

# Ratepayer Protection and Thermal Energy Networks Act

## Background

### **Emissions and equity goals require further legislative action.**

Vermont has a compelling interest in fairly and rapidly implementing the emissions and equity goals of the Paris Agreement (2015) and the Vermont Global Warming Solutions Act of 2020 (GWSA). Experience since the passage of the GWSA has demonstrated that further legislative action is urgently needed in order to fairly and effectively reduce greenhouse gas emissions at the required pace in a way that keeps electricity affordable and protects vulnerable communities and ecosystems, both in state and beyond our borders.

### **Ratepayer protection and affordable electrification**

The phasing out of fossil fuels should result in increased use of electricity to heat homes, power motor vehicles, and serve other purposes. However, if electric service is not affordable, consumers may not make the transition. By keeping electricity affordable, Vermont encourages the adoption of building electrification and transportation electrification.

*Vermont PUC, Dkt No. 20-0203, Orders issued 2/3/20 and 4/26/20.*

#### **Current Energy Assistance Program**

Some Vermont electric customers already have access to a bill reduction potential called the Energy Assistance Program, but the program is limited to families at or below 185% of the Federal Poverty Level, and provides financial assistance that is limited to 25% of monthly charges and one-time arrearage forgiveness.

*30 V.S.A. § 218(e).*

- The generally accepted level of affordability of expenditure on energy for an American family is 6% of income.
- As of 2018, the 74,000 Vermont families at or below 200% of the Federal Poverty Level were paying from 11% to 51% of their income on home energy.

The existing Green Mountain Power Energy Assistance Program has been utilized by only about 25 % of eligible consumers. This low number of participants may result from the low level of discount offered by the program—a far lower discount than the programs in other states. The low level of discount may provide insufficient incentive to complete the application process, which must be repeated every year.

In addition, the Energy Assistance Program fails to adopt best practices recommended by experts, such as automatic enrollment for those who qualify for Low Income Heating Assistance or 3SquaresVT, on-line enrollment, and self-certification with enrollment effective at date of application.

*GDS Report on GMP Electric Assistance Program, 2019 (prepared for VT DPS).*

### **Vermont lags behind other states in protecting electric customers.**

In many other states, low and moderate income ratepayers are protected by programs that provide greater relief than Vermont's program. These plans directly or indirectly limit a household's electric bills to a percentage of their monthly income, such as 6%.

*GDS Report, supra; Advancing Equity in Utility Regulation: Future Electric Utility Regulation Report No. 12 (US DOE, 11/21), §§ 1 and 2.*

On February 3, 2020, the Public Utility Commission opened a docket to consider expanding the Energy Assistance Program to other utilities, potentially with a single statewide administrator. The Commission is not considering adoption of a Tiered Discount Program.

*Docket 20-0203 Orders issued 4/2/20 and 10/4/22.*

The Commission lacks statutory authority to provide relief to customers whose income exceeds 185% of Federal Poverty Level.

*30 V.S.A. § 218(e).*

### **Vermont can effectively, fairly protect low and moderate income electric customers.**

Vermont has a compelling interest in ensuring that its Public Utility Commission reforms electric rates to protect low income and moderate income ratepayers, including ratepayers whose income exceeds 185% of Federal Poverty Level.

The National Consumer Law Center and other low income advocacy experts encourage the adoption of a Tiered Discount Program in Vermont. This approach carries maximum benefits for low and moderate income households with low administrative costs and minimal impacts on other ratepayers.

Legislative action is needed to authorize a Tiered Discount Program that provides discounts structured so that low income Vermont households do not pay more than 6% of their income for energy, and so that other households with earnings less than 60% of median income also are protected as they transition to greater use of electricity.

# Community Solutions

Emissions from burning fuels to heat Vermont's buildings pose a major challenge.

