STATE OF MAINE PUBLIC UTILITIES COMMISSION **April 11, 2024**

Docket No. 2021-00380

VERSANT POWER'S

COMMENTS TO MARCH 28, 2024

PROCEDURAL ORDER

EFFICIENCY MAINE TRUST Request for Approval of Fifth Triennial Plan for Fiscal Years 2023-2025

I. INTRODUCTION

Versant Power ("Versant") files these comments pursuant to the Maine Public Utilities Commission's (the "Commission") March 28, 2024 Procedural Order Regarding Comment on Request for Significant Changes and Scheduling Technical Conference (the "Procedural Order").

On March 1, 2024, Efficiency Maine Trust (the "Trust") filed an annual update to its Triennial Plan for FY 2023-2025 (the "2024 Annual Update"). The 2024 Annual Update requests the Commission's approval to: (1) increase electric ratepayer funding and to reallocate existing electric funds to support an interim beneficial electrification plan and (2) suspend the Trust's natural gas conservation program.

In the Procedural Order, the Commission Staff directed Versant to: (1) explain whether and why the utility supports, does not support, or takes no position on the Trust's requests impacting electric ratepayers and (2) provide an assessment of the methodology used in Attachment 2 Reliable Reduction in Rates Analysis. Versant responds to the Commission Staff's questions below.

II. REQUESTS IMPACTING ELECTRIC RATEPAYERS

Versant takes no position on the Trust's request to suspend its natural gas conservation program. These comments, therefore, focus on the Trust's proposal to shift away from its air source heat pump program towards a whole-home heat pump program. To be clear, Versant supports the Trust's beneficial electrification program.

A. Versant Supports Adding Whole-Home Heat Pump Projects to the Program.

The Trust asserts that whole-home heat pumps (any income, moderate-income, and low-income) are beneficial electrification measures that are cost-effective and reliably reduce rates over the life of the measure. Versant supports the Trust's whole-home heat pump program. Versant views this new program as a potentially valuable offering among the Trust's programs. Many Versant customers have multiple heating systems and approach their heating decisions based on common-sense and use of the most appropriate system for the outdoor conditions. Versant also recognizes that many customers may reasonably want to retain back-up heating options in order to protect against, *e.g.*, the costly damage that can be caused by a frozen burst pipe.

B. Versant Power Supports the Trust Continuing its Heat Pump Program.

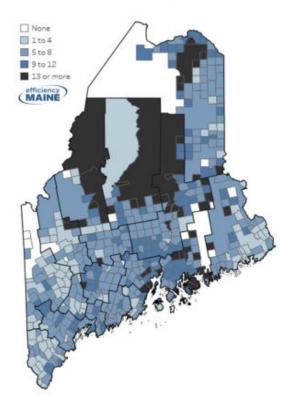
As the Commission and the Trust are no doubt aware, Versant strongly supports the use of heat pumps, and even initiated heat pump pilot projects in the years before the Trust's program. Versant commends the Trust; the air source heat pump program that the Trust has historically supported has successfully progressed Maine closer to Governor Mills' goal of 100,000 heat pump installations by 2025 and is very popular with Versant's customers in all portions of our service territories. The geographic distribution of heat pumps on a population-normalized basis shows successful adoption of this program in some of the economically challenged parts of Maine including in Aroostook, Penobscot, Piscataquis, Hancock, and Washington Counties³:

¹ 2024 Annual Update at 4.

² Versant had a call with the Trust on April 4, 2024 and requested deployment information for the initial whole-home heat pump projects within its service territory, but has not received this information from the Trust to date. Versant also requested the underlying data (assumed on an anonymized basis) from the Trust on its heat pump distribution for existing customers and the Trust's underlying data and calculations on rate impacts. Versant has not yet received this information from the Trust.

³ Efficiency Maine Trust, "Geographic Distribution." Triennial Plan VI: Income-Eligible Initiatives & Equity, Stakeholder Workshop, Slide 14 (March 15, 2024).

Heat Pumps per 100 population



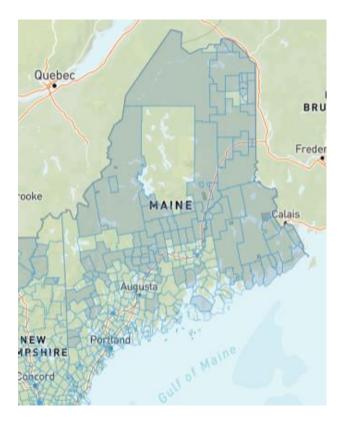
Versant serves four of these five counties. Clearly, the Trust's program was successful in some of the more economically disadvantaged parts of Maine. The program enjoyed substantial support—particularly by Versant's customers—and more broadly across all segments of Maine.

