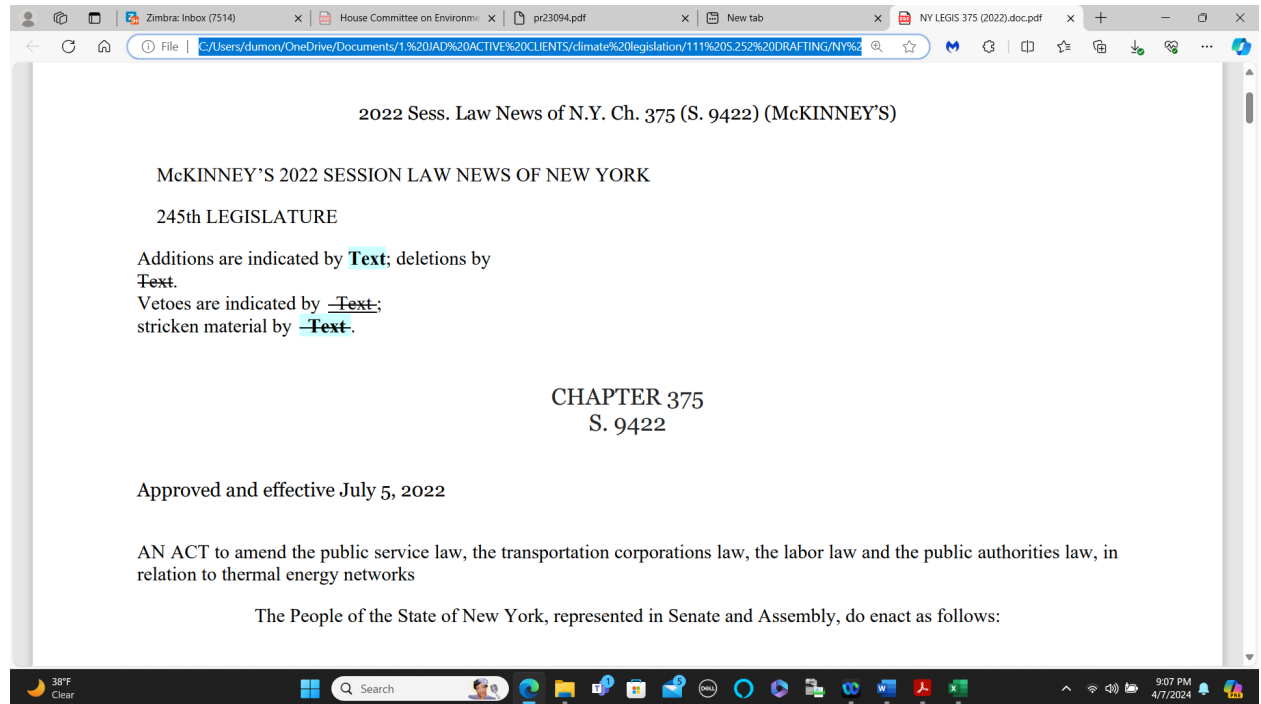


House Committee On Environment and Energy

Testimony of James A. Dumont, Esq., on Thermal Energy Networks (S.252/H.669/S.305) 4/9/24

Vermont's Thermal Energy Networks bill (S.252, H.669 and now proposed part of S.305) is modeled on NY's S.9422, effective July 5, 2022



S.9422 passed the NY Senate unanimously – because of the strong support of the major environmental, labor, and business advocates. The Governor then signed it. The bill was a win for everyone—Democrats, Republicans, labor, business and the environment. The same will be true in Vermont if S.305 is signed into law with the Thermal Energy Networks sections added to it.

What are Thermal Energy Networks?

Thermal energy networks consist of both vertical and horizontal loops of pipes carrying water between multiple buildings and energy sources. The water in the sealed, piped systems may be heated or cooled by geothermal sources, waste heat, or other sources. Building owners can connect to ground source or water heat pumps installed within the building for heating and cooling and hot water services.

Thermal energy networks have been proven to substantially reduce GHG emissions from heating and cooling buildings, while preserving well-paying jobs in the energy sector by transitioning away from fossil-fuels to thermal networks.

The Vermont proposal differs from the NY bill in two major respects

1. **No utility is forced to participate.** The bill authorizes, but does not require, electric and gas utilities to develop and operate Thermal Energy Networks under the continued supervision of the PUC.
2. **Municipalities are authorized to construct, fund and operate thermal energy networks the same way they do their water and sewer utilities.** There is **no PUC supervision or reporting.** Local

government controls itself. (The NY PSC staff has recommended that the NY PSC issue a rule exempting municipal TENS utilities from PSC regulation, for the same reason.)

