



Draft Minnesota Energy Policy Inventory

ECO Cost-Effectiveness Advisory Committee

August 08, 2024

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Purpose of Document

This document catalogs Minnesota energy policies that potentially impact cost-effectiveness evaluations for the Energy Conservation and Optimization (ECO) program. The National Standard Practice Manual's (NSPM) five-step process for developing a jurisdiction's primary cost-effectiveness test recommends that stakeholders first articulate applicable policy goals that affect elements of cost-effectiveness evaluations. The NSPM's Principle 2 explains that "utilities invest in or support energy resources to meet a variety of goals and objectives." It recommends that the "primary cost-effectiveness test should, therefore, reflect this intent by accounting for the state's applicable policy goals and objectives."¹ This inventory helped inform the Minnesota Department of Commerce's (the Department) March 31, 2023 Decision² adopting the Minnesota Test as the primary cost-effectiveness test that the gas and electric investor-owned utilities shall use to screen their energy efficiency, load management, and efficient fuel-switching ECO programs.

The Department periodically updates this Minnesota Energy Policy Inventory to reflect relevant policy changes and help ensure that ECO's primary cost-effectiveness test aligns with current energy policies. As shown in Table 1, the Minnesota Test currently includes Utility System, Non-Utility System, and Societal impacts. The NSPM recommends that the primary test include all quantifiable Utility System Impacts. This approach is reflected in the adopted Minnesota Test with all relevant Utility System impacts included (although some are not, as yet, quantified). Policy changes actively drive the Non-Utility System and Societal impacts included in the test. These policies are reflected in this document.

¹ National Standard Practice Manual for Benefit-Cost Analysis of Distributed Energy Resources, National Energy Screening Project, August 2020, p. iv.

² ["In the Matter of 2024-2026 CIP Cost-Effectiveness Methodologies for Electric and Gas Investor-Owned Utilities", Docket No. E,G999/CIP-23-46, Minnesota Department of Commerce, March 31, 2023.](#)

Table 1 - Elements of Minnesota Test

Type	Utility	Category	Impact	MN Test	Societal Test	Utility Cost Test	Participant Test	RIM
Utility System	Electric Utility	Generation	Energy Generation	x	x	x		x
			Capacity	x	x	x		x
			Environmental Compliance	x	x	x		x
			Renewable Portfolio Standard Compliance	x	x	x		x
			Market Price Effects	x	x	x		x
		Transmission	Ancillary Services	x	x	x		x
			Transmission Capacity	x	x	x		x
			Transmission System Losses	x	x	x		x
		Distribution	Distribution Costs	x	x	x		x
			Distribution System Losses	x	x	x		x
			Program Incentives	x	x	x		x
		General	Program Administration Costs	x	x	x		x
			Utility Performance Incentives	x	x	x		x
			Utility Revenue Impacts					x
			Credit and Collection Costs	x	x	x		x
			Risk	x	x	x		x
			Reliability	x	x	x		x
			Resilience	x	x	x		x
			Fuel and Variable O&M	x	x	x		x
		Utility System	Gas Utility	Commodity / Supply	Capacity and Storage	x	x	x
Environmental Compliance	x				x	x		x
Market Price Effects	x				x	x		x
Transportation	x				x	x		x
Delivery	Delivery			x	x	x		x
	Program Incentives			x	x	x		x
General (same as Electric)	Program Administration Costs			x	x	x		x
	Utility Performance Incentives			x	x	x		x
	Credit and Collection Costs			x	x	x		x
	Risk			x	x	x		x
	Reliability			x	x	x		x
	Resilience			x	x	x		x
Non-Utility System	All			Other Fuels	Other Fuels	x	x	
		Participant	Participant Costs			x		x
		Participant Benefits		x		x		
Societal	All	Societal Impacts	GHG emissions	x	x			
			Criteria air emissions	x	x			
			Other environmental	x	x			
			Economic and Jobs (Macroeconomic)	x	x			
			Energy Security	x	x			
			Energy Equity	x	x			
			Societal Discount Rate	x	x		x	

Document Organization

Source information for Section I - Minnesota Energy Policy Summary Tables is found in Sections II through VI. Section I includes four tables with “x” marks to indicate whether impacts that could be incorporated into cost-effectiveness models are addressed in statute, along with the policy grouping and statutory citation. The language from the statutory citations referenced in Tables 1 through 4 are provided in Sections II through VI.

The four tables in Section I and the corresponding statutory language in Sections II through VI are organized into: Statewide Policy Goals (Table 1 - Section II), other major utility-related policies (Table 2 - Section III), statutes that guide consumer-owned utility (Table 3 - Section IV), and public utility (Table 3 - Section V) ECO programs, and statutes that guide Minnesota Public Utility Commission activities (Table 4 - Section VI).

I. Minnesota Energy Policy Summary Tables

Table 1. Statewide Policy Goals

Cost-Effectiveness Model Impacts Reflected in Policies															
Policy	Citation	Non-Utility System			Societal										
Impact		Participant	Other Fuels	Low-Income	GHG	Air	Waste	Water	Land	Other Environ	Health	Economic	Security	Equity	Resilience
Statewide Policy Goal (ECO 2021), Energy savings and optimization policy goal	Minn. Stat. § 216B.2401		X		X							X	X		
Statewide Policy Goal (NGEA 2007), Energy planning	Minn. Stat. § 216C.05, Subd 1	X								X		X	X		X
Statewide Policy Goal (NGEA 2007), Energy policy goals	Minn. Stat. § 216C.05, Subd 2	X								X			X		
Statewide Policy Goal (NGEA 2007), GHG emissions-reduction goal	Minn. Stat. § 216H.02, Subd. 1				X										

Table 2. Other Policies

Cost-Effectiveness Model Impacts Reflected in Policies															
Policy	Citation	Non-Utility System			Societal										
Impact		Participant	Other Fuels	Low-Income	GHG	Air	Waste	Water	Land	Other Environ	Health	Economic	Security	Equity	Resilience
Other Policies (NGIA 2021), Definitions	Minn. Stat. § 216B.2427, Subd 1	X	X	X	X										
Other Policies (NGIA 2021), Innovation Plans	Minn. Stat. § 216B.2427, Subd 2	X	X	X	X		X			X		X			
Other Policies (NGIA 2021), Limitations on utility customer costs	Minn. Stat. § 216B.2427, Subd 3		X												
Other Policies (NGIA 2021), Throughput goal	Minn. Stat. § 216B.2427, Subd 10		X							X					
Other Policies (NGIA 2021), Lifecycle GHG Emissions Accounting Framework; Cost-Benefit Test for Innovative Resources	Minn. Stat. § 216B.2428		X		X					X		X			

Table 3. ECO Statutes

Cost-Effectiveness Model Impacts Reflected in Policies															
Policy	Citation	Non-Utility System		Societal											
Impact		Participant	Other Fuels	Low-Income	GHG	Air	Waste	Water	Land	Other Environ	Health	Economic	Security	Equity	Resilience
ECO COUs, Energy savings goal	Minn. Stat. § 216b.2403, Subd 2		X												
ECO COUs, Energy conservation and optimization plans	Minn. Stat. § 216b.2403, Subd 3				X										
ECO COUs, Energy conservation programs for low-income households	Minn. Stat. § 216b.2403, Subd 5	X		X						X				X	
ECO COUs, Criteria for efficient fuel-switching improvements	Minn. Stat. § 216b.2403, Subd 8		X		X										
ECO IOUs, Energy-saving goals	Minn. Stat. § 216b.241, Subd 1c		X		X										
ECO IOUs, Technical assistance	Minn. Stat. § 216b.241, Subd 1d		X												
ECO IOUs, Applied research and development grants.	Minn. Stat. § 216b.241, Subd 1e				X										
ECO IOUs, Energy conservation and optimization plans	Minn. Stat. § 216b.241, Subd 2			X	X									X	

Cost-Effectiveness Model Impacts Reflected in Policies

Policy	Citation	Non-Utility System		Societal											
		Participant	Other Fuels	Low-Income	GHG	Air	Waste	Water	Land	Other Environ	Health	Economic	Security	Equity	Resilience
ECO IOUs, Efficient lighting program	Minn. Stat. § 216b.241, Subd 5										X				
ECO IOUs, Biomethane purchases	Minn. Stat. § 216b.241, Subd 5b						X								
ECO IOUs, Low-income programs	Minn. Stat. § 216b.241, Subd 7	X	X	X										X	
ECO IOUs, Building performance standards; Sustainable Building 2030	Minn. Stat. § 216b.241, Subd 9				X										
ECO IOUs, Programs for efficient fuel-switching improvements; electric utilities	Minn. Stat. § 216b.241, Subd 11		X		X										
ECO IOUs, Programs for efficient fuel-switching improvements; gas utilities	Minn. Stat. § 216b.241, Subd 12		X		X										
ECO IOUs, Minnesota efficient technology accelerator	Minn. Stat. § 216b.241, Subd 14	X			X							X		X	

