

**SENATE
STATE OF MINNESOTA
NINETY-FIRST SESSION**

S.F. No. 3013

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DATE	D-PG	OFFICIAL STATUS
02/11/2020	4723	Introduction and first reading Referred to Energy and Utilities Finance and Policy
02/20/2020	4818a	Comm report: To pass as amended and re-refer to Finance
	4859	Author added Lang
03/16/2020	5484	Comm report: To pass
	5504	Second reading
05/12/2020		Special Order: Amended Third reading Passed

1.1 A bill for an act

1.2 relating to energy; establishing the Natural Gas Innovation Act; encouraging natural

1.3 gas utilities to develop alternative resources; requiring a renewable gaseous fuel

1.4 inventory; proposing coding for new law in Minnesota Statutes, chapter 216B.

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

1.6 Section 1. TITLE.

1.7 This bill may be referred to as the "Natural Gas Innovation Act."

1.8 Sec. 2. [216B.2427] NATURAL GAS UTILITY ALTERNATIVE RESOURCE

1.9 PLANS.

1.10 Subdivision 1. Definitions. (a) For the purposes of this section, the terms defined in this

1.11 subdivision have the meanings given.

1.12 (b) "Alternative resource" means a utility service that could be used to meet energy

1.13 demands and achieve the goals under this section, through the use of nonfossil fuel resources

1.14 or innovative technologies. Alternative resource includes but is not limited to biogas,

1.15 power-to-hydrogen, renewable natural gas, nonpipeline solutions, and avoided energy usage

1.16 achieved through energy efficiency that is not included in the utility's approved conservation

1.17 improvement program. Alternative resource does not include renewable attributes or credits

1.18 purchased separately from the associated fuel or product.

1.19 (c) "Biogas" means gas created by the anaerobic digestion of biomass, gasification of

1.20 biomass, or other effective conversion processes.

1.21 (d) "Natural gas utility" means a public utility as defined in section 216B.02, subdivision

1.22 4, that provides natural gas sales or transportation services to customers in Minnesota.

2.1 (e) "Power-to-hydrogen" means the use of electricity generated by an eligible energy
 2.2 technology as defined in section 216B.1691, subdivision 1, paragraph (a), or 216B.2422,
 2.3 subdivision 1, to create hydrogen for injection into a natural gas utility or interstate pipeline
 2.4 system.

2.5 (f) "Renewable natural gas" means biogas that has been processed to be interchangeable
 2.6 with conventional natural gas and has lower lifecycle greenhouse gas intensity than
 2.7 conventional fossil natural gas.

2.8 (g) "Renewable gaseous fuel" means renewable natural gas or hydrogen produced via
 2.9 power-to-hydrogen that has lower lifecycle greenhouse gas intensity than conventional
 2.10 fossil natural gas.

2.11 (h) "Total incremental cost" means the sum of revenue requirements allocated to regulated
 2.12 services of:

2.13 (1) capital investments in infrastructure for the production, processing, pipeline
 2.14 interconnection, storage, and distribution of renewable natural gas or alternative resources
 2.15 included in a utility alternative resource plan approved pursuant to subdivision 3, including
 2.16 the cost of capital established by the commission in the natural gas utility's most recent
 2.17 general rate case;

2.18 (2) net operating costs associated with capital investments in infrastructure for the
 2.19 production, processing, pipeline interconnection, storage, and distribution of renewable
 2.20 natural gas or alternative resources included in a utility alternative resource plan approved
 2.21 pursuant to subdivision 3;

2.22 (3) the incremental cost to procure renewable natural gas from third parties; and

2.23 (4) the incremental costs to administer programs included in a utility alternative resource
 2.24 plan approved pursuant to subdivision 3. Less the sum of:

2.25 (i) any value received by the natural gas utility upon the resale of renewable gaseous
 2.26 fuels or the sale of its by-products not used for service to Minnesota customers, including
 2.27 any environmental credits included with the resale of the renewable gaseous fuels; and

2.28 (ii) any cost savings achieved through avoidance of conventional natural gas purchases,
 2.29 including but not limited to any avoided commodity purchases or avoided pipeline costs.

2.30 Subd. 2. **Renewable natural gas and alternative resource goals.** A natural gas utility
 2.31 may assist the state in meeting its renewable energy and greenhouse gas reduction goals
 2.32 under sections 216C.05, subdivision 2, clause (3), and 216H.02, subdivision 1, by using
 2.33 alternative resources to meet customer energy demands. The natural gas utility's total

3.1 incremental cost to achieve greenhouse gas reductions under an approved alternative resource
3.2 plan must not exceed five percent of the natural gas utility's total annual revenue requirement
3.3 excluding gas costs, as determined in the natural gas utility's most recent general rate case.

