



Public Service Commission

Rory M. Christian
Chair and
Chief Executive Officer

James S. Alesi
David J. Valesky
John B. Maggiore
Uchenna Bright
Denise Sheehan
Commissioners

Three Empire State Plaza, Albany, NY 12223-1350
www.dps.ny.gov

April 9, 2024

VIA ELECTRONIC FILING

Bess Beikoussis Gorman, Esq.
Assistant General Counsel
National Grid
40 Sylvan Road
Waltham, MA 02451
bess.gorman@nationalgrid.com

Re: Case 22-M-0429 - Proceeding on Motion of the Commission to Implement the Requirements of the Utility Thermal Energy Network and Jobs Act

Dear Ms. Beikoussis-Gorman:

As required by the Public Service Commission's Order Providing Guidance on Development of Utility Thermal Energy Network Pilot Projects (Guidance Order or Order),¹ Department of Public Service Staff (Staff) has reviewed the Final Utility Thermal Energy Network Pilot Project Proposal for Brooklyn, New York (the Proposal) submitted by the Brooklyn Union Gas Company d/b/a National Grid NY (KEDNY or the Company) on December 15, 2023, in Case 22-M-0429.

The Guidance Order requires Staff to conduct a compliance review to determine whether the filing meets the requirements set forth in the Order or presents feasibility concerns. The Order states that, if a filing meets all requirements, the Director of the Office of Energy System Planning and Performance will issue an approval letter, which may include feedback that the Company should consider in the next stage of development of the pilot project. Alternatively, if the filing is non-compliant or presents feasibility concerns, the Guidance Order provides that the Director of the Office of Energy System Planning and Performance will document the deficiencies and/or feasibility concerns in a letter setting forth a timeline for the Company to respond with any necessary information.² According to the stage-gating process established in the Guidance Order, once approved by Staff, the pilot will advance to Stage 2: Pilot Project Engineering Design and Customer Protection Plan. The Company will then have nine months

¹ Case 22-M-0429, Proceeding on Motion of the Commission to Implement Requirements of the Utility Thermal Energy Network and Jobs Act, Order Providing Guidance on Development of Utility Thermal Energy Network Pilot Projects (issued September 14, 2023).

² Guidance Order, pp. 20-21.

from the date of the approval letter to submit a Final UTEN Pilot Project Engineering Design and Customer Protection Plan filing (Stage 2 Filing) for Commission consideration.

As a general matter, Staff notes the aggregated costs associated with the collective utilities' proposed thermal energy network pilot projects total over \$880 million. It is critical that the Company take all necessary steps to manage cost impacts responsibly. As a primary objective, the Stage 2 Filing must demonstrate a clear focus on designing and constructing the UTEN while responsibly managing costs to the end-use connected customers and ratepayers as a whole.

Staff finds the Proposal is compliant with the provisions of the Guidance Order and thereby grants approval for KEDNY to proceed to Stage 2: Pilot Project Engineering Design and Customer Protection Plan for the KEDNY UTEN Pilot, with a cost cap of \$6.8 million through the completion of Stage 2. Staff offers the following additional feedback that KEDNY should consider as it further develops the KEDNY UTEN Pilot.

