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**VIA ePUC**  
September 3, 2024

Ms. Holly Anderson, Clerk  
Vermont Public Utilities Commission  
112 State Street  
Montpelier, Vermont, 05620-2701

Dear Ms. Anderson:

Per Act 18 of 2023, the Vermont Department of Public Service (“Department”) hereby submits a thermal sector potential study (“Potential Study”) for the Public Utility Commission’s (“Commission”) review and consideration. The Department contracted with NV5 to perform the Potential Study, which, among other things, entailed multiple meetings with the Commission’s Technical Advisory Group (“TAG”) to vet methodology and key assumptions.

The Potential Study compares the legal obligations of the Global Warming Solutions Act (“GWSA”) to the emissions reductions that are potentially achievable in Vermont’s thermal sector.<sup>1</sup> In turn, the core purpose of the Potential Study is to determine whether there are sufficient resources available for the Clean Heat Standard (“CHS”) to meet thermal sector Greenhouse Gas reduction targets outlined in the GWSA. To approximate economic and market conditions, the study estimates achievable emission reductions under a series of scenarios. Those scenarios include conditions: 1. Without market or economic barriers to the adoption of emissions reducing measures (“Technical Potential”) 2. With idealized financial incentives to promote covering the costs of measures (“Maximum Achievable”) 3. Where measures are

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<sup>1</sup>Vt. Stat. Ann. tit. 30, §8125(e)(1)(A)(2023).

delivered in a way that meets the low- and moderate- income policy goals of Act 18 (“Optimized”) and 4. Where the CHS measures delivered are cost-effective to Vermonters (“Economic Potential”).<sup>2</sup> The Potential Study also provides a comparison between the estimated emissions reductions of measures by in-State accounting (in Vermont’s Greenhouse Gas Emissions Inventory and Forecast (“Inventory”)), and emissions that are incurred in and out of state (lifecycle emissions accounting), as required in quantifying credits pursuant to Act 18.<sup>3</sup>

The Potential Study estimates that sufficient thermal emissions reduction resources are available to satisfy the thermal sector emissions reduction requirement. However, the Potential Study also indicates that to meet emissions goals, some portion of the measures necessary will not be societally cost-effective.<sup>4</sup> The Potential Study further indicates that there may be difficulty in reaching low- and moderate-income requirements while also reaching the GWSA targets of Act 18.<sup>5</sup> The Potential Study further suggests that both cost and workforce limitations may prevent Vermont from meeting GWSA targets.

It is important to recognize that the Potential Study is not an implementation plan for the Clean Heat Standard. Thus, while NV5 has distilled cost information that can be used as an input for estimating the costs of implementing the Clean Heat Standard, the Potential Study does not include such a cost estimate. Rather, NV5 has calculated a cost for acquiring Maximum Achievable savings and a cost for Optimized results. These estimated costs derive from the numerous assumptions in the Potential Study, including loading order of measures, cost structure, incentive levels, and others. Further analysis is necessary to fully understand and

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<sup>2</sup> Potential Study at 2-3.

<sup>3</sup> tit. 30, §8124(a)(1).

<sup>4</sup> Potential Study, at 34.

<sup>5</sup> Potential Study, at 49; tit. 30, §8124(d)(2), “Of their annual requirement, each obligated party shall retire at least 16 percent from customers with low income and an additional 16 percent from customers with low or moderate income.”

estimate the types and volumes of measures, as well as the acquisition strategies that might be necessary for Vermont to meet the Clean Heat Standard.

Per Act 18, the Legislature tasked the Commission with estimating the impact of the CHS on consumer rates and bills. Act 18 further requires the Commission to issue a “check-back” report to the Legislature by January 15, 2025. The report shall include:

... to the extent available, estimates of the impact of the Clean Heat Standard on customers, including impacts to customer rates and fuel bills for participating and nonparticipating customers, net impacts on total spending on energy for thermal sector end uses, fossil fuel reductions, greenhouse gas emission reductions, and, if possible, impacts on economic activity and employment. The modeled impacts shall estimate high-, medium-, and low-price impacts...<sup>6</sup>

NV5’s Potential Study can be used as an input for the Commission’s report to the Legislature. The Department respectfully suggests that in preparing the “check-back” report, the Commission may find it helpful to conduct a process to solicit comments on how the Commission should estimate the economic impact of the Clean Heat Standard. To facilitate public review and comment, the NV5’s Potential Study, as well as supporting workbooks, will be posted to the Department’s website.<sup>7</sup> A list of those who provided feedback related to the development of the potential study as well as a list of substantive feedback received, and the Department’s response will also be posted to the Department’s website.<sup>8</sup> Such a process would afford the Commission the benefit of considering multiple perspectives on how to craft a successful thermal sector emissions reduction program.

The Department appreciates the time and effort invested by many stakeholders in vetting NV5’s Potential Study as it was in progress, particularly the members of the Clean Heat TAG

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<sup>6</sup> Public Act No. 18, §6(i) (2023 Vt., Bien. Sess.).

<sup>7</sup> <https://publicservice.vermont.gov/clean-heat-standard/public-service-department-thermal-sector-carbon-reduction-potential-study>.

<sup>8</sup> *Id.*

and Equity Advisory Group, representatives of various interest groups, and members of the public that took the time to provide valuable feedback.

Dated at Montpelier, Vermont this 3<sup>rd</sup> day of September 2024.

VERMONT DEPARTMENT OF PUBLIC SERVICE

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