216B.241 ENERGY CONSERVATION IMPROVEMENT.

Subdivision 1. **Definitions.** For purposes of this section and section 216B.16, subdivision 6b, the terms defined in this subdivision have the meanings given them.

(a) "Commission" means the Public Utilities Commission.

(b) "Commissioner" means the commissioner of commerce.

(c) "Customer facility" means all buildings, structures, equipment, and installations at a single site.

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

(e) "Energy conservation" means demand-side management of energy supplies resulting in a net reduction in energy use. Load management that reduces overall energy use is energy conservation.

(f) "Energy conservation improvement" means a project that results in energy efficiency or energy conservation. Energy conservation improvement may include waste heat recovery converted into electricity but does not include electric utility infrastructure projects approved by the commission under section 216B.1636.

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

(h) "Gross annual retail energy sales" means annual electric sales to all retail customers in a utility's or association's Minnesota service territory or natural gas throughput to all retail customers, including natural gas transportation customers, on a utility's distribution system in Minnesota. For purposes of this section, gross annual retail energy sales exclude gas sales to a large energy facility and gas and electric sales to a large electric customer facility exempted by the commissioner under subdivision 1a, paragraph (b).

(i) "Investments and expenses of a public utility" includes the investments and expenses incurred by a public utility in connection with an energy conservation improvement, including but not limited to:

(1) the differential in interest cost between the market rate and the rate charged on a no-interest or below-market interest loan made by a public utility to a customer for the purchase or installation of an energy conservation improvement;

(2) the difference between the utility's cost of purchase or installation of energy conservation improvements and any price charged by a public utility to a customer for such improvements.

(j) "Large electric customer facility" means a customer facility that imposes a peak electrical demand on an electric utility's system of not less than 20,000 kilowatts, measured in the same way as the utility that serves the customer facility measures electrical demand for billing purposes, and for which electric services are provided at retail on a single bill by a utility operating in the state.

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

(l) "Load management" means an activity, service, or technology to change the timing or the efficiency of a customer's use of energy that allows a utility or a customer to respond to wholesale market fluctuations or to reduce peak demand for energy or capacity.

(m) "Low-income programs" means energy conservation improvement programs that directly serve the needs of low-income persons, including low-income renters.

(n) "Waste heat recovery converted into electricity" means an energy recovery process that converts otherwise lost energy from the heat of exhaust stacks or pipes used for engines or manufacturing or industrial processes, or the reduction of high pressure in water or gas pipelines.

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

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

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

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

For purposes of this paragraph (a), "gross operating revenues" do not include revenues from large electric customer facilities exempted by the commissioner under paragraph (b).

(b) The owner of a large electric customer facility may petition the commissioner to exempt both electric and gas utilities serving the large energy customer facility from the investment and expenditure requirements of paragraph (a) with respect to retail revenues attributable to

the facility. At a minimum, the petition must be supported by evidence relating to competitive or economic pressures on the customer and a showing by the customer of reasonable efforts to identify, evaluate, and implement cost-effective conservation improvements at the facility. If a petition is filed on or before October 1 of any year, the order of the commissioner to exempt revenues attributable to the facility can be effective no earlier than January 1 of the following year. The commissioner shall not grant an exemption if the commissioner determines that granting the exemption is contrary to the public interest. The commissioner may, after investigation, rescind any exemption granted under this paragraph upon a determination that the customer is not continuing to make reasonable efforts to identify, evaluate, and implement energy conservation improvements at the large electric customer facility. For the purposes of investigations by the commissioner under this paragraph, the owner of any large electric customer facility shall, upon request, provide the commissioner with updated information comparable to that originally supplied in or with the owner's original petition under this paragraph.

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

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

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

(2) otherwise not be in the public interest.

Subd. 1b. **Conservation improvement by cooperative association or municipality.** (a) This subdivision applies to:

(1) a cooperative electric association that provides retail service to its members;

(2) a municipality that provides electric service to retail customers; and

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

(b) Each cooperative electric association and municipality subject to this subdivision shall spend and invest for energy conservation improvements under this subdivision the following amounts:

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

(2) for a cooperative electric association, 1.5 percent of its gross operating revenues from service provided in the state, excluding gross operating revenues from service provided in the state to large electric customer facilities indirectly through a distribution cooperative electric association.