3.4 Subd. 3. **Alternative resource plans.** (a) A natural gas utility may file an alternative
3.5 resource plan with the commission. An alternative resource plan must include the
3.6 recommended alternative resources the utility plans to implement to advance the state's
3.7 goals established in sections 216C.05 and 216H.02 within the requirements and limitations
3.8 set forth in this section. The utility's recommended plan must discuss:

3.9 (1) any pilot program proposed by the natural gas utility related to the development or
3.10 provision of renewable natural gas or alternative resources, including an estimate of the
3.11 total incremental costs to implement the pilot program;

3.12 (2) a third-party analysis of the lifecycle greenhouse gas intensity of any alternative
3.13 resources proposed to be included in the plan taking into account emissions associated with
3.14 the production, processing, transmission, and consumption of energy associated with the
3.15 resource;

3.16 (3) a third-party analysis of the forecasted lifecycle greenhouse gas emissions reductions
3.17 achieved or the lifecycle greenhouse gas emissions avoided if the alternative resources are
3.18 implemented, including any:

3.19 (i) avoided emissions attributable to utility operations;

3.20 (ii) avoided emissions from the production, processing, and transmission of fuels prior
3.21 to receipt by the utility; and

3.22 (iii) avoided emissions at the point of end use;

3.23 (4) the process used to develop the lifecycle greenhouse gas accounting methodology
3.24 used consistently throughout the plan, including descriptions of how the utility engaged
3.25 interested stakeholders and ensured the plan reflects consistency with applicable current
3.26 scientific knowledge;

3.27 (5) whether the recommended plan supports the development and use of alternative
3.28 agricultural products, waste reduction, reuse, or anaerobic digestion of organic waste, and
3.29 the recovery of energy from waste water, and, if so, the locations of such resources;

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

3.31 (i) track the proposed alternative resources included in the plan so that environmental
3.32 benefits are used only for this plan and not claimed for any other program; and

4.1 (ii) verify the environmental attributes and greenhouse gas intensity of proposed
4.2 alternative resources included in the plan;

4.3 (7) a description of known local job impacts and the steps the utility and its energy
4.4 suppliers and contractors are taking to maximize the availability of construction employment
4.5 opportunities for local workers; and

4.6 (8) a report on the utility's progress toward implementing the approved proposals
4.7 contained in its previously filed alternative resource plan, if applicable.

4.8 (b) The commission must approve, modify, or deny the plan within 12 months of filing.
4.9 A natural gas utility may propose an alternative resource plan no more frequently than every
4.10 24 months. In deciding whether to approve, modify, or deny a plan, the commission shall
4.11 consider whether the plan promotes the natural gas utility's ability to achieve the goals
4.12 established in sections 216C.05 and 216H.02 at a cost level consistent with this section.
4.13 The commission may not approve renewable natural gas as part of an alternative resource
4.14 plan unless it finds that the renewable natural gas included in the plan will have a lower
4.15 lifecycle greenhouse gas intensity than conventional fossil natural gas. The commission
4.16 may not approve any alternative resource for inclusion in an alternative resource plan unless
4.17 it finds that reasonable systems will be used to track and verify the environmental attributes
4.18 of the alternative resource, taking into account any third-party tracking or verification
4.19 systems available. As part of an alternative resource plan, the commission may not approve
4.20 the provision of renewable natural gas to, or the use of carbon capture technologies in,
4.21 residential homes or multifamily residential buildings.

4.22 (c) For natural gas utilities serving more than 800,000 customers, the first alternative
4.23 resource plan submitted to the commission must include a pilot program that will provide
4.24 alternative resource options to industrial customers and a pilot program to facilitate deep
4.25 energy retrofits and installation of cold climate electric air-source heat pumps with natural
4.26 gas backups in residential homes. For purposes of this subdivision, "deep energy retrofit"
4.27 means the installation of any measure or combination of measures, including air sealing
4.28 and addressing thermal bridges, that, under normal weather and operating conditions, can
4.29 reasonably be expected to reduce the building's calculated design load to ten or fewer British
4.30 Thermal Units per hour per square foot of conditioned floor area. "Deep energy retrofit"
4.31 does not include the installation of photovoltaic electric generation equipment, but may
4.32 include the installation of a qualifying solar thermal project, as defined in section 216B.2411.
4.33 For natural gas utilities serving more than 800,000 customers, the first alternative resource
4.34 plan submitted to the commission may not propose, and the commission may not approve,
4.35 costs exceeding two and a half percent of the natural gas utility's total annual revenue

5.1 requirement excluding gas costs, as determined in the natural gas utility's most recent general
5.2 rate case.

5.3 (d) Commission approval of a plan constitutes prima facie evidence of the reasonableness
5.4 of the investments and costs incurred pursuant to the plan. Prudently incurred costs incurred
5.5 pursuant to an approved plan and costs incurred by obtaining the third-party analysis required
5.6 in paragraph (a), clauses (2) and (3), are recoverable either:

5.7 (1) under section 216B.16, subdivision 7, clause (2), via the utility's purchase gas
5.8 adjustment; or

5.9 (2) in the natural gas utility's next general rate case. The utility bears the burden to prove
5.10 the actual incremental costs incurred to implement the approved alternative resource plan
5.11 were reasonable. A transportation customer of a natural gas utility shall not bear any costs
5.12 incurred to implement an approved alternative resource plan, except to the extent the
5.13 transportation customer elects to participate in a pilot program.

