August 18, 2023

Ms. Holly Anderson, Clerk
Vermont Public Utility Commission
112 State Street, Drawer 20
Montpelier, VT 05620

Re: Case 23-1870-PET
Petition to transfer Thermal Energy & Process Fuel ("TEPF") Funds
Response to Public Comments

Dear Ms. Anderson,

At the request of the Hearing Officer, the City of Burlington Electric Department ("BED") provides the following responses to the substantive issues raised by the public in comments submitted to the Vermont Public Utility Commission ("Commission") in the above-referenced case. Issues not addressed herein may have been addressed by the Commission's Hearing Officer in an Order dated August 1, 2023. BED concurs with the Hearing Officer's conclusions in that Order relative to the scope of the instant proceeding, the appropriate uses of TEPF funds for the proposed District Energy System ("DES"), and the accounting of the McNeil Generating Station's ("McNeil") emissions.

As of August 10, 2023, the Commission had received 27 unique comments through its e-PUC web portal.[1] Based on our review, the commenters seem primarily concerned that the proposed DES associated with McNeil will be neither efficient nor cost-effective. In addition, a relative few comments focused on emissions, cross-subsidies, prudency, prolonging McNeil's existence, and wildlife habitat.

[1] The ePUC public comment portal list includes 30 entries, but one entry is a duplicate, one entry conveyed the GREET spreadsheet tool, and another entry expressed an opinion relative to the role of the Public Service Department.

Although the focus of this proceeding is whether BED's request to transfer funds between approved TEPF programs[2] complies with its Order of Appointment[3], we address the above-referenced concerns in the sections below, as requested. However, while BED acknowledges the commenters' concerns, we believe they are not pertinent to the Commission's decision in this proceeding.

Efficiency

Many of the public comments focus on the efficiency of McNeil, or the whole of the DES. The applicable test for use of TEPF funds, however, is centered solely on the efficiency of the proposed thermal *distribution system*.

30 V.S.A. (e.)(1) states:

> *Each of the following shall be used to deliver thermal energy and process fuel energy efficiency services in accordance with this section for unregulated fuels to Vermont consumers of such fuels. In addition, the Commission may authorize an entity appointed to deliver such services under subdivision (d)(2)(B) of this section to use monies subject to this subsection for the engineering, design, and construction of facilities for the conversion of thermal energy customers using fossil fuels to district heat if the majority of the district's energy is from biomass sources, the district's* ***distribution system is highly energy efficient****, and such conversion is cost effective.*[**emphasis added**]

The above-referenced statute refers to the distribution system transporting steam and condensate from McNeil to prospective DES customers. According to Ever-Green Energy, that system is being designed and engineered to be 95 percent efficient, whereas most existing district energy distribution systems operating in other cities in the United States are 85 to 90 percent efficient (due to heat losses along distribution paths and pump losses). Based on these reported calculations, BED contends that the proposed DES complies with the above-referenced statutory requirement and, while

[2] See; Case 19 – 3272, Order of 8/26/2021.

[3] See Order of Appointment for the City of Burlington Electric Department, Case 18 -2867-INV, November 26, 2019,as revised.

district energy would also improve McNeil's efficiency, only the distribution system's efficiency rating is relevant.

Cost-effectiveness

Several commenters express concern that the DES project will not be cost effective when completed. They cite construction costs as the primary risk. The commenters worry that if the DES becomes uneconomic, BED's customers would need to subsidize its operation, causing electric rates to increase. Such concerns are misplaced.

BED has no plan to be an owner/operator of the DES and therefore would not bear any risks associated with financing, building, and operating the facility. A non-profit organization – Burlington District Energy ("BDE") – has been formed to be the owner/operator and it will assume these risks if the DES is built.

If the DES is built and operating, BED (and potentially the other McNeil joint owners) will provide thermal energy from McNeil under contract to BDE. A portion of this energy is currently lost as escaped heat through McNeil's stack but would be captured and used as thermal energy under the proposed DES.