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

(d) Each municipality and cooperative electric association subject to this subdivision may spend and invest annually up to ten percent of the total amount required to be spent and invested on energy conservation improvements under this subdivision on research and development projects that meet the definition of energy conservation improvement in subdivision 1 and that are funded directly by the municipality or cooperative electric association.

(e) Load-management activities may be used to meet 50 percent of the conservation investment and spending requirements of this subdivision.

(f) A generation and transmission cooperative electric association that provides energy services to cooperative electric associations that provide electric service at retail to consumers may invest in energy conservation improvements on behalf of the associations it serves and may fulfill the conservation, spending, reporting, and energy-savings goals on an aggregate basis. A municipal power agency or other not-for-profit entity that provides energy service to municipal utilities that provide electric service at retail may invest in energy conservation improvements on behalf of the municipal utilities it serves and may fulfill the conservation, spending, reporting, and energy-savings goals on an aggregate basis, under an agreement between the municipal power agency or not-for-profit entity and each municipal utility for funding the investments.

(g) Each municipality or cooperative shall file energy conservation improvement plans by June 1 on a schedule determined by order of the commissioner, but at least every three years. Plans received by June 1 must be approved or approved as modified by the commissioner by December 1 of the same year. The municipality or cooperative shall provide an evaluation to the commissioner detailing its energy conservation improvement spending and investments for the previous period.

The evaluation must briefly describe each conservation program and must specify the energy savings or increased efficiency in the use of energy within the service territory of the utility or association that is the result of the spending and investments. The evaluation must analyze the cost-effectiveness of the utility's or association's conservation programs, using a list of baseline energy and capacity savings assumptions developed in consultation with the department. The commissioner shall review each evaluation and make recommendations, where appropriate, to the municipality or association to increase the effectiveness of conservation improvement activities.

(h) A municipality may spend up to 50 percent of its required spending under this section to refurbish an existing district heating or cooling system until July 1, 2007. From July 1, 2007, through June 30, 2011, expenditures made to refurbish a district heating or cooling system are considered to be load-management activities under paragraph (e). This paragraph expires July 1, 2011.

(i) The commissioner shall consider and may require a utility, association, or other entity providing energy efficiency and conservation services under this section to undertake a program suggested by an outside source, including a political subdivision, nonprofit corporation, or community organization.

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

(b) Each individual utility and association shall have an annual energy-savings goal equivalent to 1.5 percent of gross annual retail energy sales unless modified by the commissioner under paragraph (d). The savings goals must be calculated based on the most recent three-year weather normalized average. A utility or association may elect to carry forward energy savings in excess of 1.5 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 particular energy savings can be used only for one year's goal.

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

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

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

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

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

(g) On an annual basis, the commissioner shall produce and make publicly available a report on the annual energy savings and estimated carbon dioxide reductions achieved by the energy conservation improvement programs for the two most recent years for which data is available. 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.

(h) By January 15, 2010, the commissioner shall report to the legislature whether the spending requirements under subdivisions 1a and 1b are necessary to achieve the energy-savings goals established in this subdivision.

Subd. 1d. **Technical assistance.** The commissioner shall evaluate energy conservation improvement programs on the basis of cost-effectiveness and the reliability of the technologies employed. The commissioner shall, by order, establish, maintain, and update energy-savings assumptions that must be used when filing energy conservation improvement programs. The commissioner shall establish an inventory of the most effective energy conservation programs, techniques, and technologies, and encourage all Minnesota utilities to implement them, where appropriate, in their service territories. The commissioner shall describe these programs in sufficient detail to provide a utility reasonable guidance concerning implementation. The commissioner shall prioritize the opportunities in order of potential energy savings and in order of cost-effectiveness. The commissioner may contract with a third party to carry out any of the

commissioner's duties under this subdivision, and to obtain technical assistance to evaluate the effectiveness of any conservation improvement program. The commissioner may assess up to $800,000 annually until June 30, 2009, and $450,000 annually thereafter for the purposes of this subdivision. The assessments must be deposited in the state treasury and credited to the energy and conservation account created under subdivision 2a. An assessment made under this subdivision is not subject to the cap on assessments provided by section 216B.62, or any other law.