Table 4. Minnesota Public Utilities Commission (PUC) Statutes

Cost-Effectiveness Model Impacts Reflected in Policies															
Policy	Citation	Non-Utility System			Societal										
Impact		Participant	Other Fuels	Low-Income	GHG	Air	Waste	Water	Land	Other Environ	Health	Economic	Security	Equity	Resilience
PUC (Rates), Reasonable rate	Minn. Stat. § 216B.03	X												X	
PUC (IRPs), Long-range emission reduction planning	Minn. Stat. § 216B.2422, Subd. 2c				X										
PUC (IRPs), Environmental costs	Minn. Stat. § 216B.2422, Subd. 3(a)				X	X						X			
PUC (IRPs), Preference for renewable energy facility	Minn. Stat. § 216B.2422, Subd. 4				X										

II. Statewide Policy Goals

Energy Conservation & Optimization Act of 2021, [MN Statutes 216B.2401, ENERGY SAVINGS AND OPTIMIZATION POLICY GOAL.](#)

(a) The legislature finds that energy savings are an energy resource, and that cost-effective energy savings are preferred over all other energy resources. In addition, the legislature finds that optimizing the timing and method used by energy consumers to manage energy use provides significant benefits to the consumers and to the utility system as a whole. The legislature further finds that cost-effective energy savings and load management programs should be procured systematically and aggressively in order to reduce utility costs for businesses and residents, improve the competitiveness and profitability of businesses, create more energy-related jobs, reduce the economic burden of fuel imports, and reduce pollution and emissions that cause climate change. Therefore, it is the energy policy of the state of Minnesota to achieve annual energy savings equivalent to at least 2.5 percent of annual retail energy sales of electricity and natural gas through multiple measures, including but not limited to:

Commented [ZA(1)]: Economic, GHGs, and Energy Security

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

(b) A utility is encouraged to design and offer to customers load management programs that enable: (1) customers to maximize the economic value gained from the energy purchased from the customer's utility service provider; and (2) utilities to optimize the infrastructure and generation capacity needed to effectively serve customers and facilitate the integration of renewable energy into the energy system.

(c) The commissioner must provide a reasonable estimate of progress made toward the statewide energy-savings goal under paragraph (a) in the annual report required under section [216B.241, subdivision 1c](#), and make recommendations for administrative or legislative initiatives to increase energy savings toward that goal. The commissioner must also annually report on the energy productivity of the state's economy by estimating the ratio

of economic output produced in the most recently completed calendar year to the primary energy inputs used in that year.

Next Generation Energy Act of 2007³, [MN Statutes 216C.05 FINDINGS AND PURPOSE.](#)

Subdivision 1. Energy planning.

The legislature finds and declares that continued growth in demand for energy will cause severe social and economic dislocations, and that the state has a vital interest in providing for: increased efficiency in energy consumption, the development and use of renewable energy resources wherever possible, and the creation of an effective energy forecasting, planning, and education program.

The legislature further finds and declares that the protection of life, safety, and financial security for citizens during an energy crisis is of paramount importance.

Commented [ZA(2)]: Energy Security.

Therefore, the legislature finds that it is in the public interest to review, analyze, and encourage those energy programs that will minimize the need for annual increases in fossil fuel consumption by 1990 and the need for additional electrical generating plants, and provide for an optimum combination of energy sources and energy conservation consistent with environmental protection and the protection of citizens.

Commented [TW2R2]: Energy Security, Resilience.

The legislature intends to monitor, through energy policy planning and implementation, the transition from historic growth in energy demand to a period when demand for traditional fuels becomes stable and the supply of renewable energy resources is readily available and adequately utilized.

Commented [ZA(3)]: Energy Security, Other Environmental, and Participant

The legislature further finds that for economic growth, environmental improvement, and protection of citizens, it is in the public interest to encourage those energy programs that will provide an optimum combination of energy resources, including energy savings.

Commented [CL4]: Economic.

Therefore, the legislature, through its committees, must monitor and evaluate progress toward greater reliance on cost-effective energy efficiency and renewable energy and lesser dependence on fossil fuels in order to reduce the economic burden of fuel imports, diversify utility-owned and consumer-owned energy resources, reduce utility costs for businesses and residents, improve the competitiveness and profitability of Minnesota businesses, create more energy-related jobs that contribute to the Minnesota economy, and reduce pollution and emissions that cause climate change.

Subd. 2. Energy policy goals.

It is the energy policy of the state of Minnesota that:

(1) annual energy savings equal to at least 1.5 percent of annual retail energy sales of electricity and natural gas be achieved through cost-effective energy efficiency;

³ [As amended.](#)

(2) the per capita use of fossil fuel as an energy input be reduced by 15 percent by the year 2015, through increased reliance on energy efficiency and renewable energy alternatives;

(3) 25 percent of the total energy used in the state be derived from renewable energy resources by the year 2025; and

(4) retail electricity rates for each customer class be at least five percent below the national average.

Commented [ZA(5)]: Energy Security, Other Environmental, Participant.

Next Generation Energy Act of 2007⁴, [MN Statutes 216H.02, GREENHOUSE GAS EMISSIONS CONTROL.](#)

Subdivision 1. Greenhouse gas emissions-reduction goal.

(a) It is the goal of the state to reduce statewide greenhouse gas emissions across all sectors producing greenhouse gas emissions by at least the following amounts, compared with the level of emissions in 2005:

(1) 15 percent by 2015;

(2) 30 percent by 2025;

(3) 50 percent by 2030; and

(4) to net zero by 2050.

(b) To the maximum extent practicable, actions taken to achieve these goals must avoid causing disproportionate adverse impacts to residents of communities that are or have been incommensurately exposed to pollution affecting human health and environmental quality.

(c) The targets under paragraph (a) must be reviewed annually by the commissioner of the Pollution Control Agency, taking into account the latest scientific research on the impacts of climate change and strategies to reduce greenhouse gas emissions published by the Intergovernmental Panel on Climate Change. The commissioner must forward any recommended changes to the targets to the chairs and ranking minority members of legislative committees with primary jurisdiction over climate change and environmental policy.

(d) For the purposes of the subdivision, "net zero" means:

(1) statewide greenhouse gas emissions equal to zero; or

(2) when annual anthropogenic emissions of greenhouse gases to the atmosphere are balanced by removals over a specific period.

to a level at least 15 percent below 2005 levels by 2015, to a level at least 30 percent below 2005 levels by 2025, and to a level at least 80 percent below 2005 levels by 2050.

The levels shall be reviewed based on the climate change action plan study.

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Commented [ZA(6)]: GHG

Subd. 2. Climate change action plan.

⁴As amended.

By February 1, 2008, the commissioner of commerce, in consultation with the commissioners of the Pollution Control Agency, the Housing Finance Agency, and the Departments of Natural Resources, Agriculture, Employment and Economic Development, and Transportation, and the chair of the Metropolitan Council, shall submit to the legislature a climate change action plan that meets the requirements of this section.

Subd. 3. Stakeholder process.

The plan required by subdivision 2 must be developed through a structured, broadly inclusive stakeholder-based review of potential policies and initiatives that will reduce statewide greenhouse gas emissions from a broad range of sources and activities. The commissioner shall engage a nationally recognized independent expert entity to conduct the stakeholder process. The report of the stakeholder process must form the basis for the plan submitted by the commissioner under subdivision 2.

Subd. 4. General elements of the plan.

The plan must:

- (1) estimate 1990 and 2005 greenhouse gas emissions in the state and make projections of emissions in 2015, 2025, and 2050;
- (2) identify, evaluate, and integrate a broad range of statewide greenhouse gas reduction options for all emission sectors in the state;
- (3) assess the costs, benefits, and feasibility of implementing the options;
- (4) recommend an integrated set of reduction options and strategies for implementing the options that will achieve the goals in subdivision 1, including analysis of the associated costs and benefits to Minnesotans;
- (5) estimate the statewide greenhouse gas emissions reductions anticipated from implementation of existing state policies;
- (6) recommend a system to require the reporting of statewide greenhouse gas emissions, identifying which facilities must report, and how emission estimates should be made; and
- (7) evaluate the option of exempting a project from the prohibitions contained in section [216H.03, subdivision 3](#), if the project contributes a specified fee per ton of carbon dioxide emissions emitted annually by the project, the proceeds of which would be used to fund permanent, quantifiable, verifiable, and enforceable reductions in greenhouse gas emissions that would not otherwise have occurred.

Subd. 5. Specific plan requirements.

- (a) The plan must evaluate and recommend interim goals as steps to achieve the goals in subdivision 1.

(b) The plan must determine the feasibility, assess the costs and benefits, and recommend how the state could adopt a regulatory system that imposes a cap on the aggregate air pollutant emissions of a group of sources, requires those subject to the cap to own an allowance for each ton of the air pollutant emitted, and allows for market-based trading of those allowances. The evaluation must contain an analysis of the state implementing a cap and trade system alone, in coordination with other states, and as a requirement of federal law applying to all states. The plan must recommend the parameters of a cap and trade system that includes a cap that would prevent significant increases in greenhouse gas emissions above current levels with a schedule for lowering the cap periodically to achieve the goals in subdivision 1 and interim goals recommended under paragraph (a). The plan must consider cost savings and cost increases on energy consumers in the state.

(c) The plan must include recommendations for improvements in the emissions inventory and recommend whether the state should require greenhouse gas emissions reporting from specific sources and, if so, which sources should be required to report. The plan must also evaluate options for an emissions registry after reviewing registries in other states and recommend a registry that will insure the greatest opportunity for Minnesota entities to obtain marketable credits.