To reiterate, BED has not injected—and does not plan to inject—TEPF funds into the proposed DES beyond the design and engineering phase of the project. Nor is BED assuming any ownership risk associated with financing and operating the DES. At this time, BED is only providing TEPF funds to support the studies and design work needed to provide sufficient detail about the project costs to prospective end users/customers of BDE's, to permit those ultimate customer(s) of BDE to decide whether to contract with BDE, and thus support the financing of the DES. In the end, it is solely up to BDE's potential customer or customers to determine whether the proposed DES is a cost-effective proposal.

Other comments raised by fewer commenters

As noted above, other comments concerning emissions, cross-subsidies, prudency, prolonging McNeil's existence, and wildlife habitat are either incomplete or not pertinent to the Commission's decision in the instant case.

First, McNeil is a biomass plant using sustainable harvesting methods, with less than 0.5% of its fuel purchased as roundwood in CY2022 (the vast majority comes from residues from other harvesting operations, mill residues, or waste wood)[4]. The Vermont Agency of Natural Resources, consistent with Intergovernmental Panel on Climate Change (IPCC) practice, does not account for biomass emissions at the stack but rather by looking at land use flux.[5] Third-party analysis indicates that the private timberlands from which McNeil procures wood, and on which McNeil supports sustainable forestry practices have added over 24 million tons of net CO2 storage in live trees between 2007 and 2020.[6]

Second, imprudence is determined in the context of a rate request and is limited to those funds that the utility is seeking rate recovery for in the request. TEPF funds are not recovered through BED rates for electric service but derive from revenues from the Regional Greenhouse Gas Initiative (RGGI) and Forward Capacity Markets (FCM).

Third, although the potential to extend the operating life of the McNeil generating plant is not relevant to this docket, BED would reply that the DES is not expected to result in a contractual obligation for McNeil to operate for the life of the DES.

Fourth, the issue of wildlife habitat destruction is similarly not relevant to the fund transfer request. Nevertheless, BED is proud of McNeil's sustainable fuel sourcing and wood harvesting practices, which are overseen by professional foresters employed by the plant. At many sites, there would be no harvesting plan or sustainable

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[4] Microsoft Word - McNeil Economic Impact -6.26.2023 (burlingtonelectric.com)

[5] "Emissions of biogenic carbon dioxide, which are produced from the burning, breaking down, or processing of biologically based material, are not included in the overall gross totals in the inventory based on IPCC inventory guidelines. Those emissions are instead captured in the LULUCF sector through changes in land use and the amount of stored carbon on the landscape (carbon stocks and fluxes). Estimates of emissions of biogenic CO2 have been included as additional information by sector where applicable and where the data exist. A detailed explanation of the accounting decisions and calculations for biogenic emissions in Vermont is included in the Methodology document."
https://outside.vermont.gov/agency/anr/climatecouncil/Shared%20Documents/_Vermont_Greenhouse_Gas_Emissions_Inventory_Update_1990-2020_Final.pdf

[6] https://www.burlingtonelectric.com/wp-content/uploads/McNeil-Carbon-6.2023.pdf

requirements at all if not for the involvement of the McNeil forestry team and the fact that harvest residues will be going to McNeil.

Finally, the concern that the DES will be subsidized by BED ratepayers is inaccurate; as discussed in our response regarding cost-effectiveness, above, risks and rewards from the construction and operation of the proposed DES will be borne by the non-profit BDE and its prospective customers.

BED appreciates the opportunity to respond to the public comments received by the Commission. The commenters have provided us with additional insight into their concerns. Completing the engineering and design of a DES in Burlington is the only method – that we know of – that can definitively inform key stakeholders and the community about whether a DES could provide thermal energy that is cost-competitive with other types of alternative clean energy solutions.

In addition to responding to the issues raised by the public, BED would like to take this opportunity to reiterate its agreement with the Hearing Officer's conclusions relative to the scope of this proceeding. The matter before the Commission in the instant case is limited to whether BED's petition to transfer funds from one approved TEPF program to another complies with Section III.3. of BED's Order of Appointment. BED contends it does for the reasons set forth in our petition of June 2, 2023.

Should you have any additional questions or concerns, please do not hesitate to contact me.

Sincerely,

Thomas Lyle
Program and Policy Analyst