C. Versant Seeks to Ensure its Customers Have Access to the Trust's Heat Pump Programs.

Many of Versant's customers are located in economically disadvantaged communities. The Trust has identified Versant's service territories as containing Justice40 "Disadvantaged Communities" using the Climate and Economic Justice Screening Tool (the "CEJST"). The CEJST looks at factors including energy burden, pollution, and health effects, and where more than 65 percent of the population have an income at or below 200 percent of the Federal poverty level. In a recent presentation, 4 the Trust provided the following map identifying Maine's Justice40

⁴ Justice40 "Disadvantaged Communities" using the CEJST looks at various categories of burdens, including: low-income status, energy burden, health factors, housing, climate change, transportation, workforce development, legacy hazardous waste sites and wastewater discharge and underground storage tanks. Efficiency Maine Trust, *Triennial Plan VI: Income-Eligible Initiatives & Equity*, Stakeholder Workshop, Slide 13 (March 15, 2024).

census tracts:



In the most recent version of the Triennial Plan V for FY 2023-2025 approved by the Commission, Figure 1 of Triennial Plan V illustrates that the geographic distribution of heat pumps in Maine are generally higher on a per capita basis in rural counties, which includes much of Versant's service territory. The geographic distribution of the Trust's heat pump program from 2013 to 2021 represents more than 75,000 heat pump rebates (cumulative heat pump rebates per 100 population, where each rebate is equivalent to single-head, mini-split air source heat pump). The Trust concluded that, based on historical results, the Trust's programs promoting heat-pumps "have shown strong distribution among low-income communities and in rural communities." Versant agrees and finds this is particularly true with respect to Versant's service territories—the

⁵ Efficiency Maine Trust, Triennial Plan for Fiscal Years 2023-2025, 20, Figure 1 (Nov. 29, 2021) (updated May 27, 2022). An updated version of this figure provided by the Trust in March 2024 continues to support the same conclusion. *See* Efficiency Maine Trust, Triennial Plan VI: Income-Eligible Initiatives & Equity, Stakeholder Workshop, Slide 14 (March 15, 2024).

⁶ Efficiency Maine Trust, Triennial Plan for Fiscal Years 2023-2025, 19 (Nov. 29, 2021) (updated May 27, 2022).

Bangor Hydro District ("BHD") and the Maine Public District ("MPD")—which generally have lower median household income and a higher rate of heat pump distribution.⁷ This Trust program has been successful in achieving deployments of heat pumps to disadvantaged portions of the state and to areas with households of lower median incomes.

D. Versant Therefore Opposes Shifting Away From Customer-Driven Air-Source Installations

A shift to whole-home heat pumps risks shifting greater access to higher-income households who can afford the more extensive retrofits to their home. Landlords in particular will likely be reluctant to undertake whole-home solutions, given the well-understood market-failure/agency of landlords having low incentive to reduce tenant energy costs, given the now even more extensive capital investments than a single or two heat pumps. Risking such an outcome conflicts with the Trust's "efforts to ensure its programs equitably deliver benefits of energy efficiency to renters" because "a significant share of low-income Mainers rent, and do not own, their home."

The approved Triennial Plan for FY 2025 included a budget for electric efficiency procurement to incentivize "lost opportunity" heat pump installations, but part-way through FY 2024 the Trust "shifted its heat pump program to require whole-building installations and discontinued the use of electric efficiency procurement funds to pay for the electric 'lost opportunity' heat pump projects." In the 2024 Annual Update, the Trust asks the Commission to approve a material alteration of its beneficial electrification program to shift away from air-source heat pump installations in favor of whole-home heat pump projects. The Trust states in the 2024 Annual Update that its "transition to a focus on whole-home and whole-building heat pump

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⁷ Efficiency Maine Trust, Triennial Plan for Fiscal Years 2023-2025, 20, Figure 1 (Nov. 29, 2021) (updated May 27, 2022).

Efficiency Maine Trust, Triennial Plan for Fiscal Years 2023-2025, 20 (Nov. 29, 2021) (updated May 27, 2022).