Subd. 1e. **Applied research and development grants.** (a) The commissioner may, by order, approve and make grants for applied research and development projects of general applicability that identify new technologies or strategies to maximize energy savings, improve the effectiveness of energy conservation programs, or document the carbon dioxide reductions from energy conservation programs. When approving projects, the commissioner shall consider proposals and comments from utilities and other interested parties. The commissioner may assess up to $3,600,000 annually for the purposes of this subdivision. The assessments must be deposited in the state treasury and credited to the energy and conservation account created under subdivision 2a. An assessment made under this subdivision is not subject to the cap on assessments provided by section 216B.62, or any other law.

(b) The commissioner, as part of the assessment authorized under paragraph (a), shall annually assess and grant up to $500,000 for the purpose of subdivision 9.

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

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

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

(d) The commissioner may assess up to $500,000 annually for the purposes of this subdivision. The assessments must be deposited in the state treasury and credited to the energy and

conservation account created under subdivision 2a. An assessment made under this subdivision is not subject to the cap on assessments provided by section 216B.62, or any other law.

Subd. 1g. **Manner of filing and service.** (a) A public utility, generation and transmission cooperative electric association, municipal power agency, cooperative electric association, and municipal utility shall submit filings to the department via the department's electronic filing system. The commissioner may approve an exemption from this requirement in the event an affected utility or association is unable to submit filings via the department's electronic filing system. All other interested parties shall submit filings to the department via the department's electronic filing system whenever practicable but may also file by personal delivery or by mail.

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

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

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

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

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

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

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

Subd. 2a. **Energy and conservation account.** The energy and conservation account is established in the special revenue fund in the state treasury. The commissioner must deposit money assessed or contributed under subdivisions 1d, 1e, 1f, and 7 in the state treasury and credit it to the energy and conservation account in the special revenue fund. Money in the account is appropriated to the commissioner for the purposes of subdivisions 1d, 1e, 1f, and 7. Interest on money in the account accrues to the account.

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

Subd. 2c. **Performance incentives.** By December 31, 2008, the commission shall review any incentive plan for energy conservation improvement it has approved under section 216B.16, subdivision 6c, and adjust the utility performance incentives to recognize making progress toward and meeting the energy-savings goals established in subdivision 1c.

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

Subd. 4. **Federal law prohibitions.** If investments by public utilities in energy conservation improvements are in any manner prohibited or restricted by federal law and there is a provision

under which the prohibition or restriction may be waived, then the commission, the governor, or any other necessary state agency or officer shall take all necessary and appropriate steps to secure a waiver with respect to those public utility investments in energy conservation improvements included in this section.

Subd. 5. **Efficient lighting program.** (a) Each public utility, cooperative electric association, and municipal utility that provides electric service to retail customers shall include as part of its conservation improvement activities a program to strongly encourage the use of fluorescent and high-intensity discharge lamps. The program must include at least a public information campaign to encourage use of the lamps and proper management of spent lamps by all customer classifications.

(b) A public utility that provides electric service at retail to 200,000 or more customers shall establish, either directly or through contracts with other persons, including lamp manufacturers, distributors, wholesalers, and retailers and local government units, a system to collect for delivery to a reclamation or recycling facility spent fluorescent and high-intensity discharge lamps from households and from small businesses as defined in section 645.445 that generate an average of fewer than ten spent lamps per year.

(c) A collection system must include establishing reasonably convenient locations for collecting spent lamps from households and financial incentives sufficient to encourage spent lamp generators to take the lamps to the collection locations. Financial incentives may include coupons for purchase of new fluorescent or high-intensity discharge lamps, a cash back system, or any other financial incentive or group of incentives designed to collect the maximum number of spent lamps from households and small businesses that is reasonably feasible.

(d) A public utility that provides electric service at retail to fewer than 200,000 customers, a cooperative electric association, or a municipal utility that provides electric service at retail to customers may establish a collection system under paragraphs (b) and (c) as part of conservation improvement activities required under this section.