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Subd. 6. Regional activities.

The state must, to the extent possible, with other states in the Midwest region, develop and implement a regional approach to reducing greenhouse gas emissions from activities in the region, including consulting on a regional cap and trade system. The commissioner of commerce shall coordinate Minnesota's regional activities under this subdivision and report to the legislative committees in the senate and house of representatives with jurisdiction over energy and environmental policy by February 1, 2008, and February 1, 2009, on the progress made and recommendations for further action. The commissioner of commerce, as part of the activities required under this subdivision, must meet with responsible officials from bordering states, other states in the Midwest region, and states in other regions of the country to:

- (1) determine whether other states are interested in establishing and cooperating in a multistate or regional greenhouse gas cap and trade allowance program;
- (2) identify and prepare an inventory of greenhouse gas reduction resources available to support a multistate or regional greenhouse gas cap and trade allowance program;
- (3) seek cooperation on a regional inventory of greenhouse gas emission sources; and
- (4) prepare an inventory of available renewable energy resources within a state or region.

The commissioner of commerce must develop a definition of scope of this regional activity that is in addition to the components described in clauses (1) to (4). The commissioner must report on the additional scoping definitions to the chairs and ranking

minority members of the legislative committees with jurisdiction over energy and environmental finance and policy on or before the commencement of the 2008 regular legislative session.

III. Other Policies

Natural Gas Innovation Act of 2021⁵, MN Statutes 216B.2427, NATURAL GAS UTILITY INNOVATION PLANS.

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.

(g~~f~~) "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.

(h~~e~~) "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.

Commented [GS7]: Other Fuels

Commented [ZA(8)]: GHG

Commented [ZA(9)]: GHG

Commented [GS10]: Participant (Low-Income), Societal Low-Income.

Commented [ZA(11)]: Important distinction between ECO and NGIA

Commented [ZA(12)]: GHG

⁵ As amended.

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

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

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

Commented [ZA(13): GHG

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

(im) "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.

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

(oo) "Renewable energy" has the meaning given in section [216B.2422, subdivision 1](#).

(pe) "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.

(qp) "Solar thermal" has the meaning given to qualifying solar thermal project in section [216B.2411, subdivision 2](#), paragraph (d).

(rq) "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:

Commented [ZA(14): Other Fuels

(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

Commented [ZA(15): GHG

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

(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.

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](#).

Commented [ZA(16): Important distinction between ECO and NGIA

(f) "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) "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.

Subd. 2. Innovation plans.

(a) A natural gas utility may file an innovation plan with the commission. The utility's plan must include, as applicable, the following components:

(1) the innovative resource or resources the utility plans to implement to contribute to meeting the state's greenhouse gas and renewable energy goals, including those established in section [216C.05, subdivision 2](#), clause (3), and section [216H.02, subdivision 1](#), within the requirements and limitations set forth in this section;

Commented [ZA(17)]: GHG

(2) research and development investments related to innovative resources the utility plans to undertake;

(3) total lifecycle greenhouse gas emissions that the utility projects are reduced or avoided through implementing the plan;

Commented [ZA(18)]: GHG

(4) a comparison of the estimate in clause (3) to total emissions from natural gas use by utility customers in 2020;

(5) a description of each pilot program included in the plan that is related to the development or provision of innovative resources, and an estimate of the total incremental costs to implement each pilot program;

(6) the cost-effectiveness of innovative resources calculated from the perspective of the utility, society, the utility's nonparticipating customers, and the utility's participating customers compared to other innovative resources that could be deployed to reduce or avoid the same greenhouse gas emissions targeted for reduction by the utility's proposed innovative resource;

Commented [ZA(19)]: Participant, GHG

(7) for any pilot program not previously approved as part of the utility's most recent innovation plan, a third-party analysis of:

(i) the lifecycle greenhouse gas emissions intensity of the proposed innovative resources; and

(ii) the forecasted lifecycle greenhouse gas emissions reduced or avoided if the proposed pilot program is implemented;

(8) an explanation of the methodology used by the utility to calculate the lifecycle greenhouse gas emissions avoided or reduced by each pilot program included in the plan, including descriptions of how the utility's method deviated, if at all, from the carbon accounting frameworks established by the commission under section [216B.2428](#);

Commented [ZA(20)]: GHG

(9) a discussion of whether the plan supports the development and use of alternative agricultural products, waste reduction, reuse, or anaerobic digestion of organic waste, and the recovery of energy from wastewater, and, if it does, a description of the geographic areas of the state in which the benefits are realized;

Commented [ZA(21)]: Other Environmental

Commented [CL21R2]: Waste

(10) a description of third-party systems and processes the utility plans to use to:

(i) track the innovative resources included in the plan so that environmental benefits produced by the plan are not claimed for any other program; and

Commented [ZA(22)]: Other Environmental

(ii) verify the environmental attributes and greenhouse gas emissions intensity of innovative resources included in the plan;

Commented [ZA(23)]: GHG and Other Environmental

(11) projected local job impacts resulting from implementation of the plan and a description of steps the utility and the utility's energy suppliers and contractors are taking to maximize the availability of construction employment opportunities for local workers;

Commented [ZA(24)]: Economic

(12) a description of how the utility proposes to recover annual total incremental costs of the plan;

(13) steps the utility has taken or proposes to take to reduce the expected cost of the plan on low- and moderate-income residential customers and to ensure that low- and moderate-income residential customers benefit from innovative resources included in the plan;

Commented [CL25]: Participant (Low-income)

(14) a report on the utility's progress toward implementing the utility's previously approved innovation plan, if applicable;

(15) a report of the utility's progress toward achieving the cost-effectiveness objectives established by the commission with respect to the utility's previously approved innovation plan, if applicable; and

(16) collections of pilot programs that the utility estimates would, if implemented, provide approximately 50 percent, 150 percent, and 200 percent of the greenhouse gas reduction or avoidance benefits of the utility's proposed plan.

Commented [ZA(26)]: GHG

(b) The commission must approve, modify, or reject a plan. The commission must not approve an innovation plan unless the commission finds:

(1) the size, scope, and scale of the plan produces net benefits under the cost-benefit framework established by the commission in section [216B.2428](#);

(2) the plan promotes the use of renewable energy resources and reduces or avoids greenhouse gas emissions at a cost level consistent with subdivision 3;

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(3) the plan promotes local economic development;

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(4) the innovative resources included in the plan have a lower lifecycle greenhouse gas intensity than natural gas produced from conventional geologic sources;

Commented [ZA(29)]: GHG

(5) the systems used to track and verify the environmental attributes of the innovative resources included in the plan are reasonable, considering available third-party tracking and verification systems;

Commented [ZA(30)]: Other Environmental

(6) the costs and revenues projected under the plan are reasonable in comparison to other innovative resources the utility could deploy to reduce greenhouse gas emissions, considering other benefits of the innovative resources included in the plan;

Commented [ZA(31)]: GHG

(7) the total amount of estimated greenhouse gas emissions reduction or avoidance to be achieved under the plan is reasonable considering the state's greenhouse gas and renewable energy goals, including those established in section [216C.05, subdivision 2](#), clause (3), and section [216H.02, subdivision 1](#); customer cost; and the total amount of greenhouse gas emissions reduction or avoidance achieved under the utility's previously approved plans, if applicable; and

Commented [ZA(32)]: GHG

(8) any renewable natural gas purchased by a utility under the plan that is produced from the anaerobic digestion of manure is certified as being produced at an agricultural livestock production facility that has not and does not increase the number of animal units at the facility solely or primarily to produce renewable natural gas for the plan.

(c) In seeking to recover costs under a plan approved by the commission under this section, the utility must demonstrate to the satisfaction of the commission that the actual total incremental costs incurred to implement the approved innovation plan are reasonable. Prudently incurred costs under an approved plan, including prudently incurred costs to obtain the third-party analysis required in paragraph (a), clauses (6) and (7), are recoverable either:

(1) under section [216B.16, subdivision 7](#), clause (2), via the utility's purchased gas adjustment;

(2) in the utility's next general rate case; or

(3) via annual adjustments, provided that after notice and comment the commission determines that the costs included for recovery through rates are prudently incurred. Annual adjustments must include a rate of return, income taxes on the rate of return, incremental property taxes, incremental depreciation expense, and incremental operation and maintenance expenses. The rate of return must be at the level approved by the commission in the utility's last general rate case, unless the commission determines that a different rate of return is in the public interest.

(d) The commission may not approve a utility's initial plan filed under this section unless:

(1) 50 percent or more of the utility's costs approved by the commission for recovery under the plan are for the procurement and distribution of renewable natural gas, biogas, hydrogen produced via power-to-hydrogen, and ammonia produced via power-to-ammonia; and

(2) the utility's costs approved by the commission for recovery for any pilot program to facilitate the development, expansion, or modification of district energy systems, as required under subdivision 9, represent no more than 20 percent of the total costs approved by the commission for recovery under the plan.

