



**Gerry Runte**

P.O. Box 32

York, ME 03909

Phone: (207) 361-7143

[Gerry.Runte@legislature.maine.gov](mailto:Gerry.Runte@legislature.maine.gov)

# HOUSE OF REPRESENTATIVES

2 STATE HOUSE STATION

AUGUSTA, MAINE 04333-0002

(207) 287-1400

TTY: MAINE RELAY 711

April 24, 2025

*Testimony of Representative Gerry Runte introducing*

## **LD 1619, Resolve, to Establish a Commission to Study Pathways for Creating a Thermal Energy Networks Program in Maine**

*Before the Joint Standing Committee on Energy, Utilities and Technology*

Senator Lawrence, Representative Sachs, and distinguished Energy, Utilities, and Technology Committee members, thank you for the opportunity to present testimony on **LD 1619, Resolve, to Establish a Commission to Study Pathways for Creating a Thermal Energy Networks Program in Maine**. I am pleased to support this careful assessment of the potential role of thermal energy networks (TENs) in the State. The bill creates a legislative commission to gather and evaluate available data on TENs in Maine, better understand how TENs might fit into Maine's energy landscape and recommend next steps to the Legislature in the second session.

A thermal energy network is a system of interconnected piping that circulates water used as the heat source for water-to-air heat pumps at each connected site to provide heating and cooling. These systems can rely on a variety of thermal energy sources to assure the water reservoir has consistent heat, including the constant temperatures below ground, low level geothermal resources, as well as recovered waste heat from buildings, wastewater infrastructure, or industrial processes.

TENs offer several advantages where deployment is feasible. Compared to individual ground-source or air-source heat pumps—or natural gas heating—TENs can deliver significantly lower operating costs. For example, customers of a TEN may see electricity costs that could be up to one-third of the costs of operating individual heat pumps.

In addition to dramatically lower operating costs, a TEN eliminates direct fossil fuel use, helps stabilize electricity grid demand, and supports decarbonization and climate goals. They also leverage a workforce with skills closely aligned to those in the natural gas and utility sectors, supporting an orderly transition for energy infrastructure labor.

It is important to note that these systems are not universally applicable. Because they require buried infrastructure, installation costs can be substantial, especially in areas with difficult

subsurface conditions, such as ledge. Successful implementation also depends on centralized management and collaboration among participating building owners. As a result, the most practical applications are likely to include new housing developments, campuses, and downtown districts.

This study would give legislators and stakeholders the opportunity to examine how Maine-specific factors such as geology, energy needs, and community design affect the viability of TENs, and help inform the role thermal energy networks may play in Maine's future.

The amended language includes a definition of "thermal energy networks," and adds a representative from Efficiency Maine to the commission.

As Maine continues to pursue more affordable, reliable, and lower-emission strategies for heating and cooling, TENs are a technology worth careful consideration.

While I am glad to take any questions, please note there are several people here today that are more versed in the details of TENs and their potential deployment.

Thank you for your consideration.