⁹ 2024 Annual Update at 8.

projects is recent – occurring within the current fiscal year." ¹⁰

While the Trust cites a partial new federal tax credit available directly to customers as an "offset" to its program elimination, Versant does not view federal tax credits as sufficient in amount or timing of support for customer-installed air source heat pumps. A tax credit requires an upfront customer capital outlay. Moreover, the amount of tax credits available is less than the Trust's prior support for single or double installations of single-head, mini-split heat pumps. Accordingly, Versant is concerned that the Trust's recent proposal to reallocate electric ratepayer funding to transition away from single-head, mini-split air source heat pumps to focus on whole-home heat pumps will negatively affect the ability of moderate-income households and middle-income customers located in Versant's service territories to participate in such beneficial electrification programs.

The Trust acknowledges that, where this transition is very recent, "the pace of installations forecasted in FY 2025 remains highly uncertain." The Trust estimated that the "best-fit budget" for whole-home heat pump measures range between approximately \$11.3M to \$13.6M. This projection is uncertain because, as the Trust noted, whole-home heat pump measures have less than one year of program data to inform the expected trajectories in uptake, which in turn informs the best-fit budget analysis. This acknowledged level of uncertainty regarding the forecasted installation of whole-home heat pumps underscores concern regarding ramping up a new program to the detriment of the successful, existing heat pump program.

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¹⁰ Efficiency Maine Trust Request for Approval of Fifth Triennial Plan for Fiscal Years 2023-2025 Pertaining to Efficiency Maine Trust, Docket No. 2021-00380, 2024 Annual Update at 7 (March 1, 2024).

Efficiency Maine Trust, "New federal tax credits offset need for Efficiency Maine's residential rebates for 'room heaters' in presentation on "Making the Switch: The Imperative to Convert to Whole Home (or Whole Building) to Heat Pumps," slide 5 of 33 (Sept. 14, 2023).

¹² 2024 Annual Update at 7.

¹³ 2024 Annual Update at 6.

¹⁴ 2024 Annual Update at 7.

Therefore, in Versant's view, the Trust should continue to support the popular availability of non-whole-home heat pump installations. Non-whole-home heat pump support should not be limited to the income-tested program as proposed by the Trust. Moderate-income Mainers and middle-class families have successfully installed and use heat pumps with the Trust's prior support, and Versant respectfully requests that these efforts continue to be supported, which will serve important energy justice goals. As noted above, the Trust's data illustrates that the program has benefited less affluent areas of the state. Versant's own data presented in Section IV of these comments below supports continuation of the Trust's program. Accordingly, Versant does not support any suggestion that customers are not effectively using single or more air source heat pumps. 15 To the contrary, Versant's data (see below) suggests our customers are using their single or more air source heat pumps for heating and cooling. Given Versant's experience, data, and understanding of customer appreciation of their heat pumps, the Trust has provided insufficient data, analysis, and reason to justify why the program funding should now be limited to only whole-home heat pumps. Reallocating electric ratepayer funds entirely toward a whole-home heat pump program with a "highly uncertain" pace of installation forecast that seems likely to largely benefit higher-income households and developers able to pay the homeowner or developer portion of the whole-house conversion.

III. METHODOLOGY USED IN RELIABLE REDUCTION IN RATES ANALYSIS (Attachment 2).

Column C of Table 1 in the Trust's Request for Approval presents the findings of the Trust's assessment of whether each assessed beneficial electrification measure reliably reduces electricity rates over the lifetime of the measure. These findings are derived from the Trust's calculations

Versant observes that the Trust's own evaluation on a small sample of heat pump users found that residences are using heat pumps approximately 67% on average of what the Trust projected. See Efficiency Maine Trust, "Metering results indicates that heat pumps are not being used to their full heating potential" in presentation on "Making the Switch: The Imperative to Convert to Whole Home (or Whole Building) to Heat Pumps," slide 5 of 33 (Sept. 14, 2023).

provided in its attached Reliable Reduction in Rates Analysis (Attachment 2).

In the Procedural Order, the Commission Staff directed Versant Power to "[p]rovide an assessment of the methodology used in Att. 2 Reliable Reduction in Rates Analysis." As noted in footnote 2 of these responsive comments, Versant requested the calculations underlying Attachments 1 and 2 from the Trust in its April 4, 2024 call. The Trust referred Versant back to the Attachments, suggesting that the data within the attachments are sufficient. Without the Trust being open to sharing the underlying data and methodologies, Versant is unable to fully evaluate the Trust's methodology, calculation, or conclusions. That said, Versant undertook efforts to evaluate the conclusions (ultimate calculation) presented in Attachment 1 and Attachment 2 without the Trust's underlying data and methodologies. The conclusions appear directionally correct, but Versant cannot sufficiently corroborate these conclusions absent access the underlying Trust data.