(e) Upon approval of a utility's plan, the commission shall establish cost-effectiveness objectives for the plan based on the cost-benefit test for innovative resources developed under section [216B.2428](#). The cost-effectiveness objective for each plan must demonstrate incremental progress from the previously approved plan's cost-effectiveness objective.

(f) A utility operating under an approved plan must file annual reports to the commission on work completed under the plan, including:

(1) costs incurred;

(2) lifecycle greenhouse gas emissions reductions or avoidance achieved;

(3) a description of the processes used to track and verify the innovative resources and to retire the associated environmental attributes;

(4) an assessment of the degree to which the lifecycle greenhouse gas accounting methodology is consistent with current science;

(5) the economic impact of the plan, including job creation;

(6) the utility's progress toward achieving the cost-effectiveness objectives established by the commission; and

(7) modifications to elements of the plan proposed by the utility.

Commented [ZA(33)]: Other Fuels

Commented [GS34]: Key ECO vs. NGIA distinction re: cost-effectiveness.

Commented [ZA(35)]: GHG

Commented [ZA(36)]: GHG

Commented [ZA(37)]: Economic

(g) When evaluating a utility's annual report, the commission may:

- (1) approve the continuation of a pilot program included in the plan, with or without modifications;
- (2) require the utility to file a new or modified pilot program or plan; or
- (3) disapprove the continuation of a pilot program or plan.

(h) An innovation plan has a term of five years. A subsequent innovation plan must be filed no later than four years after the previous plan was approved by the commission so that, if approved, the new plan takes effect immediately upon expiration of the previous plan.

(i) For purposes of this section and the commission's lifecycle carbon accounting framework and cost-benefit test for innovative resources under section [216B.2428](#), any required analysis of lifecycle greenhouse gas emissions reductions or avoidance, or lifecycle greenhouse gas intensity:

(1) must include but is not limited to estimates of:

- (i) avoided or reduced greenhouse gas emissions attributable to utility operations;
- (ii) avoided or reduced greenhouse gas emissions from the production, processing, and transmission of fuels prior to receipt by the utility; and

(iii) avoided or reduced greenhouse gas emissions at the point of end use;

(2) must not count any unit of greenhouse gas emissions avoidance or reduction more than once; and

(3) may, where direct measurement is not technically or economically feasible, rely on emissions factors, default values, or engineering estimates from a publicly accessible source accepted by a federal or state government agency, provided that the emissions factors, default values, or engineering estimates can be demonstrated to the satisfaction of the commission to produce a reasonable estimate of greenhouse gas emissions reductions, avoidance, or intensity.

Commented [ZA(38)]: GHG

(j) Strategic electrification implemented in a plan approved by the commission under this section is not eligible for a financial incentive under section [216B.241, subdivision 2c](#). Electric end-use equipment installed under a plan approved by the commission under this section is the exclusive property of the building owner.

Subd. 3. **Limitations on utility customer costs.**

(a) Except as provided in paragraph (b), the first innovation plan submitted to the commission by a utility must not propose, and the commission must not approve, annual total incremental costs exceeding the lesser of:

- (1) 1.75 percent of the utility's gross operating revenues from natural gas service provided in Minnesota at the time of plan filing; or

(2) \$20 per nonexempt customer, based on the proposed annual total incremental costs for each year of the plan divided by the total number of nonexempt utility customers.

(b) The commission may approve additional annual costs up to the lesser of:

(1) an additional 0.25 percent of the utility's gross operating revenues from service provided in Minnesota at the time of plan filing; or

(2) \$5 per nonexempt customer, based on the proposed annual total incremental costs for each year of the plan divided by the total number of nonexempt utility customers of incremental costs.

The commission may approve the additional costs under this paragraph only if the commission determines that the additional costs are associated exclusively with the purchase of renewable natural gas produced from:

(i) food waste diverted from a landfill;

(ii) a municipal wastewater treatment system; or

(iii) an organic mixture that includes at least 15 percent, by volume, sustainably harvested native prairie grasses or locally appropriate cover crops, as determined by a local soil and water conservation district or the United States Department of Agriculture, Natural Resources Conservation Service.

Commented [ZA(39)]: Other Fuels

(c) Unless the commission determines that paragraph (d) applies, if the commission determines that the utility has successfully achieved the cost-effectiveness objectives established in the utility's most recently approved innovation plan, the next subsequent plan filed by the utility under this section is subject to the provisions of paragraphs (a) and (b), except that:

(1) the cap on total incremental costs in paragraph (a) with respect to the second plan is the lesser of:

(i) 2.75 percent of the utility's gross operating revenues from natural gas service in Minnesota at the time of the plan's filing; or

(ii) \$35 per nonexempt customer; and

(2) the cap on additional costs in paragraph (b) is the lesser of:

(i) an additional 0.75 percent of the utility's gross operating revenues from natural gas service in Minnesota at the time of the plan's filing; or

(ii) \$10 per nonexempt customer.

(d) If the commission determines that the utility has successfully achieved the cost-effectiveness objectives established in two of the same utility's previously approved innovation plans, all subsequent plans filed by the utility under this section are subject to paragraphs (a) and (b), except that:

(1) the cap on total incremental costs in paragraph (a) with respect to the third or subsequent plan is the lesser of:

(i) four percent of the utility's gross operating revenues from natural gas service in Minnesota at the time of the plan's filing; or

(ii) \$50 per nonexempt customer; and

(2) the cap on additional costs in paragraph (b) is the lesser of:

(i) an additional 1.5 percent of the utility's gross operating revenues from natural gas service in Minnesota at the time of the plan's filing; or

(ii) \$20 per nonexempt customer.

(e) For purposes of paragraphs (a) to (d), the limits on annual total incremental costs must be calculated at the time the innovation plan is filed as the average of the utility's forecasted total incremental costs over the five-year term of the plan.

(f) A large customer facility that the commissioner of commerce has exempted from a utility's conservation improvement program under section [216B.241, subdivision 1a](#), paragraph (b), is exempt from the utility's innovation plan offerings and must not be charged any costs incurred to implement an approved innovation plan unless the large customer facility files a request with the commissioner to be included in a utility's innovation plan. The commission may prohibit large customer facilities exempt from innovation plan costs from participating in innovation plans.

(g) A utility filing an innovation plan may include annual spending and investments on research and development of up to ten percent of the proposed total incremental costs related to innovative plans, subject to the limitations in paragraphs (a) to (e).

(h) For purposes of this subdivision, gross operating revenues do not include revenues from large customer facilities exempt from innovation plan costs.

Subd. 4. Innovative resources procured outside of an innovation plan.

(a) Without filing an innovation plan, a natural gas utility may propose and the commission may approve cost recovery for:

(1) innovative resources acquired to satisfy a commission-approved green tariff program that allows customers to choose to meet a portion of the customers' energy needs through innovative resources; or

(2) utility expenditures for innovative resources procured at a cost that is within five percent of the average of Ventura and Demarc index prices for natural gas produced from conventional geologic sources at the time of the transaction per unit of natural gas that the innovative resource displaces.

(b) An approved green tariff program must include provisions to ensure that reasonable systems are used to track and verify the environmental attributes of innovative resources

included in the program, taking into account any available third-party tracking or verification systems.

(c) For the purposes of this subdivision, "Ventura and Demarc index prices" means the daily index price of wholesale natural gas sold at the Northern Natural Gas Company's Ventura trading hub in Hancock County, Iowa, and its demarcation point in Clifton, Kansas.

Subd. 5. Power-to-ammonia.

When determining whether to approve a power-to-ammonia pilot program as part of an innovative plan, the commission must consider:

- (1) the risk of exposing any person to unhealthy concentrations of ammonia;
- (2) the risk that any home or business might be affected by ammonia odors;
- (3) whether the greenhouse gas emissions addressed by the proposed power-to-ammonia project could be more efficiently addressed using power-to-hydrogen; and
- (4) whether the power-to-ammonia project achieves lifecycle greenhouse gas emissions reductions in the agricultural sector more effectively than power-to-hydrogen.

Subd. 6. Thermal energy audits.

The first innovation plan filed under this section by a utility with more than 800,000 customers must include a pilot program to provide thermal energy audits to small- and medium-sized businesses in order to identify opportunities to reduce or avoid greenhouse gas emissions from natural gas use. The pilot program must provide incentives for businesses to implement recommendations made by the audit. The utility must develop criteria to identify businesses that achieve significant emissions reductions by implementing audit recommendations and must recognize the businesses as thermal energy leaders.

Subd. 7. Innovative resources for certain industrial processes.

The first innovation plan filed under this section by a utility with more than 800,000 customers must include a pilot program to provide innovative resources to industrial facilities whose manufacturing processes, for technical reasons, are not amenable to electrification. A large customer facility exempt from innovation plan offerings under subdivision 3, paragraph (f), is not eligible to participate in the pilot program under this subdivision.

Subd. 8. Electric cold climate air-source heat pumps.

(a) The first innovation plan filed under this section by a utility with more than 800,000 customers must include a pilot program that facilitates deep energy retrofits and the installation of cold climate electric air-source heat pumps in existing residential homes that have natural gas heating systems.

