

HOUSE BILL REPORT

ESHB 2131

As Passed Legislature

Title: An act relating to promoting the establishment of thermal energy networks.

Brief Description: Promoting the establishment of thermal energy networks.

Sponsors: House Committee on Environment & Energy (originally sponsored by Representatives Ramel, Slatter, Simmons, Reed, Riccelli, Doglio and Hackney).

Brief History:

Committee Activity:

Environment & Energy: 1/16/24, 1/23/24 [DPS];

Capital Budget: 2/1/24, 2/2/24 [DPS(ENVI)].

Floor Activity:

Passed House: 2/9/24, 97-0.

Senate Amended.

Passed Senate: 3/1/24, 49-0.

House Concurred.

Passed House: 3/5/24, 96-0.

Passed Legislature.

Brief Summary of Engrossed Substitute Bill

- Allows gas and most electric utilities to own and operate thermal energy networks (TENs), with oversight from the Utilities and Transportation Commission (UTC) for investor-owned utilities (IOU) and with oversight from governing bodies for consumer-owned utilities.
- Establishes a TEN pilot project program in which the UTC must review projects according to specified criteria, the Department of Commerce may award grants to gas companies, IOU gas companies must ask for pilot projects in requests for proposals, and the Joint Legislative Audit and Review Committee must evaluate and report on the program after three years.

This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not part of the legislation nor does it constitute a statement of legislative intent.

- Amends a gas company's obligation to serve gas to customers that have access to a TEN by providing thermal energy instead of gas, upon petition of a gas company and subject to UTC approval.
- Authorizes gas and combination utilities to combine gas operations and TENs into a single rate base with approval from the UTC.

HOUSE COMMITTEE ON ENVIRONMENT & ENERGY

Majority Report: The substitute bill be substituted therefor and the substitute bill do pass. Signed by 14 members: Representatives Doglio, Chair; Mena, Vice Chair; Dye, Ranking Minority Member; Ybarra, Assistant Ranking Minority Member; Abbarno, Barnard, Berry, Duerr, Fey, Goehner, Lekanoff, Ramel, Slatter and Street.

Minority Report: Without recommendation. Signed by 1 member: Representative Sandlin.

Staff: Megan McPhaden (786-7114).

HOUSE COMMITTEE ON CAPITAL BUDGET

Majority Report: The substitute bill by Committee on Environment & Energy be substituted therefor and the substitute bill do pass. Signed by 24 members: Representatives Tharinger, Chair; Callan, Vice Chair; Hackney, Vice Chair; Abbarno, Ranking Minority Member; McClintock, Assistant Ranking Minority Member; Alvarado, Bateman, Cheney, Christian, Eslick, Farivar, Fosse, Kloba, Kretz, Maycumber, Morgan, Mosbrucker, Orwall, Peterson, Reed, Rule, Shavers, Stearns and Waters.

Minority Report: Do not pass. Signed by 3 members: Representatives Steele, Assistant Ranking Minority Member; Dye and Sandlin.

Staff: Dawn Eychaner (786-7135).

Background:

Thermal Energy.

Thermal energy is heat or cold in the form of steam, heated or chilled water, or any other heated or chilled fluid or gas. Thermal energy systems are systems that provide thermal energy for space heating and cooling, or that process uses from a central plant or combined heat and power facility, and that distributes the thermal energy to two or more buildings through a pipe network.

Utilities and Transportation Commission.

The Utilities and Transportation Commission (UTC) is a three-member commission with broad authority to regulate the rates, services, and practices of a variety of businesses in the state, including investor-owned gas and electrical companies. The UTC must ensure rates charged by these companies are fair, just, reasonable, and sufficient. The UTC also oversees gas pipeline safety in the state.

Electric Utilities.

Electric utilities include investor-owned utilities and consumer-owned utilities. There are three investor-owned electric utilities under the regulatory purview of the UTC: Avista Corporation, PacifiCorp, and Puget Sound Energy. Consumer-owned utilities take many forms and include municipal electric utilities, public utility districts, irrigation districts, cooperatives, and certain mutual corporations and associations.

Gas Companies.

Gas companies include companies and cities that own, control, operate, or manage any gas plant within Washington. A gas plant includes all property and fixtures in connection with the manufacture, transmission, distribution, sale, or furnishing of types of gas, but does not include a plant that manufactures natural gas. There are four investor-owned gas companies under UTC jurisdiction in Washington: Avista Corporation, Puget Sound Energy, Cascade Natural Gas Corporation, and Northwest Natural Gas Company. The UTC does not have jurisdiction over gas companies owned by cities and towns. There are two consumer-owned city gas companies: Ellensburg and Enumclaw.

A Gas Company's Obligation to Serve.

Every gas company that sells and distributes gas must provide gas and suitable facilities for providing gas to all people and corporations who may apply for gas service and be reasonably entitled to gas service.

Multiyear Rate Plan.