Versant's caveats are set forth here. The Attachment 2 Reliable Reduction in Rates Analysis spreadsheet may be using higher rates than appropriate, as the analysis doesn't appear to incorporate Versant's Tiered Heating rates which thirteen percent of Versant customers use. Instead, the Trust appears to use the full Residential and/or Commercial rate. The analysis also does not differentiate between Summer and Winter kWh, which for Versant involves a substantial winter Heating Discount rate but no difference in summer rates from standard rate class rates. Versant acknowledges that Central Maine Power Company's ("CMP") rates affect the majority of electric customers in Maine, and the analysis must make trade-offs between accuracy and the time and cost to develop the analysis. Versant expects these appropriate corrections would improve the accuracy of the Trust methodology and not change the results materially; that is, those incentives that are expected to generate future electric revenue for the utilities generally stay in the same Yes/No category for Reliably Reduces Rates (Column C in Table 1), just to a different degree so the cost/benefit ratios may change. While the calculations appear directionally correct as suggesting all ratepayers will save money, Versant cannot ratify or analyze the impacts of the

identified beneficial electrification measures on T&D costs to provide the requested assessment of the Trust's analysis in Attachment 2, nor is it clear how much of a review the Commission intends the electrical distribution companies to undertake. To the extent the Commission has not evaluated the Trusts' electrical usage data per measure, projections of electricity usage, and cost-benefit calculations, Versant respectfully suggests that the Commission consider an independent, third-party evaluator to obtain underlying data for select Trust programs of concern to ensure they are cost-effective.

Specifically, Versant suggests a third-party auditor may review the Trust's underlying assumptions and modeling used in Attachment 2, including, but not limited to, the following:

- 1. <u>Annual consumption figures</u>: Attachment 2 is unclear on data inputs for specific annual consumption values attributable to each program (or combination of source) (*i.e.*, TRM, measured program data, or other states' analyses). The Trust states that its annual consumption figures "are drawn from the Trust's TRMs [(Technical Reference Manuals)], from measured program data, or from relevant analyses conducted by program administrators in other states." Versant would expect annual consumption figures would also be based on actual data usage and measure-cost data in Maine before moving to full-scale deployment of a new program such as whole-house heat pump strategies, the basis for usage data is not clear from Attachment 2 and the Trust did not provide Versant with the underlying data for Attachment 2 when requested.
- 2. <u>T&D delivery rates</u>: The Trust calculated a statewide average T&D delivery rate for residential and commercial customers using weighted averages of rates effective January 1, 2024 for both CMP and Versant. Attachment 2 provides the kWh-based weight for the averages. The Trust does not explain how these weights were derived. For home heating, Versant's heating rates offer substantial winter discounts which Versant would apply specifically to any heating measures in its territory. It is unclear whether these discounts are reflected in the methodology for determining the weights.
- 3. <u>Marginal impact of each measure</u>: The Trust calculated the marginal impact of each beneficial electrical measure on T&D system costs consistent with the methodologies and assumptions in its Triennial Plan V and Chapter 3 of the Trust's rules. Versant suggests a third-party evaluator review these methodologies and assumptions to determine whether they are appropriate for this analysis. The summer peak impacts of each measure are drawn from the Trust's TRMs and the Trust's analysis and modeling. However, the Trust does not provide this underlying analysis and modeling and did not share

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¹⁶ 2024 Annual Update at 5.

- that information with Versant when requested in a call on April 4, 2024.
- 4. <u>Discount rate</u>: Attachment 2's net present value of the changes in T&D costs and revenues attributable to each measure are determined using the Trust's discount rate for FY 2025, which was determined pursuant to the Trust's methodologies and assumptions in its Triennial Plan V. Versant suggests a third-party evaluator review this discount rate to determine whether it is appropriate for this analysis and whether other discount rates may be more appropriate.
- 5. *Impact of over-collection*: In the recent past, the Trust has collected more funds for the electrical savings program than it was able to expend. Specifically, the Trust over-collected approximately \$20 million for electrical programs, which was subsequently transferred to its demand-management program in a following fiscal year. Versant expressed concerns at both the high-system benefit charge and subsequently on the transfer of those funds. Versant expresses a similar concern here, given that: (i) the Trust's acknowledgement that uptake of these new programs and the Trust's ability to scale these programs may be optimistic; (ii) the magnitude of the budget; and (iii) the charge on ratepayers is likely higher than the Trust's ability to scale these whole-house heat pumps programs. Versant sees no analysis of ability to stand up these programs on the scale proposed by the Trust. In fact, the Trust itself expresses uncertainty regarding its ability to implement this new whole-house heat pump program at scale.¹⁷ Versant suggests that half of the proposed heat-pump whole-home program¹⁸ funding continue to be re-dedicated to the prior successful program allowing customers to install air-source heat pumps in locations to heat and cool portions of their houses that make sense to the customer in consultation with the installer.