(b) For purposes of this subdivision, "deep energy retrofit" means the installation of any measure or combination of measures, including air sealing and addressing thermal bridges,

that under normal weather and operating conditions can reasonably be expected to reduce a building's calculated design load to ten or fewer British Thermal Units per hour per square foot of conditioned floor area. Deep energy retrofit does not include the installation of photovoltaic electric generation equipment, but may include the installation of a solar thermal energy project.

Subd. 9. District energy.

The first innovation plan filed under this section by a utility with more than 800,000 customers must include a pilot program to facilitate the development, expansion, or modification of district energy systems in Minnesota. This subdivision does not require the utility to propose, construct, maintain, or own district energy infrastructure.

Subd. 10. Throughput goal.

It is the goal of the state of Minnesota that through the Natural Gas Innovation Act and Conservation Improvement Program, utilities reduce the overall amount of natural gas produced from conventional geologic sources delivered to customers.

Commented [ZA(40)]: Other Fuels and Other Environmental

Subd. 11. Utility system report and forecasts.

(a) A public utility filing an innovation plan shall concurrently submit a report to the commission containing the following information:

- (1) the volume of methane gas emissions attributed to venting or leakage across the utility's system, including emissions information reported to the Environmental Protection Agency and gas leaks considered to be hazardous or nonhazardous, and a narrative description of the utility's expectations regarding the cost and performance of the utility's leakage reduction programs over the next five years;
- (2) total system greenhouse gas emissions and greenhouse gas emissions projected to be reduced or avoided through innovative resource investments and energy conservation investments, and a narrative description of the costs required to achieve the reductions over the next five years through investments in innovative resources and energy conservation;
- (3) the quantity of pipe in service in the utility's natural gas network in Minnesota, by material, size, coating, operating pressure, and decade of installation, based on utility information reported to the United States Department of Transportation;
- (4) a narrative description of other significant equipment owned and operated by the utility through which gas is transported or stored, including regulator stations and storage facilities, a discussion of the function of the equipment, how the equipment is maintained, and utility efforts to prevent leaks from the equipment;
- (5) a five-year forecast of fuel prices and anticipated purchases including, as available, natural gas produced from conventional geologic sources, renewable natural gas, and alternative fuels;

(6) a five-year forecast of potential capital investments by the utility in existing infrastructure and new infrastructure for natural gas produced from conventional geologic sources and for innovative resources; and

(7) an inventory of the utility's current financial incentive programs for natural gas, including rebates and incentives offered for new and existing buildings and a description of the utility's projected changes in incentives the utility is likely to implement over the next five years.

(b) Information filed under this subdivision is intended to be used by the commission to evaluate a utility's innovation plan in the context of the utility's other planned investments and activities with respect to natural gas produced from conventional geologic sources. Information filed under this subdivision must not be used by the commission to set or limit utility rate recovery.

[MN Statutes 216B.2428, LIFECYCLE GREENHOUSE GAS EMISSIONS ACCOUNTING FRAMEWORK; COST-BENEFIT TEST FOR INNOVATIVE RESOURCES](#)

By June 1, 2022, the commission shall, by order, issue frameworks the commission must use to calculate lifecycle greenhouse gas emissions intensities of each innovative resource, as follows:

(1) a general framework to compare the lifecycle greenhouse gas emissions intensities of power-to-hydrogen, strategic electrification, renewable natural gas, district energy, energy efficiency, biogas, carbon capture, and power-to-ammonia; and

Commented [GS41]: GHG, Other Fuels.

(2) a cost-benefit analytic framework to be applied to innovative resources and innovation plans filed under section [216B.2427](#) that the commission must use to compare the cost-effectiveness of those resources and plans. This analytic framework must take into account:

(i) the total incremental cost of the plan or resource and the lifecycle greenhouse gas emissions avoided or reduced by the innovative resource or plan, using the framework developed under clause (1);

(ii) additional economic costs and benefits, programmatic costs and benefits, additional environmental costs and benefits, and other costs or benefits that may be expected under a plan; and

Commented [GS42]: Economic, Other Environmental.

(iii) baseline cost-effectiveness criteria against which an innovation plan should be compared. When establishing baseline criteria, the commission must take into account options available to reduce lifecycle greenhouse gas emissions from natural gas end uses and the goals in section [216C.05, subdivision 2](#), clause (3), and section [216H.02, subdivision 1](#). To the maximum reasonable extent, the cost-benefit framework must be consistent with environmental cost values established under section [216B.2422, subdivision 3](#), and other calculations of the social value of greenhouse gas emissions reductions used by the commission. The commission may update frameworks established under this section as necessary.

IV. ECO COU Statutory Requirements

MN Statutes 216B.2403 CONSUMER-OWNED UTILITIES; ENERGY CONSERVATION AND OPTIMIZATION.

Subdivision 1. **Applicability.**

This section applies to:

- (1) a cooperative electric association that provides retail service to more than 5,000 members;
- (2) a municipality that provides electric service to more than 1,000 retail customers; and
- (3) a municipality with more than 1,000,000,000 cubic feet in annual throughput sales to natural gas retail customers.

Subd. 2. **Consumer-owned utility; energy-savings goal.**

(a) Each individual consumer-owned 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 0.95-90 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 0.55-60 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.

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(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.~~

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.

(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.~~

Subd. 4. Consumer-owned utility; energy savings investment.

(a) Except as otherwise provided, a consumer-owned utility that the commissioner determines falls short of the minimum energy savings goal from energy conservation improvements established in subdivision 2, paragraph (a), for three consecutive years during which the utility has annually spent on energy conservation improvements less than 1.5 percent of the utility's gross operating revenues for an electric utility or less than 0.5 percent of the utility's gross operating revenues for a natural gas utility, must spend no less than the following amounts for energy conservation improvements:

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

(2) for a cooperative electric association, 1.5 percent of the association's gross operating revenues from service provided in the state, excluding gross operating revenues from service

provided in Minnesota to large electric customers facilities indirectly through a distribution cooperative electric association.

(b) The commissioner may not impose the spending requirement under this subdivision if the commissioner has determined that the utility has followed the commissioner's recommendations, if any, provided under subdivision 3, paragraph (d).

(c) Upon request of a consumer-owned utility, the commissioner may reduce the amount or duration of the spending requirement imposed under this subdivision, or both, if the commissioner determines that the consumer-owned utility's failure to maintain the minimum energy savings goal is the result of:

(1) a natural disaster or other emergency that is declared by the executive branch through an emergency executive order that affects the consumer-owned utility's service area;

(2) a unique load distribution experienced by the consumer-owned utility; or

(3) other factors that the commissioner determines justifies a reduction.

(d) Unless the commissioner reduces the duration of the spending requirement under paragraph (c), the spending requirement under this subdivision remains in effect until the consumer-owned utility has met the minimum energy savings goal for three consecutive years.

Subd. 5. Energy conservation programs for low-income households.

Commented [ZA(44)]: Participant (Low-Income), Low-Income, and Equity

(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, 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

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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.

Subd. 6.Recovery of expenses.

The commission must allow a cooperative electric association subject to rate regulation under section [216B.026](#) to recover expenses resulting from: (1) a plan under this section; and (2) assessments and contributions to the energy and conservation account under section [216B.241, subdivision 2a](#).

Subd. 7.Ownership of preweatherization measure or energy conservation improvement.

(a) A preweatherization measure or energy conservation improvement installed in a building under this section, excluding a system owned by a consumer-owned utility that is designed to turn off, limit, or vary the delivery of energy, is the exclusive property of the building owner, except to the extent that the improvement is subject to a security interest in favor of the consumer-owned utility in case of a loan to the building owner for the improvement.

(b) A consumer-owned utility has no liability for loss, damage, or injury directly or indirectly caused by a preweatherization measure or energy conservation improvement, unless a consumer-owned utility is determined to have been negligent in purchasing, installing, or modifying a preweatherization measure or energy conservation improvement.

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;

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(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 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 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;

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

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~~(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.

Subd. 9. **Manner of filing and service.**

(a) A consumer-owned utility must submit the filings required under this section to the department using the department's electronic filing system. The commissioner may approve an exemption from this requirement if an affected consumer-owned utility is unable to submit filings via the department's electronic filing system. All other interested parties must 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) The submission of a document to the department's electronic filing system constitutes service on the department. If a department rule requires service of a notice, order, or other document by the department, a consumer-owned utility, or an interested party upon persons on a service list maintained by the department, service may be made by personal delivery, mail, or electronic service. Electronic service may be made only to persons on the service list that have previously agreed in writing to accept electronic service at an e-mail address provided to the department for electronic service purposes.

Subd. 10. **Assessment.**

The commission or department may assess consumer-owned utilities subject to this section to carry out the purposes of section [216B.241, subdivisions 1d, 1e, and 1f](#). An assessment under this subdivision must be proportionate to a consumer-owned utility's gross operating revenue from sales of gas or electric service in Minnesota during the previous calendar year, as applicable. Assessments under this subdivision are not subject to the cap on assessments under section [216B.62](#) or any other law.