Buildings are one of Vermont's largest sources of greenhouse gasses, due to the combustion of fossil fuels and other greenhouse gas emitting fuels for heating, domestic hot water, cooking, and other end-uses. The greenhouse gas emissions from heating homes and businesses accounts for approximately one-third of Vermont's greenhouse gas emissions.

*Vermont Climate Council, Initial Vermont Climate Action Plan, p.89.*

## 1. 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 eliminate or nearly eliminate greenhouse gas emissions from buildings at the community and utility scale, and to help achieve the goals of the Paris Agreement and the GWSA.

*Overcoming Legal and Regulatory Barriers to District Geothermal in New York State, Final Report (New York State Energy Research and Development Authority June 2021).*

Vermont has a compelling interest in making thermal energy networks available to homeowners, tenants, landlords, commercial business owners, and owners of commercial real estate because of the dramatic greenhouse gas emission savings, the economic savings, and the reliability of these systems. Other benefits of enhanced safety, health, security, and resilience will create stronger communities and make Vermont's climate mandates more achievable.

### **Authorizing thermal energy network utilities**

The model of utility regulation already governing electric, gas, water, and other utilities in Vermont enables utility companies to invest in electric, gas, water, and other infrastructure and operating costs, to recover the investment in rates, 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.

In 2022, the State of New York adopted legislation titled the “Utility Thermal Energy and Jobs Act,” S.9244, which authorizes that state’s utilities to own and operate thermal energy networks subject to the supervision of the New York Public Service Commission. The goal of the act is to provide low-cost, low-emission heating and cooling from thermal networks while transitioning well-paid fossil fuel jobs into well-paid thermal network-sector jobs, and creating new well-paying jobs in the thermal network sector.

Because of the policies of the GWSA, the effects of climate change already being experienced in Vermont, the urgent need to combat climate change, and the increasing need for housing with both heating and cooling, Vermont has a strong interest in fostering the development of thermal energy networks and the authorization of utilities to invest in, construct, and operate these networks.

### **Balancing electric load and adding energy storage**

Vermont also has a compelling interest in ensuring an adequate supply of reliable electrical power and, therefore, needs to promote the development of alternative energy sources that will alleviate demands on the electric grid. Thermal energy networks are highly efficient and minimize impact on the electric grid because they use, exchange, and store thermal energy from underground sources and buildings, including recycled thermal energy.

### **Prioritizing low and moderate income Vermonters**

Vermont also has a compelling interest in prioritizing providing thermal energy networks to low and moderate income Vermonters, because these Vermonters are affected the most by rising fuel and electricity costs, poor indoor air quality, and less ability than higher income Vermonters to acquire solar arrays, electric vehicles, and other cost-effective greenhouse gas emission reduction technologies.

### **Maximizing existing businesses, workers, and expertise**

Existing utility companies, and many persons and entities in Vermont other than existing utilities, possess expertise in heating, plumbing, and/or alternative energy, and would be able to construct and/or operate thermal energy networks if a simple, low-cost, and expeditious regulatory approval process were available.

The policy of the State of Vermont is to phase out the use of fossil fuels, which will affect the jobs of persons who are employed by companies that sell fossil fuels. It is in the interests of the State of Vermont to retain the skills and jobs of employees of fossil fuel companies by employing them and using their skills in constructing and operating thermal energy networks.

## 2. Limit gas distribution to current territory

Vermont's sole regulated fossil fuel provider, Vermont Gas Systems, Inc., recognizes that because of the climate crisis, the public interest no longer would be served by expanding its service territory.

The company's latest Integrated Resource Plan states that the company has abandoned its prior goal of system expansion and now intends to add customers only "within the existing footprint of our distribution system."

*VGS Integrated Resource Plan (2021)*

The Vermont legislature recognizes Vermont Gas Systems for this decision, finds that the climate crisis requires that there be no further expansion of the service territory in which fossil fuels regulated by the Public Utility Commission are sold, and finds that this change should be memorialized in the law governing Vermont utilities.