In 2021 enacted legislation directed every gas or electric utility filing a general rate case to include a proposal for a multiyear rate plan (MYRP) beginning January 1, 2022. The UTC may, by order after an adjudicative proceeding, approve, approve with conditions, or reject an MYRP proposal made by a utility, an alternative proposal made by one or more parties, or any combination of these. The UTC's consideration of a MYRP proposal is subject to the same standards as other related filings, including that it be in the public interest and that the rates be fair, just, reasonable, and sufficient.

Thermal Energy Companies.

Thermal energy companies are those that develop, produce, transmit, distribute, deliver, provide, or sell thermal energy for any beneficial use other than electricity generation. Legislation enacted in 1996 exempted thermal energy companies from oversight by the UTC.

Summary of Engrossed Substitute Bill:

Thermal Energy Networks.

Thermal energy networks (TENs) are all real estate, fixtures, and property involved in a utility-scale project to supply thermal energy, which is piped noncombustible fluids that transfer heat into and out of buildings for the purpose of eliminating any on-site greenhouse gas emissions from heating and cooling, improving energy efficiency, or both. Thermal energy networks may not rely on combustion to create thermal energy, except for emergency backup purposes.

Authorization for Gas and Electrical Companies to Deploy a Thermal Energy Network.

Gas companies may own, control, operate, or manage a TEN. Electrical companies and public utility districts may own, operate, or manage a TEN.

If an investor-owned gas or electrical company intends to deploy a TEN, the company must submit the project to the Utilities and Transportation Commission (UTC) for review and validation of costs assessments. If the UTC validates the costs assessments selection of a TEN, the company may propose to recover the costs of building and operating the project from ratepayers in a rate case filing before the UTC. Such a validation by the UTC does not constitute a prudence finding or a finding that the resource is used and useful for rate-making purposes.

If a consumer-owned gas company or electrical company intends to deploy a TEN, the company must submit the project to its governing body for review and approval.

Thermal Energy Network Pilot Project Program.

A TEN pilot project program is established, which requires the UTC to approve a TEN pilot project and the Department of Commerce (Commerce) to award grants for the TEN pilot project.

Gas Company Priority.

A gas company has priority for developing a TEN pilot project in its service territory, subject to: a) the gas company announcing its intention to deploy the project in a specific location within a year of the effective date of this bill to the UTC; and then b) deploying the

project within 30 months of the effective date of this bill. The UTC may approve an extension requested by the gas company if the UTC determines the gas company is making substantial progress.

The UTC may choose not to provide priority for a gas company in the scenario where an existing thermal energy company deployed or is developing a TEN in a specific location.

Grant Funding for Gas Companies.

Commerce must provide grant funding to gas companies, subject to appropriation. When determining whether to award a grant and the grant amount, Commerce must consider the information provided by the utility to the UTC regarding the criteria for approval outlined below. When awarding grants, Commerce must also consider any finding or conclusions of the UTC regarding the pilot project, and may prioritize grant funds to projects based on cost effectiveness and geographic diversity.

Any grant awardee must coordinate with other awardees, the UTC, Commerce, and consultants with expertise on successful TENs to ensure that the TEN pilot projects are diverse and designed to inform the UTC's decisions in the proceeding on the various ownership, market, and rate structures for TENs.

Criteria for Approval.

When submitting a TEN pilot project to the UTC for review, gas and electrical companies must include metrics that the company proposes to use to evaluate the project. The metrics should help inform UTC's rule making and rate making. Specifically, the metrics are intended to help inform any future standardized metrics that the UTC may adopt for TEN pilot projects.

When approving a TEN pilot project, the UTC must consider the following criteria:

- the number and type of customers served by the project, including the percent of low-income customers;
- the use of existing gas workforce and other labor considerations;
- the ability to maintain infrastructure safety and reliability;
- the ability to meet 100 percent of the customers' demand for space heating with the TEN pilot project;
- whether the TEN pilot project benefits customers, communities, and society at large, including public health benefits in disadvantaged communities and increased affordability of thermal energy options;
- coordination with electric utilities;
- whether the project furthers state climate justice and emissions reduction requirements;
- whether the project advances financial and technical ways to make building electrification equitable and affordable;

- whether the project will develop useful information for the UTC's TENs rules;
- enrollment in an electric utility demand response program;
- the potential to both enable gas pipe decommissioning and supplant the need for replacing gas pipes; and
- whether the TEN is a distributed system that uses ambient temperature fluid and high-efficiency heat pump equipment in each building.

The UTC may also consider the following criteria when approving a TEN pilot project:

- greenhouse gas emissions reductions;
- the use of waste heat, ground-source heat, geothermal resources, other nonfossil fuel and noncombustion sources, and electric heat pumps;
- the ability to provide the TEN pilot project customers' hot water demands and cooling demands; and
- the consideration of options to provide thermal energy storage.

Investor-Owned Utility Gas Company Requests for Proposals.

