

Support with Amendment  
Education, Energy, and the  
Environment  
2/22/2024

## **Senate Bill 570- Working for Accessible Renewable Maryland Thermal Heat (WARMTH) Act**

Baltimore Gas and Electric Company (BGE) is pleased to support with amendments *Senate Bill 570 - Working for Accessible Renewable Maryland Thermal Heat (WARMTH) Act*. *Senate Bill 570* requires each gas company to file with the Public Service Commission (Commission) a proposal for one or two thermal energy network systems pilot programs by July 1, 2025.

BGE is a key partner and has an important role to play in achieving the state's climate goals. Maryland's energy transformation should include investments in network geothermal, battery storage, and other emerging technology that proves viable, but will also rely on the electric and gas distribution systems. BGE supports an *integrated energy delivery system* utilizing multiple sources of energy to maximize customer choice and assist the state in attaining its decarbonization objectives at the lowest cost.

*Senate Bill 570* would require gas companies to establish a network geothermal pilot program. Network geothermal works by creating a neighborhood of ground source heat pumps (GSHP), each connected to a common network of underground pipes that tap into the earth's constant underground temperatures. If properly coordinated, network geothermal could reduce the use of gas and other fossil fuels as a heating source, significantly reducing GHG emissions while also reducing incremental costs of new electric infrastructure expansion that would be needed to support all-electric heating, according to an independent analysis by Energy + Environmental Economics (E3)<sup>1</sup>.

For much of 2023, BGE has been in conversations with gas companies executing networked geothermal pilot programs in other states, and the company is working with an experienced consultant to understand the potential of the technology in Maryland. The preliminary results of our discussions indicate that when compared with full electrification, network geothermal is cost effective. Networked geothermal compares particularly favorably due to the tax credit that is available until 2032, as a result of the Federal Inflation Reduction Act of 2022 (IRA).

While BGE sees promise in network geothermal for achieving the state's energy goals, the company commits to working with the sponsor and the committee to address challenges with the timeline and program requirements prescribed in *Senate Bill 570*. *Senate Bill 570* requires

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<sup>1</sup> BGE engaged E3 to conduct a study analyzing viable pathways to achieve the state's goals and to identify potential impacts to customers in BGE's service area.

BGE, headquartered in Baltimore, is Maryland's largest gas and electric utility, delivering power to more than 1.3 million electric customers and more than 700,000 natural gas customers in central Maryland. The company's approximately 3,400 employees are committed to the safe and reliable delivery of gas and electricity, as well as enhanced energy management, conservation, environmental stewardship and community assistance. BGE is a subsidiary of Exelon Corporation (NYSE: EXC), the nation's largest energy delivery company.

gas companies to establish a pilot program by July 1, 2025. The timeline for the legislation is ambitious, resource-intensive, and concerning. Approval from the Commission could easily take longer than six months before a company could even begin implementation. Further, to meet the current timelines, a utility would have already needed to undertake a feasibility study, conduct engagement and outreach with stakeholders, identify a pilot location and site-specific study, and develop an RFP for the engineering and design to accommodate requirements associated with *Senate Bill 570*. We recommend a more measured timeline for implementing the network geothermal pilot program.

Second, the legislation requires that each pilot program includes 80% of customers from low to moderate-income housing (LMI). BGE recommends amending the legislation to require the LMI requirement for one of the two pilots to achieve a more representative cross section of our service territory. LMI customers are likely to have lower cooling demands than their heating demands due to financial limitations; this thermal imbalance could result in higher costs and significantly lower efficiencies, adversely skewing pilot results. BGE supports giving more flexibility in the program design to ensure that the pilots are economically viable and representative of the potential results that can be achieved in a scaled deployment.

Additionally, the pilot program can potentially be implemented cost-effectively if federal incentives can be fully leveraged; however, *Senate Bill 570* as drafted would preclude this from happening. IRA incentives and Internal Revenue Service (IRS) tax credits are available for purchasing behind-the-meter equipment and investments in the network infrastructure. The IRS mandates that the entity seeking tax credits must own BOTH the network infrastructure and the behind-the-meter GSHPs to qualify for the 40% IRA tax credit. If the utility purchases the ground source heat pumps, in addition to owning the geothermal network, the 40% IRA incentive could apply. As currently drafted, *Senate Bill 570* does not allow the utility to own the behind-the-meter heat pumps, so the federal incentive would be lost. BGE respectfully asks that the legislation be amended to enable gas utilities to own the necessary behind-the-meter assets to maximize federal incentives and lower the costs to our customers.

BGE is preparing to deploy a network geothermal pilot program and welcomes the opportunity to help the state achieve its energy and decarbonization goals. For these reasons, BGE supports *Senate Bill 570* with amendments and respectfully requests a favorable committee report.