V. ECO IOU Statutory Requirements

[MN Statutes 216B.241, PUBLIC UTILITIES; ENERGY CONSERVATION AND OPTIMIZATION.](#)

Subdivision 1. MS 2020 [Repealed, [2021 c 29 s 19](#)]

Subd. 1a. **Large customer facility.**

(a) The owner of a large customer facility may petition the commissioner to exempt both electric and gas utilities serving the large customer facility from contributing to investments and expenditures made under an energy and conservation optimization plan filed under subdivision 2 or section [216B.2403, subdivision 3](#), with respect to retail revenues attributable to the large customer facility. The filing must include a discussion of the competitive or economic pressures facing the owner of the facility and the efforts taken by the owner to identify, evaluate, and implement energy conservation and efficiency improvements. A filing submitted on or before October 1 of any year must be approved within 90 days and become effective January 1 of the year following the filing, unless the commissioner finds that the owner of the large customer facility has failed to take reasonable measures to identify, evaluate, and implement energy conservation and efficiency improvements. If a facility qualifies as a large customer facility solely due to its peak electrical demand or annual natural gas usage, the exemption may be limited to the qualifying utility if the commissioner finds that the owner of the large customer facility has failed to take reasonable measures to identify, evaluate, and implement energy conservation and efficiency improvements with respect to the nonqualifying utility. Once an exemption is approved, the commissioner may request the owner of a large customer facility to submit, not more often than once every five years, a report demonstrating the large customer facility's ongoing commitment to energy conservation and efficiency improvement after the exemption filing. The commissioner may request such reports for up to ten years after the effective date of the exemption, unless the majority ownership of the large customer facility changes, in which case the commissioner may request additional reports for up to ten years after the change in ownership occurs. The commissioner may, within 180 days of receiving a report submitted under this paragraph, rescind any exemption granted under this paragraph upon a determination that the large customer facility is not continuing to make reasonable efforts to identify, evaluate, and implement energy conservation improvements. A large customer facility that is, under an order from the commissioner, exempt from the investment and expenditure requirements of paragraph (a) as of December 31, 2010, is not required to submit a report to retain its exempt status, except as otherwise provided in this paragraph with respect to ownership changes. No exempt large customer facility may participate in a utility conservation improvement program unless the owner of the facility submits a filing with the commissioner to withdraw its exemption.

(b) A commercial gas customer that is not a large customer facility and that purchases or acquires natural gas from a public utility having fewer than 600,000 natural gas customers in Minnesota may petition the commissioner to exempt gas utilities serving the commercial gas customer from contributing to investments and expenditures made under an energy and conservation optimization plan filed under subdivision 2 or section [216B.2403, subdivision](#)

3, with respect to retail revenues attributable to the commercial gas customer. The petition must be supported by evidence demonstrating that the commercial gas customer has acquired or can reasonably acquire the capability to bypass use of the utility's gas distribution system by obtaining natural gas directly from a supplier not regulated by the commission. The commissioner shall grant the exemption if the commissioner finds that the petitioner has made the demonstration required by this paragraph.

(c) A public utility, consumer-owned utility, or owner of a large customer facility may appeal a decision of the commissioner under paragraph (a) or (b) to the commission under subdivision 2. In reviewing a decision of the commissioner under paragraph (a) or (b), the commission shall rescind the decision if it finds the decision is not in the public interest.

(d) Notwithstanding paragraph (a), a large customer facility or commercial gas customer that is exempt from the investment and expenditure requirements of this section pursuant to an order from the commissioner as of December 31, 2020, is not required to submit additional documentation to maintain the exemption and must not be assessed any costs related to any energy conservation and optimization plan filed under this section or section 216B.2403, including but not limited to costs, incentives, or rates of return associated with investments in programs for efficient fuel-switching improvements.

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

Subd. 1b.

MS 2020 [Repealed, 2021 c 29 s 19]

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

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(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](#).

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~~(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.~~

Subd. 1d. **Technical assistance.**

(a) The commissioner shall evaluate energy conservation improvement programs filed under this section and section [216B.2403](#) on the basis of cost-effectiveness and the reliability of the technologies employed. The commissioner shall, by order, establish, maintain, and update energy-savings assumptions that must be used by utilities when filing energy conservation improvement programs. The department must track a public utility's or consumer-owned utility's lifetime energy savings and cumulative lifetime energy savings reported in plans submitted under this section and section [216B.2403](#).

(b) 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. 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.

(c) 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.

(d) The commissioner may assess up to \$850,000 annually for the purposes of this subdivision. The assessments must be deposited in the state treasury and credited to the energy and conservation account created under subdivision 2a. An assessment made under this subdivision is not subject to the cap on assessments provided by section [216B.62](#), or any other law.

(e) The commissioner must work with stakeholders to develop technical guidelines that public utilities and consumer-owned utilities must use to:

(1) determine whether deployment of a fuel-switching improvement meets the criteria established in subdivision 11, paragraph (d); subdivision 12, paragraph (a); or section [216B.2403](#), [subdivision 8](#), as applicable; and

(2) calculate the amount of energy saved due to the deployment of a fuel-switching improvement.

The guidelines must be issued by the commissioner by order no later than March 15, 2022, and must be updated as the commissioner determines is necessary.

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

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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.

(c) The commissioner, as part of the assessment authorized under paragraph (a), each state fiscal year shall assess \$500,000 for a grant to the partnership created by section [216C.385, subdivision 2](#). The grant must be used to exercise the powers and perform the duties specified in section [216C.385, subdivision 3](#).

(d) By February 15 annually, the commissioner shall report to the chairs and ranking minority members of the committees of the legislature with primary jurisdiction over energy policy and energy finance on the assessments made under this subdivision for the previous calendar year and the use of the assessment. The report must clearly describe the activities supported by the assessment and the parties that engaged in those activities.

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.

(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 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 a public utility 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, public utility, or interested party upon persons on a service list maintained by the department, service may be made by personal delivery, mail, or electronic service, except that electronic service may only be made 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. 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 or efficient fuel-switching program, subject to the requirements of subdivisions 11 and 12, that is program suggested by an outside source, including a political subdivision, a nonprofit corporation, or community organization. When 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.

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(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.

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(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.

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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.

(a) The commission shall allow a public utility to recover expenses resulting from an energy conservation and optimization plan approved by the department under this section and contributions and assessments to the energy and conservation account, unless the recovery would be inconsistent with a financial incentive proposal approved by the commission.

(b) A public utility may file annually, or the Public Utilities Commission may require the public 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 public utility for real and personal property taxes, fees, and permits, the amounts of which the public 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.

MS 2020 [Repealed, [2021 c 29 s 19](#)]

Subd. 3. Ownership of preweatherization measure or energy conservation improvement.

(a) A preweatherization measure or energy conservation improvement made to or installed in a building in accordance with this section, except systems owned by a public 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 public utility in case of a loan to the building owner.

(b) A public utility has no liability for loss, damage or injury caused directly or indirectly by a preweatherization measure or energy conservation improvement except for negligence by the utility in purchasing, installing, or modifying a preweatherization measure or energy conservation improvement.

Subd. 4.

MS 2020 [Repealed, [2021 c 29 s 19](#)]

Subd. 5. **Efficient lighting program.**

(a) Each public utility and consumer-owned utility that provides electric service to retail customers and is subject to subdivision 1c or section [216B.2403](#) shall include as part of its conservation improvement activities a program to strongly encourage the use of LEDs. The program must include at least a public information campaign to encourage use of LEDs and proper management of spent lamps and LEDs 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 LEDs, 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 or a consumer-owned 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.

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(e) The commissioner of the Pollution Control Agency may not, unless clearly required by federal law, require a public utility or consumer-owned utility 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 or consumer-owned 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 or consumer-owned utility to promote the use of LEDs and to collect LEDs under this subdivision are conservation improvement spending under this section.

(h) For the purposes of this subdivision, "LED" means a light-emitting diode bulb or lighting product.

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.

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(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. 5c. Large solar electric generating plant.

(a) For the purpose of this subdivision:

(1) "project" means a solar electric generation project consisting of arrays of solar photovoltaic cells with a capacity of up to two megawatts located on the site of a closed landfill in Olmsted County owned by the Minnesota Pollution Control Agency; and

(2) "cooperative electric association" means a generation and transmission cooperative electric association that has a member distribution cooperative association to which it provides wholesale electric service in whose service territory a project is located.

(b) A cooperative electric association may elect to count all of its purchases of electric energy from a project toward only one of the following:

(1) its energy-savings goal under subdivision 1c; or

(2) its energy objective or standard under section [216B.1691](#).

(c) A cooperative electric association may include in its conservation plan purchases of electric energy from a project. The cost-effectiveness of project 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 solar energy. The kilowatt hours of solar energy purchased by a cooperative electric association from a project may count for up to 33 percent of its one percent savings goal under subdivision 1c or up to 22 percent of its 1.5 percent savings goal under that subdivision. Expenditures made by a cooperative association for the purchase of energy from a project may not be used to meet the revenue expenditure requirements of subdivisions 1a and 1b.

Subd. 5d. On-bill repayment programs.

(a) For the purposes of this subdivision:

(1) "utility" means a public utility, municipal utility, or cooperative electric association subject to subdivision 1c that provides electric or natural gas service to retail customers; and

(2) "on-bill repayment program" means a program in which a utility collects on a customer's bill repayment of a loan to the customer by an eligible lender to finance the customer's investment in eligible energy conservation or renewable energy projects, and remits loan repayments to the lender.