Before deploying a TEN, investor-owned gas companies must include a solicitation for thermal energy network pilot projects in requests for proposals for energy resources. Investor-owned gas companies must compare the costs of a proposed TEN pilot project to the cost of current business practices and share this cost comparison with the UTC. The cost comparison must be considered when calculating grant award amounts. Investor-owned gas companies may petition the UTC to estimate the cost of deploying a thermal energy network using an alternative process. The UTC must review the alternative process and then accept it, deny it, or accept it with modifications.

A Gas Company's Obligation to Serve.

Exclusively upon petition of a gas company, and subject to UTC's approval, a gas company's obligation to serve gas to customers that have access to a TEN may be met by providing thermal energy through a TEN.

Multiyear Rate Plan.

In any multiyear rate plan proposed by a natural gas company or a company that provides both gas and electric service, the company may propose to merge its gas operations with its TEN into a single rate base. The UTC may approve this merger if it finds it is in the public interest.

If the UTC approves such a merger, the company must monetize benefits received from any tax and other incentives for the benefit of customers. These benefits must be separately accounted for and amortized on a schedule designed to mitigate the combined rate impacts to customers.

Implementation Report.

The Joint Legislative Audit and Review Committee must evaluate the implementation of the TEN pilot project program, and provide a report to the Legislature no later than three years after the effective date of the bill. The report must evaluate how all TEN pilot projects address the criteria for UTC approval of a pilot project and Commerce approval of grant funding.

Thermal Energy Companies.

Thermal energy companies already exempt from UTC oversight are not subject to UTC regulation of TENS.

Appropriation: None.

Fiscal Note: Available.

Effective Date: The bill takes effect 90 days after adjournment of the session in which the bill is passed.

Staff Summary of Public Testimony (Environment & Energy):

(In support) This proposal involves working with gas utilities to explore new tools to serve heating load with a nonemitting technology. It provides a viable path for gas companies to decarbonize space heating. Thermal energy networks (TENS) are the most energy efficient systems available for heating and cooling and they emit no pollution. The bill would leverage utilities' expertise and access to investment capital, allow utilities to keep their customers, could keep pipeline workers employed, and will benefit Washington families. This bill introduces a pathway to take advantage of a renewable energy source that is all around us.

Some changes are requested to the bill, to the definitions section, and to sections 5 and 6. Most importantly, the parameters for the pilot projects should be as flexible as possible. It is important to incentivize projects to demonstrate the use of this technology. No matter how well they are built, we will learn from these projects and be able to assess the viability of TENS for future deployment.

There is interest in TENS in other states: the first TEN is currently being installed in Massachusetts; TEN legislation has passed in 4 states and is being proposed in 8 others; there is a utilities coalition with 23 gas utilities; and the United States Department of Energy (USDOE) has awarded related grants to 10 states.

Notably, TENS have a modest impact on the electric grid because they are so efficient; a USDOE study found that decarbonizing with ground source heat pumps was the best

electric grid cost reduction strategy. And then by bringing these heat pumps together with a TEN, even greater efficiencies can be realized through using waste heat and load diversity. This would minimize the need to expand the electric grid.

(Opposed) None.

(Other) There is work going on with the sponsor of this bill and other stakeholders and there is hope that this position will become one of support for the bill.

Staff Summary of Public Testimony (Capital Budget):

(In support) Decarbonizing buildings is one of the biggest challenges faced when addressing the climate crisis. Thermal energy networks (TENs) are a way to link buildings together in a way that addresses energy demand efficiently. There is a company in Bellingham that captures energy in wastewater and uses that energy to heat buildings. In the future TENs will be able to help with responding to peak energy challenges. This is an exciting and innovative opportunity to decarbonize. Gas companies already have relationships with the Utilities and Transportation Commission, are already doing work in rights of way and with pipes, and this is an opportunity for them to deliver a different type of energy. This policy provides authority for these systems and regulatory oversight to make sure these are developed in a manner that is fair. Gas companies are willing to participate in this pilot. Gas companies have pipes in the ground and the expertise with staff to put these projects together. The funding request for grants would lower overall costs for these projects and the projects will be scalable. TENs hold great appeal, rely on tried and true technology, emit zero emissions and can keep pipeline workers employed for generations. TENs have a modest impact on the electric grid, especially when compared to other decarbonization approaches.

(Opposed) None.

Persons Testifying (Environment & Energy): (In support) Representative Alex Ramel, prime sponsor; Laura Feinstein, Sightline Institute; Ania Camargo, Building Decarbonization Center and Home Energy Efficiency Team; John Rothlin, Avista; and Matt Miller, Puget Sound Energy.

(Other) Natasha Jackson, Northwest Gas Association.

Persons Testifying (Capital Budget): Representative Alex Ramel, prime sponsor; Laura Feinstein, Sightline Institute; and Charlie Brown, Cascade Natural Gas and Northwest Natural.

Persons Signed In To Testify But Not Testifying (Environment & Energy): Eric Pratt; and Alyn Spector, Cascade Natural Gas.

Persons Signed In To Testify But Not Testifying (Capital Budget): None.