IV. VERSANT DATA ON HEAT PUMP RATE CUSTOMER USAGE

Versant is able to collect data, aggregate, and anonymize for its customers who opt into Versant's winter heating rate programs. The Versant customers who take advantage of this winter rate constitute roughly thirteen percent (13%) of Versant's total customers.

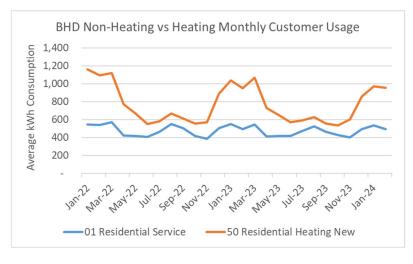
Versant's data indicates that customers are effectively using their current heat pumps installed under the Trust's prior program In MPD and BHD, residential customers on the optional

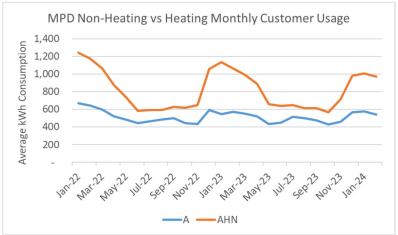
¹⁷ 2024 Annual Update at 7.

Versant suggests that half of each new whole-house heat pump program budget (a total of three) be re-dedicated to funding the prior successful heat-pump programs for residential customers. In the alternative, the Trust or Commission could re-allocate other Trust funds which are being spent slowly such as the demand-management program fundings, which themselves were originally allocated from excess electrification funds. Versant believes it would be reasonable, where additional beneficial electrifications funds are now needed, to re-allocate such funds back to allow continued support for the Trust's successful and popular heat-pump programs.

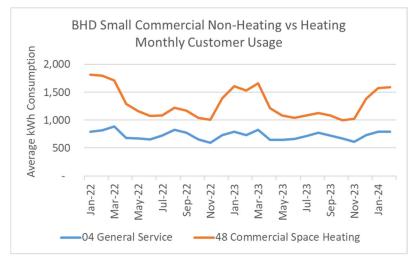
winter heat rates are using more electricity than customers on the standard rate customers at all times of the year, and significantly more during the winter heating months. This suggests customers are effectively using their heat-pumps for heating and cooling.

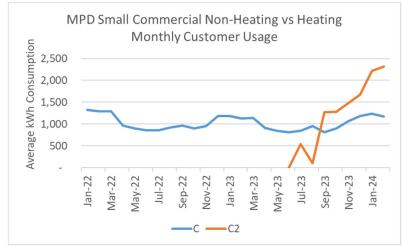
In the below graphs, the blue line is the default/standard rate and the orange line is the optional winter heating rate customer average usage:





The same increases in overall usage are true for small commercial customers on the heat pump rates:





The Commission may recall that the Versant MPD small commercial heating rate is a new offering.

This data suggests both that: (1) Versant customers are consistently using the heat pumps installed under the prior Trust program for heating and cooling, and (2) that the Trust's conclusions on increased electrical usage are directionally correct for home heating programs. The first conclusion leads Versant to strongly support current customer choice through the Trust's programs whether the customer wants to install a whole-house heat pump solution or install one or two units in portions of the residence or business which most effectively heat and cool the building envelope, and again Versant respectfully requests the Trust and the Commission maintain support levels in place in prior fiscal years for customer selected single or double installations of efficient

heat-pumps at residences and business in Maine.

Further, because not all residential and businesses can be cost-effectively heated in all

portions through a whole-house heat pump solution, Versant views its role as supporting its

customers in making the most cost-effective heating and cooling solutions for that individual

customer which have involved installation of one or two heat pumps successfully and their

successful operation for the last decade plus.

V. **CONCLUSION**

Versant strongly supports the Trust's efforts and makes these comments pursuant to the

Commission's request for comment on these specific topics. Versant thanks the Commission and

Commission Staff for considering our comments in response to the Procedural Order and we would

be pleased to provide additional information as requested.

Dated: April 11, 2024

Respectfully submitted,

Versant Power

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