5.14 (e) Without filing an alternative resource plan, a natural gas utility may propose, and
5.15 the commission may approve cost recovery for:

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

5.19 (2) utility expenditures for alternative resources within five percent of the average of
5.20 Ventura and Demarc index price for conventional natural gas at the time of the transaction.
5.21 Any approved green-tariff program must include provisions to ensure reasonable systems
5.22 are used to track and verify the environmental attributes of alternative resources included
5.23 in the program, taking into account any third-party tracking or verification systems available.

5.24 (f) A natural gas utility with an approved plan must provide annual status reports to the
5.25 commission regarding the work completed pursuant to the plan, including the costs incurred
5.26 under the plan; the resulting progress toward meeting the state's goals in sections 216C.05
5.27 and 216H.02; a description of the processes used to track, verify, and retire the alternative
5.28 resources and associated environmental attributes; and an update on the lifecycle greenhouse
5.29 gas accounting methodology consistent with current science. As part of the annual status
5.30 report the natural gas utility may propose modifications to pilot programs in the plan. In
5.31 evaluating a utility's annual report the commission may:

5.32 (1) approve the continuation of pilot programs, with or without modifications;

6.1 (2) require the utility to file a new or modified plan to account for changed circumstances;
 6.2 or
 6.3 (3) disapprove the continuation of pilot programs.

6.4 (g) A utility may file an alternative resource plan at any time after this section becomes
 6.5 effective.

6.6 (h) For purposes of this section, whenever an analysis or estimate of lifecycle greenhouse
 6.7 gas emissions reductions, lifecycle greenhouse gas avoidance, or lifecycle greenhouse gas
 6.8 intensity is required, the analysis or estimate may rely on emissions factors, default values,
 6.9 or engineering estimates from a publicly accessible source accepted by a federal or state
 6.10 government agency, where direct measurement is not technically or economically feasible,
 6.11 if such emissions factors, default values, or engineering estimates can be demonstrated to
 6.12 produce a reasonable estimate of greenhouse gas emissions reductions, avoidance, or
 6.13 intensity.

6.14 Sec. 3. **RENEWABLE GASEOUS FUEL INVENTORY.**

6.15 (a) By June 15, 2021, the Department of Commerce must develop an inventory of
 6.16 renewable gaseous fuel resources as defined in Minnesota Statutes, section 216B.2427,
 6.17 subdivision 1, paragraph (g), available to Minnesota. The inventory must include but is not
 6.18 limited to:

6.19 (1) a list of the potential renewable natural gas sources in Minnesota and the estimated
 6.20 potential production quantities available at each source;

6.21 (2) an estimate of the energy content of listed renewable natural gas sources;

6.22 (3) a description of the technologies available to Minnesota for renewable gaseous fuel
 6.23 production and an estimate of the potential energy production by technology, including:

6.24 (i) an estimate of the renewable gaseous fuel production potential using
 6.25 power-to-hydrogen;

6.26 (ii) separate estimates for production from excess renewable electricity that would
 6.27 otherwise be curtailed and for production from dedicated renewable generation facilities;
 6.28 and

6.29 (iii) an ideal site characterization that details the aspects of a power-to-hydrogen facility
 6.30 that would contribute to the facility's technical and economic success;

6.31 (4) a list of the existing biogas and renewable natural gas production sites in Minnesota
 6.32 that includes:

- 7.1 (i) the location of each site;
- 7.2 (ii) an estimate of the lifecycle greenhouse gas emissions associated with the fuel
7.3 produced at each site including the production, processing, transmission, and consumption
7.4 of the biogas or renewable natural gas; and
- 7.5 (iii) an assessment of the supply-chain infrastructure associated with the site;
- 7.6 (5) an assessment of the market viability of Minnesota renewable natural gas production
7.7 taking into account renewable natural gas sales prices, the cost of infrastructure needed to
7.8 produce and transport renewable natural gas, the size of producers, and the availability of
7.9 renewable natural gas feedstocks in the state;
- 7.10 (6) for the potential sources identified in clause (1), a discussion of the best use or uses
7.11 for each potential energy resource. The discussion shall take into account:
- 7.12 (i) estimated lifecycle greenhouse gas emissions;
- 7.13 (ii) cost, including all infrastructure costs associated with production and transportation
7.14 of the energy; and
- 7.15 (iii) whether the energy source can be used to address local natural gas or electricity
7.16 constraints; and
- 7.17 (7) a discussion of whether development of a system of tradable thermal credits would
7.18 be beneficial for the development of renewable thermal resources in the state. This discussion
7.19 should consider system designs that could best facilitate development of renewable thermal
7.20 resources while ensuring adequate tracking and verification of environmental attributes
7.21 associated with those resources.
- 7.22 (b) The department may assess natural gas utilities serving more than 800,000 customers
7.23 within the state during the last calendar year for the costs necessary to carry out the purposes
7.24 of this section. Those assessments are not subject to the cap on assessments provided in
7.25 Minnesota Statutes, section 216B.62, or any other law.
- 7.26 **Sec. 4. EFFECTIVE DATE.**
- 7.27 Sections 1 to 3 are effective the day following final enactment.