(b) A utility may include as part of its conservation improvement plan an on-bill repayment program to enable a customer to finance eligible projects with installment loans originated by an eligible lender. An eligible project is one that is either an energy conservation improvement, or a project installed on the customer's site that uses an eligible

renewable energy source as that term is defined in section [216B.2411, subdivision 2](#), paragraph (b), but does not include mixed municipal solid waste or refuse-derived fuel from mixed municipal solid waste. An eligible renewable energy source also includes solar thermal technology that collects the sun's radiant energy and uses that energy to heat or cool air or water, and meets the requirements of section [216C.25](#). To be an eligible lender, a lender must:

- (1) have a federal or state charter and be eligible for federal deposit insurance;
- (2) be a government entity, including an entity established under chapter 469, that has authority to provide financial assistance for energy efficiency and renewable energy projects;
- (3) be a joint venture by utilities established under section [452.25](#); or
- (4) be licensed, certified, or otherwise have its lending activities overseen by a state or federal government agency.

The commissioner must allow a utility broad discretion in designing and implementing an on-bill repayment program, provided that the program complies with this subdivision.

(c) A utility may establish an on-bill repayment program for all customer classes or for a specific customer class.

(d) A public utility that implements an on-bill repayment program under this subdivision must enter into a contract with one or more eligible lenders that complies with the requirements of this subdivision and contains provisions addressing capital commitments, loan origination, transfer of loans to the public utility for on-bill repayment, and acceptance of loans returned due to delinquency or default.

(e) A public utility's contract with a lender must require the lender to comply with all applicable federal and state laws, rules, and regulations related to lending practices and consumer protection; to conform to reasonable and prudent lending standards; and to provide businesses that sell, maintain, and install eligible projects the ability to participate in an on-bill repayment program under this subdivision on a nondiscriminatory basis.

(f) A public utility's contract with a lender may provide:

(1) for the public utility to purchase loans from the lender with a condition that the lender must purchase back loans in delinquency or default; or

(2) for the lender to retain ownership of loans with the public utility servicing the loans through on-bill repayment as long as payments are current.

The risk of default must remain with the lender. The lender shall not have recourse against the public utility except in the event of negligence or breach of contract by the utility.

(g) If a public utility customer makes a partial payment on a utility bill that includes a loan installment, the partial payment must be credited first to the amount owed for utility service, including taxes and fees. A public utility may not suspend or terminate a customer's

utility service for delinquency or default on a loan that is being serviced through the public utility's on-bill repayment program.

(h) An outstanding balance on a loan being repaid under this subdivision is a financial obligation only of the customer who is signatory to the loan, and not to any subsequent customer occupying the property associated with the loan. If the public utility purchases loans from the lender as authorized under paragraph (f), clause (1), the public utility must return to the lender a loan not repaid when a customer borrower no longer occupies the property.

(i) Costs incurred by a public utility under this subdivision are recoverable as provided in section [216B.16, subdivision 6b](#), paragraph (c), including reasonable incremental costs for billing system modifications necessary to implement and operate an on-bill repayment program and for ongoing costs to operate the program. Costs in a plan approved by the commissioner may be counted toward a utility's conservation spending requirements under subdivisions 1a and 1b. Energy savings from energy conservation improvements resulting from this section may be counted toward satisfying a utility's energy-savings goals under subdivision 1c.

(j) This subdivision does not require a utility to terminate or modify an existing financing program and does not prohibit a utility from establishing an on-bill financing program in which the utility provides the financing capital.

(k) A municipal utility or cooperative electric association that implements an on-bill repayment program shall design the program to address the issues identified in paragraphs (d) through (h) as determined by the governing board of the utility or association.

Subd. 6.

MS 2008 [Expired]

Subd. 7. Low-income programs.

(a) The commissioner shall ensure that each public utility subject to subdivision 1c provides energy conservation and efficient fuel-switching programs to low-income households. When approving spending and energy-savings goals for low-income programs, the commissioner shall consider historic spending and participation levels, energy savings achieved by low-income programs, and the number of low-income persons residing in the utility's service territory. Beginning January 1, 2022, a public utility furnishing gas service must spend at least one percent of its most recent three-year average gross operating revenue from residential customers in the state on low-income programs. A public utility that furnishes electric service must spend at least 0.4 percent of its gross operating revenue from residential customers in the state on low-income programs. Beginning in 2024, a public utility that furnishes electric service must spend 0.6 percent of the public utility's gross operating revenue from residential customers in the state on low-income programs.

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(b) To meet the requirements of paragraph (a), a public utility may contribute money to the energy and conservation account established under subdivision 2a. An energy conservation improvement plan must state the amount, if any, of low-income energy conservation improvement funds the public utility 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 energy conservation programs to utilize contributions made 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 providing energy and weatherization assistance to low-income households. Contributions made to the energy and conservation account under paragraph (b) must provide programs for low-income households, including low-income renters, in the service territory of the public utility 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 (f). The commissioner may contract with a political subdivision, nonprofit or community organization, public utility, or consumer-owned utility to implement low-income programs funded through the energy and conservation account.

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

(e) Representatives of each public utility must participate in the stakeholder group on multifamily building eligibility for low-income energy conservation programs, as provided under section [216B.2403, subdivision 5](#), paragraph (e). Notwithstanding the definition of low-income household under section [216B.2402](#), a public utility may apply the most recent guidelines for eligibility of multifamily buildings to participate in low-income energy conservation programs published by the commissioner under section [216B.2403, subdivision 5](#), paragraph (e).

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

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

(h) A public utility may elect to contribute money to the Healthy AIR account under section [216B.2403, subdivision 5](#), paragraph (h), to provide preweatherization measures to households eligible for weatherization assistance under section [216C.264](#). Remediation activities must be executed in conjunction with federal weatherization assistance program services. Money contributed to the account counts toward: (1) the minimum low-income spending requirement in paragraph (a); and (2) the cap on preweatherization measures under paragraph (f).

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

Subd. 8. Assessment.

The commission or department may assess public utilities subject to this section to carry out the purposes of subdivisions 1d, 1e, and 1f. An assessment under this subdivision must be proportionate to a public utility's gross operating revenue from sales of gas or electric service within Minnesota during the last calendar year, as applicable. Assessments made under this subdivision 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.

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(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.

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(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.

Subd. 10.

MS 2020 [Repealed, [2021 c 29 s 19](#)]

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.

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(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;

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(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;

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(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.

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:

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

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(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.

(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.~~

Subd. 13. Cost-effective load management programs.

(a) A public utility may include in the utility's plan required under subdivision 2 programs to implement load management activities, or combinations of energy conservation improvements, fuel-switching improvements, and load management activities. For each program the public utility must provide a proposed budget, cost-effectiveness analysis, and estimated net energy and demand savings.

(b) The commissioner may approve a proposed program if the commissioner determines the program is cost-effective, considering the costs and benefits to ratepayers, the utility, participants, and society.

(c) A public utility providing retail electric service to Minnesota customers may file rate schedules with the commission that provide for annual cost recovery of reasonable and prudent costs incurred to implement and promote cost-effective load management programs approved by the department under this subdivision.

(d) The commission may approve, modify, or reject a proposal made by the department or a public utility for an incentive plan to encourage investments in load management programs. The commission may approve a proposal that the commission determines:

- (1) is needed to increase the public utility's investment in cost-effective load management;
- (2) is compatible with the interest of the public utility's ratepayers; and

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(3) links the incentive to the public utility's performance in achieving cost-effective load management.

(e) The commission may structure an incentive plan to encourage cost-effective load management programs as an asset on which a public utility earns a rate of return at a level the commission determines is reasonable and in the public interest.

(f) The commission may include the net benefits from a load management activity integrated with an energy efficiency program approved under this section in the net benefits of the energy efficiency program for purposes of a financial incentive program under section [216B.16, subdivision 6c](#), if the department determines the primary purpose of the load management activity is energy efficiency.

(g) A public utility is not eligible for a financial incentive for a load management program in any year in which the utility achieves energy savings below one percent of gross annual retail energy sales, excluding savings achieved through load management programs.

(h) The commission may include net benefits from a particular load management activity in an incentive plan under this subdivision or section [216B.16, subdivision 6c](#), but not both.

Subd. 14. **Minnesota efficient technology accelerator.**

(a) A nonprofit organization with extensive experience implementing energy efficiency programs in Minnesota and conducting efficient technology research in the state may file a proposal with the commissioner of commerce for a program to accelerate deployment and reduce the cost of emerging and innovative efficient technologies and approaches and lead to lower energy costs for Minnesota consumers. Accelerator activities include strategic initiatives with technology manufacturers to improve the efficiency and performance of products, as well as with equipment installers and other key actors in the technology supply chain. Benefits of activities expected from the accelerator include cost effective energy savings for Minnesota utilities, bill savings for Minnesota utility consumers, enhanced employment opportunities in Minnesota, and avoidance of greenhouse gas emissions.

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(b) Prior to developing and filing a proposal, the nonprofit must submit to the commissioner of commerce a notice of intent to file a proposal under this subdivision. The notice of intent must describe the nonprofit's qualifications and eligibility to file a proposal under this subdivision. The commissioner must review the notice of intent and issue a determination of eligibility within 30 days if the commissioner determines the nonprofit meets the required qualifications.