- The Proposal aims to connect three buildings that comprise the Vandalia Houses owned and operated by the New York City Housing Authority with up to 15 businesses located within two shopping centers. The Company demonstrates in its initial models that it anticipates the thermal load profile of the system to be heating dominant before the inclusion of domestic hot water (DHW) and the commercial customers, thus resulting in thermal drift. The Company responds by stating the addition of DHW and commercial customers into the loop would help balance the thermal load. KEDNY should verify the thermal loads at the commercial customers' sites and provide updated detail and modeling demonstrating the effects of these loads on the thermal balance of the system in the Stage 2 Filing.
- The Company states the system may require the integration of thermal balancing equipment in the event the borefield capacity and customer loads remain unbalanced. The Stage 2 Filing should explain the type(s) of thermal balancing equipment KEDNY would plan to install and explain, in detail, the placement, cost, and overall functionality of this equipment.
- The Proposal states existing fossil fuel systems may be left in place within the connected customers' premises (though not connected to the utility distribution system or customer equipment) for redundancy/backup, but the decision has not been made yet. Staff notes the impracticality of retaining customers' legacy fossil fuel systems on-site but not operational as a form of redundancy/backup. Additionally, the Utility Thermal Energy Network and Jobs Act (the Act) added Public Service Law (PSL) §2(28), defining the term "thermal energy" to mean "piped non-combustible fluids used for transferring heat into and out of buildings for the purpose of **eliminating any resultant on-site greenhouse gas emissions of all types of heating and cooling processes, including, but not limited to, comfort heating and cooling, domestic hot water, and refrigeration.**" Further, the Act added PSL §2(29), defining "thermal energy network" as "all real estate, fixtures and personal property operated, owned, used or to be used for or in connection with or to facilitate a utility-scale distribution infrastructure project that supplies thermal energy." Therefore, Staff advises that the UTEN and associated on-site electrification equipment should be designed to ensure it does not require the use of on-

site combustion at the customer premises. The Stage 2 Filing should provide further detail and justification for the proposed approach.

- The Company has identified several permits it may need to secure for implementation of the KEDNY UTEN Pilot, including with respect to the potential alternate thermal energy sources (wastewater piping and Hendrix Creek). The Company further describes the complexities and timing considerations that would prohibit the Company from concurrently conducting the permitting process along with the detailed engineering phase. Staff recognizes these timing issues and advises the Company to describe in detail in its Stage 2 Filing the progress and engagement with local, state, and federal entities responsible for issuing the respective permits that have occurred at the time of the filing and the Company's expectation for the timeline to acquire the relevant permits. Staff notes that the utilities' experiences with the permitting process are important for project learnings.
- The Stage 2 Filing should clearly indicate whether the local electric distribution system is adequate to serve the proposed UTEN or whether any upgrades will be needed. If upgrades are needed, the Stage 2 Filing should identify those upgrades, and the costs and timeline associated with such upgrades.
- The Proposal is not clear on whether upgrades to the electric service drop or electric panel associated with the connected buildings will be required. Staff understands some of this information may not be available until further engagement with potential customers occurs. The Stage 2 Filing should include additional information on the costs and timing associated with this work utilizing best available information or estimates, as necessary.
- The Proposal states electrification equipment will be installed on-site at the connected buildings. The Stage 2 Filing should provide details regarding the approach it intends to undertake to ensure that the on-site electrification work is designed and installed properly to satisfy the building(s)' space heating, cooling, and domestic hot water needs.
- Staff notes the lifecycle cost analysis conducted by the Company and provided in the Proposal. Staff observes that the utilities took various approaches to this analysis. Staff intends to work with all utilities to review the various approaches and reach a uniform approach that can provide Staff, stakeholders, and the Commission with comparable information as part of the Stage 2 Filings.
- Staff observes that while the Preliminary Customer Protection Plan included in the Proposal meets the basic requirements of the Order, it is generic relative to the information that the Company will need to further detail in the Stage 2 Filing. Staff further notes the customer engagement activities and associated outreach and education plan to be included in the Stage 2 Filing should include not only a prospective view, but also those outreach activities the Company has conducted to date.
- The Order requires the utilities to file monthly Progress and Expenditure Reports detailing the pilot projects' status and associated expenditures, including a description of the activities accomplished since the prior report, anticipated activities within or beyond the current stage, and any major changes in the scope of the project. The Company should ensure any substantive changes in the status of the pilot project, including any

updates or concerns related to the design, construction, or operational aspects of the pilot project are included in future monthly Progress and Expenditure Reports.

Sincerely,

A handwritten signature in cursive script that reads "Tammy Mitchell". The signature is written in black ink and has a long, horizontal flourish extending to the right.

Tammy Mitchell
Director
Office of Energy System Planning & Performance