Because of Dillon's Rule, Vermont Municipalities Need This Bill

Our communities can be capturing waste heat from wastewater treatment plants and providing it to residents and businesses alike. One neighborhood in Vancouver is getting 70% of its heating and cooling, reducing building emissions by 50%, by using its wastewater treatment plant to supply thermal energy. This system is municipally owned, requiring no taxpayer dollars. It's paid for and earns a return on investment through rates. Vermont towns such as Northfield, Woodstock, Killington, Johnson, Winooski, and St. Albans could use this technology and this locally-owned model that we know works and keeps energy dollars invested locally for the public good.

Low income housing, health centers, schools, and town centers can be served by geothermal borefields and a network of underground pipes that can also harness and share waste heat from grocery stores or ice arenas. Another municipally-owned thermal network in a rural community in Iowa is using this infrastructure to attract businesses and revitalize their downtown. Hartford and St. Johnsbury want to do this to support affordable housing, build vibrant, resilient town centers, and create the kind of sustainable prosperity they value.

However, under "Dillon's Rule," adopted by our Supreme Court, municipalities have only those powers expressly granted to them in their Charter and in the General Laws, and those powers necessarily implied in the express grants.

Very few Vermont municipal charters (we have found only one) and no general laws expressly authorize municipalities to construct, fund and operate Thermal Energy Networks.

The NY Constitution was amended in 1964 to overrule Dillon's Rule in NY. Vermont still is controlled by Dillon's Rule.

Without this bill, it is unlikely that most municipalities in Vermont could construct, fund or operate a TENS. This bill is needed not only to dramatically reduce fossil fuels and emissions, but also to allow Vermonters to access unprecedented levels of federal funding for clean energy and community infrastructure.

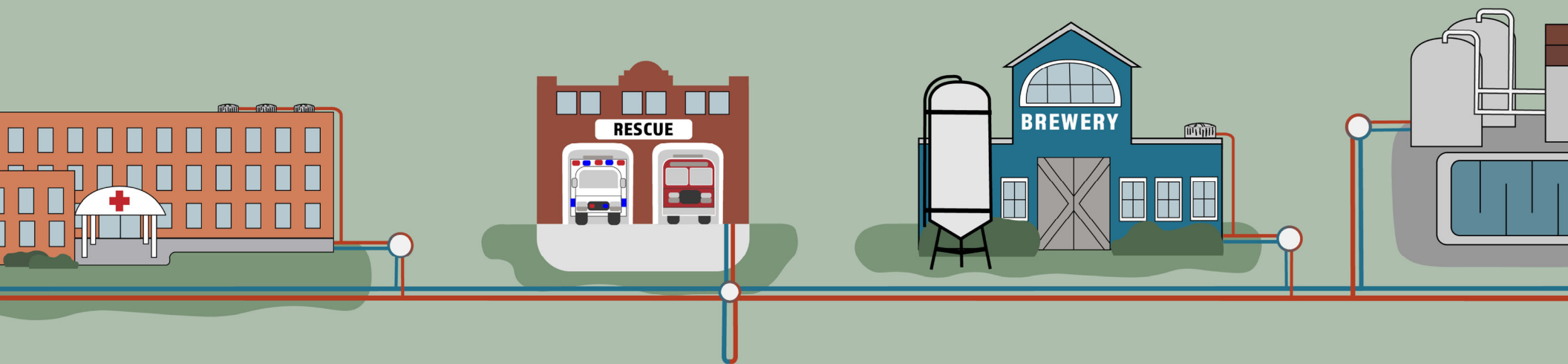
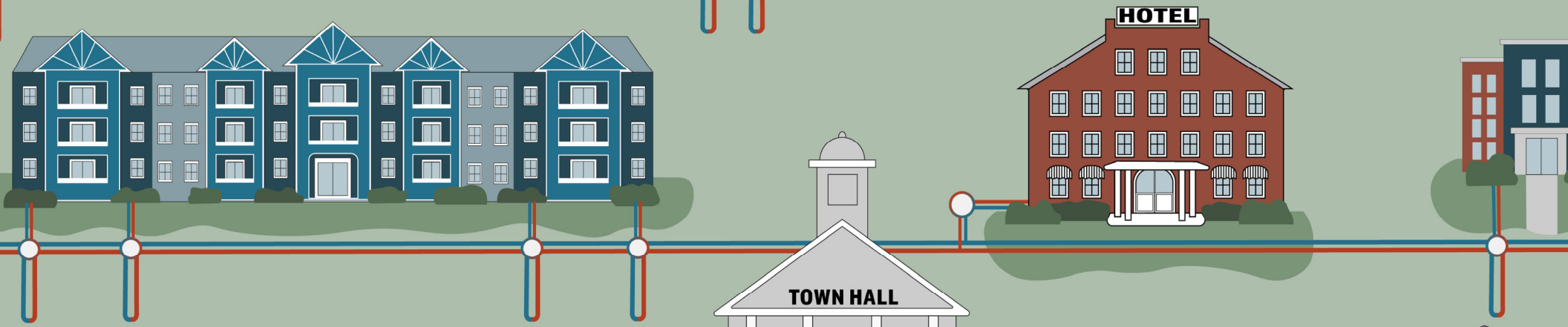
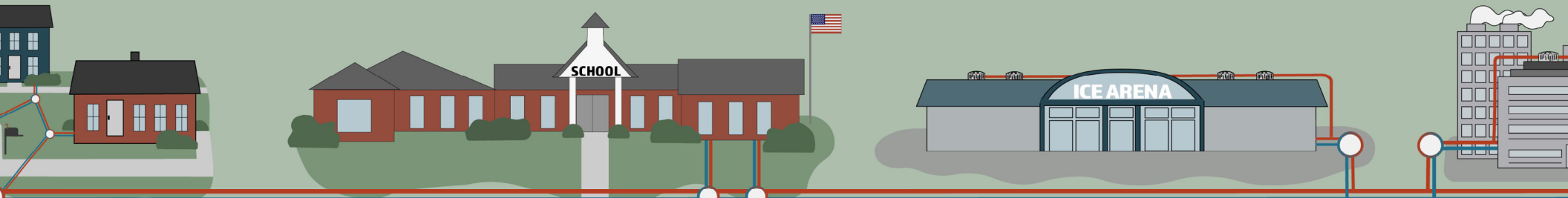
The current draft language is the product of 18 months of meetings with engineers, municipalities, a municipal law expert, utilities, PUC staff, fuel dealers, and environmental advocates.

