse gas emissions reduction goals in Minnesota Statutes, section 216H.02. The tariff standards must reflect an interconnection process designed to, at a minimum:

(1) accelerate the expansion of hosting capacity at multiple points on a utility's distribution system by ensuring that the cost of upgrades is shared fairly among owners of distributed

generation projects seeking interconnection on a pro rata basis according to the amount of the expanded capacity utilized by each interconnected distributed generation facility;

(2) reduce the capital burden on owners of trigger projects seeking interconnection;

(3) establish a minimum level of upgrade costs an expansion of hosting capacity must reach in order to be eligible to participate in the cost-share process and below which a trigger project must bear the full cost of the upgrade;

(4) establish a distributed generation facility's pro rata cost-share amount as the utility's total cost of the upgrade divided by the incremental capacity resulting from the upgrade, and multiplying the result by the capacity of the distributed generation facility seeking interconnection;

(5) establish a minimum proportion of the total upgrade cost that a utility must receive from one or more distributed generation facilities before initiating constructing an upgrade;

(6) allow trigger projects and any other distributed generation facilities to pay a utility more than the trigger project's or distributed generation facility's pro rata cost-share amount only if needed to meet the minimum threshold established in clause (6) and to receive refunds for amounts paid beyond the trigger project's or distributed generation facility's pro rata share of expansion costs from distributed generation projects that subsequently interconnect at the applicable location, after which pro rata payments are paid to the utility for distribution to ratepayers;

(7) prohibit owners of distributed generation facilities from using any unsubscribed capacity at an interconnection that has undergone an upgrade without the distributed generation owners paying the distributed generation owner's pro rata cost of the upgrade; and

(8) establish an annual limit or a formula for determining an annual limit for the total cost of upgrades that are not allocated to owners of participating generation facilities and may be recovered from ratepayers under section 216B.16, subdivision 7b, clause (6).

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

(1) "distributed generation project" means an energy generating system with a capacity no greater than ten megawatts;

(2) "hosting capacity" means the maximum capacity of a utility distribution system to transport electricity at a specific location without compromising the safety or reliability of the distribution system;

(3) "trigger project" means the initial distributed generation project whose application for interconnection of a distributed generation project alerts a utility that an upgrade is needed in order to accommodate the trigger project and any future interconnections at the applicable location;

(4) "upgrade" means a modification of a utility's distribution system at a specific location that is necessary to allow the interconnection of distributed generation projects by increasing hosting capacity at the applicable location, including but not limited to installing or modifying equipment at a substation or along a distribution line. Upgrade does not mean an expansion of hosting capacity dedicated solely to the interconnection of a single distributed generation project; and

(5) "utility" means a public utility, as defined in Minnesota Statutes, section 216B.02, subdivision 4, that provides electric service.

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

Sec. 4. **POSITION ESTABLISHED; PUBLIC UTILITIES COMMISSION.**

Subdivision 1. **Position; duties.** (a) The Public Utilities Commission's Consumer Affairs Office must establish a new full-time equivalent interconnection ombudsperson position to assist applicants seeking to interconnect distributed generation projects to utility distribution systems under the generic statewide standards developed by the commission under section 2. The Public Utilities Commission must (1) appoint a person to the position who possesses mediation skills and technical expertise related to interconnection and interconnection procedures, and (2) authorize the person to request and review all interconnection data from utilities and applicants that are necessary to fulfill the duties of the position described in this subdivision.

(b) The duties of the interconnection ombudsperson include but are not limited to:

(1) tracking interconnection disputes between applicants and utilities;

(2) facilitating the efficient and fair resolution of disputes between customers seeking to interconnect and utilities;

(3) reviewing utility interconnection policies to assess opportunities to reduce interconnection disputes, while considering the equitable distribution of distributed generation facilities;

(4) convening stakeholder groups as necessary to facilitate effective communication among interconnection stakeholders; and

(5) preparing reports that detail the number, type, resolution timelines, and outcome of interconnection disputes.

(c) A utility must provide information requested under this section that the interconnection ombudsperson determines is necessary to effectively carry out the duties of the position.

Subd. 2. **Definition.** For the purposes of this section, "utility" means a public utility, as defined in Minnesota Statutes, section 216B.02, subdivision 4, that provides electric service.

Subd. 3. **Position; funding.** (a) A utility must assess and collect a surcharge of $50 on each application interconnection filed by an owner of a distributed generation facility located

in Minnesota. A utility must remit the full surcharge to the Public Utilities Commission monthly, in a manner determined by the Public Utilities Commission, for each interconnection application filed with the utility during the previous month.

(b) The interconnection ombudsperson account is established in the special revenue account in the state treasury. The Public Utilities Commission must manage the account. The Public Utilities Commission must deposit in the account all revenues received from utilities from the surcharge on interconnection applications established under this section. Money is appropriated from the account to the Public Utilities Commission for the sole purpose of funding the ombudsperson position established in subdivision 1.

(c) The Public Utilities Commission must review the amount of revenues collected from the surcharge each year and may adjust the level of the surcharge as necessary to ensure (1) sufficient money is available to support the position, and (2) the reserve in the account does not reach more than ten percent of the amount necessary to fully fund the position.

EFFECTIVE DATE. This section is effective the day following final enactment and applies to applications for interconnections filed with a utility on or after that date.