(e) The commissioner of the Pollution Control Agency may not, unless clearly required by federal law, require a public utility, cooperative electric association, or municipality that establishes a household fluorescent and high-intensity discharge lamp collection system under this section to manage the lamps as hazardous waste as long as the lamps are managed to avoid breakage and are delivered to a recycling or reclamation facility that removes mercury and other toxic materials contained in the lamps prior to placement of the lamps in solid waste.

(f) If a public utility, cooperative electric association, or municipal utility contracts with a local government unit to provide a collection system under this subdivision, the contract must

provide for payment to the local government unit of all the unit's incremental costs of collecting and managing spent lamps.

(g) All the costs incurred by a public utility, cooperative electric association, or municipal utility for promotion and collection of fluorescent and high-intensity discharge lamps under this subdivision are conservation improvement spending under this section.

Subd. 5a. **Qualifying solar energy project.** (a) A utility or association may include in its conservation plan programs for the installation of qualifying solar energy projects as defined by section 216B.2411 to the extent of the spending allowed for generation projects by section 216B.2411. The cost-effectiveness of a qualifying solar energy project may be determined by a different standard than for other energy conservation improvements under this section if the commissioner determines it is in the public interest to do so to encourage solar energy projects. Energy savings from qualifying solar energy projects may not be counted toward the minimum energy-savings goal of at least one percent for energy conservation improvements required under subdivision 1c, but may, if the conservation plan is approved:

(1) be counted toward energy savings above that minimum percentage; and

(2) be eligible for a performance incentive under section 216B.16, subdivision 6c, or 216B.241, subdivision 2c, that is distinct from the incentive for energy conservation and is based on the competitiveness and cost-effectiveness of solar projects in relation to other potential solar projects available to the utility.

(b) Qualifying solar energy projects may not be considered when establishing demand-side management targets under section 216B.2422, 216B.243, or any other section of this chapter.

Subd. 5b. **Biomethane purchases.** (a) A natural gas utility may include in its conservation plan purchases of biomethane, and may use up to five percent of the total amount to be spent on energy conservation improvements under this section for that purpose. The cost-effectiveness of biomethane purchases may be determined by a different standard than for other energy conservation improvements under this section if the commissioner determines that doing so is in the public interest in order to encourage biomethane purchases. Energy savings from purchasing biomethane may not be counted toward the minimum energy-savings goal of at least one percent for energy conservation improvements required under subdivision 1c, but may, if the conservation plan is approved:

(1) be counted toward energy savings above that minimum percentage; and

(2) be considered when establishing performance incentives under subdivision 2c.

(b) For the purposes of this subdivision, "biomethane" means biogas produced through anaerobic digestion of biomass, gasification of biomass, or other effective conversion processes, that is cleaned and purified into biomethane that meets natural gas utility quality specifications for use in a natural gas utility distribution system.

Subd. 6. **Renewable energy research.** (a) A public utility that owns a nuclear generation facility in the state shall spend five percent of the total amount that utility is required to spend under this section to support basic and applied research and demonstration activities at the University of Minnesota Initiative for Renewable Energy and the Environment for the development of renewable energy sources and technologies. The utility shall transfer the required amount to the University of Minnesota on or before July 1 of each year and that annual amount shall be deducted from the amount of money the utility is required to spend under this section. The University of Minnesota shall transfer at least ten percent of these funds to at least one rural campus or experiment station.

(b) Activities funded under this subdivision may include, but are not limited to:

(1) environmentally sound production of energy from a renewable energy source including biomass;

(2) environmentally sound production of hydrogen from biomass and any other renewable energy source for energy storage and energy utilization;

(3) development of energy conservation and efficient energy utilization technologies;

(4) energy storage technologies; and

(5) analysis of policy options to facilitate adoption of technologies that use or produce low-carbon renewable energy.

(c) Notwithstanding other law to the contrary, the utility may, but is not required to, spend more than two percent of its gross operating revenues from service provided in this state under this section or section 216B.2411.

(d) For the purposes of this subdivision:

(1) "renewable energy source" means hydro, wind, solar, biomass and geothermal energy, and microorganisms used as an energy source; and

(2) "biomass" means plant and animal material, agricultural and forest residues, mixed municipal solid waste, and sludge from wastewater treatment.