Why the utility model makes sense

The model of utility regulation already governing electric and gas utilities in Vermont enables utility companies to invest in infrastructure and operating costs, to recover the investment in rates, and to obtain a fair rate of return on the investment, while the PUC ensures this is done in a manner that is fair to ratepayers. 30 V.S.A. §§ 218, 225, 226; *Petition of Allied Light & Power Co.*, 132 Vt. 354 (1974).

The same model would enable thermal energy network providers to invest in thermal energy networks, recover the investment in rates, and obtain a fair rate of return on the investment, while protecting ratepayers.

The 3 following pages include a schematic drawing of a TENS, and a signed letter of support.



LETTER TO LEGISLATORS RE: VERMONT'S THERMAL ENERGY NETWORKS ACT

April 2024

To Vermont Legislators:

We are writing in support of [S.252/H.669](#), An act relating to thermal energy networks, and ask that you support passage of this bill this session.

Vermont's Thermal Energy Networks Act is adapted from New York's pioneering [Utility Thermal Energy Network and Jobs Act](#) that passed unanimously in their Senate and was promptly signed into law, led by a surprising alliance of utilities, unions, and climate advocates. We represent a similar coalition united in support of the bill to make geothermal and other kinds of Thermal Energy Networks available to communities across Vermont.

Community-scale Thermal Energy Networks use closed loops of mainly water in pipes and ground source heat pumps to deliver geothermal and other thermal energy (such as waste heat from commercial refrigeration or from municipal wastewater) to heat and cool homes and businesses. These systems work in cold climates as well as warm ones. They can provide reliable, affordable energy, reduce electricity demand and peaks, and create quality jobs in Vermont, including for current fossil fuel workers.

Vermont's Thermal Energy Networks Act creates a legal structure for the PUC to authorize thermal network utilities and authorizes all municipalities to provide Thermal Energy Networks without PUC approval or regulation, just as municipal water and sewer utilities operate under local control. This general statutory authority avoids the need for up to 250 charter amendments.

While the New York law requires gas and electric utilities to enter this business, the Vermont version simply allows existing utilities as well as nonprofits, businesses such as fuel companies, and others to seek PUC authority to become a thermal network utility. The PUC would supervise rates and terms of service as it already does for other utilities. Without use of any taxpayer funds, a utility model makes one of the most efficient, cleanest energy systems accessible to many Vermont communities and allows businesses or nonprofits to recover the upfront investment through rates that can be affordable and equitable for all.

Passage of Vermont's Thermal Energy Networks Act this session will create a pathway for the development of Thermal Energy Networks in communities across the state and accelerate our shared efforts to meet our climate mandates. We hope you will support the passage of this bill this session.

Thank you.

350VT
Champlain Housing Trust
Northfield Energy Committee
Vermont Businesses for Social Responsibility

Vermont Climate and Health Alliance
Vermont Community Solar Association
Vermont Community Thermal Networks
Vermont Conservation Voters
Vermont Interfaith Power and Light
Vermont Natural Resources Council
Vermont Public Interest Research Group
Vermont Sierra Club