(c) Upon receiving the determination by the commissioner under paragraph (b), the nonprofit organization must engage with interested stakeholders on at least the following attributes required of a program proposal under this subdivision:

(1) a proposed budget and operational guidelines for the accelerator;

(2) a proposed energy savings attribution, evaluation, and allocation methodology that includes a method for calculating net benefits from activities under the program. Energy savings and net benefits from activities under the program must be allocated to participating utilities and be considered when determining cost-effectiveness of achieved energy savings and related incentives;

(3) a process to ensure that the technologies that are selected for the program benefit electric and natural gas utility customers in proportion to the funds each utility sector contributes to the program and address residential, commercial, and industrial building energy use; and

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(4) a process for identifying and tracking performance metrics for each technology selected against which progress can be measured, including one or more methods for evaluating cost-effectiveness.

(d) No earlier than 180 days from the date of the commissioner's eligibility determination under paragraph (b), the nonprofit may file a program proposal under this subdivision. The filing must describe how the proposal addresses each of the required attributes listed in paragraph (c), clauses (1) to (4), and how the proposal addresses the recommendations and concerns identified in the stakeholder engagement process required under paragraph (c).

(e) Within ten days of receiving the proposal, the commissioner must provide public notice of the proposal and solicit feedback from interested parties for a period of not less than ten business days.

(f) Within 90 days of the filing of the proposal, the commissioner must approve, modify, or reject a proposal under this subdivision. In making a determination, the commissioner must consider public comments, the expected costs and benefits of the program from the perspectives of ratepayers, the participating utilities, and society, and the expected costs and benefits relative to other energy conservation programming authorized under this section.

(g) The initial program term may be up to five years. At the request of the nonprofit, the commissioner may renew a program approved under paragraph (d) for up to five years at a time. The nonprofit must submit to the commissioner a request to renew the program no later than 180 days prior to the end of the term of the program approved or renewed under this subdivision. When making a request to renew and determination on renewal, the nonprofit and commissioner must follow the process established under this subdivision, except that a qualified nonprofit is not required to seek eligibility under paragraph (b).

(h) Upon approval, each public utility with over 30,000 customers must participate in the program and contribute to the approved budget of the program by depositing annually in the energy and conservation account under subdivision 2a an amount that is proportional to the utility's gross operating revenue from sales of gas or electric service in Minnesota, excluding revenues from large customer facilities exempted under subdivision 1a. A participating utility must not be required to contribute more than the following percentages of the utility's spending approved by the commission in the plan filed under subdivision 2:

(1) two percent in the program's initial two years; (2) 3.5 percent in the program's third and fourth years; and (3) five percent thereafter. Other utilities may elect to participate in the accelerator program. Costs incurred by a public utility under this subdivision are recoverable under subdivision 2b as an assessment to the energy and conservation account. Amounts provided to the account under this subdivision are not subject to the cap on assessments in section [216B.62](#). The commissioner may make expenditures from the account for the purposes of this subdivision, including amounts necessary to cover administrative costs incurred by the department under this subdivision. Costs for research projects under this subdivision that the commissioner determines may be duplicative to projects that would be eligible for funding under subdivision 1e, paragraph (a), may be deducted from the assessment under subdivision 1e for utilities participating in the accelerator.

(i) The commissioner must not approve more than one program to be implemented or in operation at any given time under this subdivision.

(j) At least once during the term of a program that is approved or renewed, the commissioner must contract for an independent review of the program to determine if it meets the objectives and requirements of this section and any criteria established by the department as a condition of approval. The review may not be conducted by an entity or person that acted as a stakeholder or interested party, or otherwise participated in the program preparation, filing, or review process. Upon completion, the reviewer must prepare a report detailing findings and recommendations, and the commissioner must transmit a copy of the report to the chairs and ranking minority members of the house of representatives and senate committees with jurisdiction over energy policy. Money required to conduct the review and prepare the report must be deducted from the total contribution amount under paragraph (h).

VI. PUC Statutes

Rates, [MN Statutes 216B.03, REASONABLE RATE.](#)

Every rate made, demanded, or received by any public utility, or by any two or more public utilities jointly, shall be just and reasonable. Rates shall not be unreasonably preferential, unreasonably prejudicial, or discriminatory, but shall be sufficient, equitable, and consistent in application to a class of consumers. To the maximum reasonable extent, the commission shall set rates to encourage energy conservation and renewable energy use and to further the goals of sections [216B.164](#), [216B.241](#), and [216C.05](#). Any doubt as to reasonableness should be resolved in favor of the consumer. For rate-making purposes a public utility may treat two or more municipalities served by it as a single class wherever the populations are comparable in size or the conditions of service are similar.

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IRPs, [MN Statutes 216B.2422, RESOURCE PLANNING; RENEWABLE ENERGY.](#)

Subdivision 1. **Definitions.**

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

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

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

- (1) wind;
- (2) solar;
- (3) geothermal;
- (4) hydro;
- (5) trees or other vegetation;
- (6) landfill gas; or

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

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

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

Subd. 2. Resource plan filing and approval.

A utility shall file a resource plan with the commission periodically in accordance with rules adopted by the commission. The commission shall approve, reject, or modify the plan of a public utility, as defined in section [216B.02, subdivision 4](#), consistent with the public interest. In the resource plan proceedings of all other utilities, the commission's order shall be advisory and the order's findings and conclusions shall constitute prima facie evidence which may be rebutted by substantial evidence in all other proceedings. With respect to utilities other than those defined in section [216B.02, subdivision 4](#), the commission shall consider the filing requirements and decisions in any comparable proceedings in another jurisdiction. As a part of its resource plan filing, a utility shall include the least cost plan for meeting 50 and 75

percent of all new and refurbished capacity needs through a combination of conservation and renewable energy resources.

Subd. 2a. Historical data and advance forecast.

Each utility required to file a resource plan under this section shall include in the filing all applicable annual information required by section [216C.17, subdivision 2](#), and the rules adopted under that section. To the extent that a utility complies with this subdivision, it is not required to file annual advance forecasts with the department under section [216C.17, subdivision 2](#).

Subd. 2b. Optional integrated resource plan compliance for certain cooperatives.

For the purposes of this subdivision, a "cooperative" means a generating and transmission cooperative electric association that has at least 80 percent of its member distribution cooperatives located outside of Minnesota and that provides less than four percent of the electricity annually sold at retail in the state of Minnesota. A cooperative may, in lieu of filing a resource plan under subdivision 2, elect to file a report to the commission under this subdivision. The report must include projected demand levels for the next 15 years and generation resources to meet any projected generation deficiencies. To supply the information required in a report under this subdivision, a cooperative may use reports submitted under section [216C.17, subdivision 2](#), reports to regional reliability organizations, or similar reports submitted to other state utility commissions. A report must be submitted annually by July 1, but the commission may extend the time if it finds the extension in the public interest. Presentation of the annual report shall be done in accordance with procedures established by the commission. Data in a report under this subdivision may be aggregate data and need not be separately reported for individual distribution cooperative members of the cooperative. The commission may take whatever action in response to a report under this subdivision that it could take with respect to a report by a cooperative under subdivision 2.

Subd. 2c. Long-range emission reduction planning.

Each utility required to file a resource plan under subdivision 2 shall include in the filing a narrative identifying and describing the costs, opportunities, and technical barriers to the utility continuing to make progress on its system toward achieving the state greenhouse gas emission reduction goals established in section [216H.02, subdivision 1](#), and the technologies, alternatives, and steps the utility is considering to address those opportunities and barriers.

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Subd. 3. Environmental costs.

(a) The commission shall, to the extent practicable, quantify and establish a range of environmental costs associated with each method of electricity generation. A utility shall use the values established by the commission in conjunction with other external factors, including socioeconomic costs, when evaluating and selecting resource options in all

proceedings before the commission, including resource plan and certificate of need proceedings.

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

Subd. 4. Preference for renewable energy facility.

The commission shall not approve a new or refurbished nonrenewable energy facility in an integrated resource plan or a certificate of need, pursuant to section [216B.243](#), nor shall the commission allow rate recovery pursuant to section [216B.16](#) for such a nonrenewable energy facility, unless the utility has demonstrated that a renewable energy facility is not in the public interest. The public interest determination must include whether the resource plan helps the utility achieve the greenhouse gas reduction goals under section [216H.02](#), the renewable energy standard under section [216B.1691](#), or the solar energy standard under section [216B.1691](#), subdivision 2f.

Subd. 5. Bidding; exemption from certificate of need proceeding.

(a) A utility may select resources to meet its projected energy demand through a bidding process approved or established by the commission. A utility shall use the environmental cost estimates determined under subdivision 3 in evaluating bids submitted in a process established under this subdivision.

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

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

Subd. 6. Consolidation of resource planning and certificate of need.

A utility shall indicate in its resource plan whether it intends to site or construct a large energy facility. If the utility's resource plan includes a proposed large energy facility and construction of that facility is likely to begin before the utility files its next resource plan, the commission shall conduct the resource plan proceeding consistent with the requirements of section [216B.243](#) with respect to the proposed facility. If the commission approves the proposed facility in the resource plan, a separate certificate of need proceeding is not required.

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