(e) This subdivision expires June 30, 2010.

Subd. 7. **Low-income programs.** (a) The commissioner shall ensure that each utility and association provides low-income programs. When approving spending and energy-savings goals for low-income programs, the commissioner shall consider historic spending and participation levels, energy savings for low-income programs, and the number of low-income persons residing in the utility's service territory. A utility that furnishes gas service must spend at least 0.2 percent of its gross operating revenue from residential customers in the state on low-income programs. A utility or association that furnishes electric service must spend at least 0.1 percent of its gross operating revenue from residential customers in the state on low-income programs. For a generation and transmission cooperative association, this requirement shall apply to each association's members' aggregate gross operating revenue from sale of electricity to residential customers in the state. Beginning in 2010, a utility or association that furnishes electric service must spend 0.2 percent of its gross operating revenue from residential customers in the state on low-income programs.

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

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

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

Subd. 8. **Assessment.** The commission or department may assess utilities subject to this section in proportion to their respective gross operating revenue from sales of gas or electric

service within the state during the last calendar year to carry out the purposes of subdivisions 1d, 1e, and 1f. Those assessments are not subject to the cap on assessments provided by section 216B.62, or any other law.

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

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

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

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

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

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

(c) Sustainable Building 2030 energy-efficiency performance standards must be firm, quantitative measures of total building energy use and associated carbon dioxide emissions per square foot for different building types and uses, that allow for accurate determinations of a building's conformance with a performance standard. Performance standards must address energy use by electric vehicle charging infrastructure in or adjacent to buildings as that infrastructure begins to be made widely available. The energy-efficiency performance standards must be updated every three or five years to incorporate all cost-effective measures. The performance standards must reflect the reductions in carbon dioxide emissions per square foot resulting from actions taken by utilities to comply with the renewable energy standards in section 216B.1691. The performance standards should be designed to achieve reductions equivalent to the following reduction schedule, measured against energy consumption by an average building in each

applicable building sector in 2003: (1) 60 percent in 2010; (2) 70 percent in 2015; (3) 80 percent in 2020; and (4) 90 percent in 2025. A performance standard must not be established or increased absent a conclusive engineering analysis that it is cost-effective based upon established practices used in evaluating utility conservation improvement programs.

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

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

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

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

(4) development and delivery of training programs for architects, engineers, commissioning agents, technicians, contractors, equipment suppliers, developers, and others in the building industries; and

(5) analysis and evaluation of the effect of building operations on energy use.

(e) The commissioner shall require utilities to develop and implement conservation improvement programs that are expressly designed to achieve energy efficiency goals consistent with the Sustainable Building 2030 performance standards. These programs must include offerings of design assistance and modeling, financial incentives, and the verification of the proper installation of energy-efficient design components in new and substantially reconstructed buildings. A utility's design assistance program must consider the strategic planting of trees and shrubs around buildings as an energy conservation strategy for the designed project. A utility making an expenditure under its conservation improvement program that results in a building

meeting the Sustainable Building 2030 performance standards may claim the energy savings toward its energy-savings goal established in subdivision 1c.

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

History: *1980 c 579 s 18; 1980 c 614 s 123; 1981 c 356 s 182,248; 1982 c 561 s 4; 1983 c 179 s 6-8; 1989 c 338 s 2,3; 1991 c 235 art 1 s 2; 1992 c 478 s 2,3; 1993 c 249 s 31; 1994 c 483 s 1; 1994 c 641 art 3 s 1; art 4 s 4; 1994 c 644 s 3; 1998 c 273 s 11; 1998 c 350 s 1; 1999 c 140 s 2-7; 2001 c 212 art 8 s 4-7,12; 1Sp2001 c 4 art 6 s 44-46,77; 2003 c 130 s 12; 1Sp2003 c 11 art 2 s 5; art 3 s 4; 2004 c 216 s 3; 2005 c 97 art 7 s 1,2; 2007 c 10 s 5; 2007 c 57 art 2 s 21; 2007 c 136 art 2 s 5; 2008 c 278 s 2,3; 2008 c 296 art 1 s 9; 2009 c 86 art 1 s 31; 2009 c 110 s 15-18; 2009 c 134 s 5*