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Assistant General Counsel

May 22, 2024

VIA ELECTRONIC DELIVERY

Honorable Michelle L. Phillips, Secretary
New York State Public Service Commission
Three Empire State Plaza
Albany, New York 12223-1350

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

Dear Secretary Phillips:

Enclosed for filing in the above referenced proceeding is the Petition of Niagara Mohawk Power Corporation d/b/a National Grid for the New York State Public Service Commission to Authorize Additional Funding to Support Its Utility Thermal Energy Network Pilot Projects Through Stage 2.

Please contact me if you have any questions regarding this filing. Thank you for your attention to this matter.

Respectfully submitted,

/s/ Bess Beikoussis Gorman
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STATE OF NEW YORK
PUBLIC SERVICE COMMISION

Proceeding to Implement the	)	
Utility Thermal Energy Network	)	Case 22-M-0429
And Jobs Act	)	
	)	

PETITION OF NIAGARA MOHAWK POWER CORORATION d/b/a NATIONAL GRID FOR THE NEW YORK STATE PUBLIC SERVICE COMMISSION TO AUTHORIZE ADDITIONAL FUNDING TO SUPPORT ITS UTILITY THERMAL ENERGY NETWORK PILOT PROJECTS THROUGH STAGE 2

I. Introduction

In September 2023, the New York Public Service Commission ("Commission") issued guidance on the development of Utility Thermal Energy Network ("UTEN") pilot projects in its *Order Providing Guidance on Development of Utility Thermal Energy Network Pilot Projects* ("Guidance Order").[1] The Guidance Order established a five-stage, gate process and required utilities file, by December 15, 2023, Stage 1 submissions supplementing their pilot proposals in the UTEN proceeding ("Stage 1 Submittals") before pilots would be allowed to progress to Stage 2 and conduct final engineering and design, permitting, and finalization of customer protect plans. Importantly, the Guidance Order also authorized a maximum funding amount for every UTEN pilot project that could be incurred through Stage 2 equal to 10 percent of the total estimated costs of each pilot.

The Niagara Mohawk Power Corporation d/b/a National Grid ("NMPC" or the "Company") has proposed two UTEN pilot projects, one in Troy ("Troy Pilot") and the second in Syracuse ("Syracuse Pilot"). In its Guidance Order, the Commission has authorized NMPC to incur the following costs through Stage 2: $1.2 million for the Troy Pilot and $6.7 million for the

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

Syracuse Pilot, based on a ten percent spending cap using the preliminary estimated total pilot project costs NMPC had provided in its UTEN Pilot Proposal submission to the Commission on January 9, 2023 ("January 9th Proposal").[2] Since the funding authorized by the Commission was based on the preliminary cost estimates NMPC had provided in its January 9th Proposal, it does not (nor could not) reflect the cost estimate updates for the Troy Pilot and Syracuse Pilot the Company subsequently provided on December 15, 2023 with its Stage 1 Submittals.

On April 9, 2024, the Department of Public Service ("DPS") issued Stage 1 Compliance Letters advancing NMPC's Troy Pilot and Syracuse Pilot to Stage 2. In order to complete final engineering and design and the other requirements for Stage 2 set forth in the Guidance Order, the Company seeks authorization to increase the Commission-approved funding in the Guidance Order to a total of $ 2.4 million through Stage 2 for the Troy Pilot (an increase of $1.2 million from the authorized funding) and to $ 8.3 million through Stage 2 for the Syracuse Pilot (an increase of $1.6 million from the authorized funding), which would bring the Company's total authorized spend through Stage 2 for the Troy Pilot to 4.6 percent of the total updated budget and for the Syracuse Pilot to 6.3 percent of the total updated budget the Company provided in its Stage 1 Submittals. [3] This request includes 40% contingency for the Troy Pilot and the Syracuse Pilot to cover unexpected pilot project developments and design requirements, which is necessary considering the nascent nature of these pilot projects and technology and the unknown building upgrades and subsurface conditions at this stage of project development that could result in unanticipated and additional engineering design requests.

[2] UTEN Proceeding, UTEN Guidance Order, Appendix A, p. 1.
[3] UTEN Proceeding, *Final Utility Thermal Energy Network Pilot Proposal For Troy, New York* at p. 36 (December 15, 2023) and *Final Utility Thermal Energy Network Pilot Proposal For Syracuse, New York* at p. 48 (December 15, 2023).

The Commission's prompt approval of this funding request will enable the Company to complete Stage 2 development of these two pilot projects and more effectively support New York State in piloting UTENs while also exploring equitable and scalable building electrification solutions. As such, the Company respectfully requests the Commission's favorable determination prior to exhaustion of the current authorized budget for the Troy Pilot, which is projected to occur on or about early September.

II. Background

The Company initially filed with the Commission a conceptual design for the Troy Pilot and for the Syracuse Pilot with its January 9th Proposal. In that proposal, the Company had provided high level cost estimates based on the conceptual design for the Troy Pilot totaling $12.27 million and for the Syracuse Pilot totaling $66.754 million. NMPC subsequently updated the high level estimates for its Stage 1 Submittals to include the costs of permitting, third-party construction oversight consultants (including senior field engineers and quality inspectors), contractor performance bonds, contractor insurance, sales tax, and internal labor for both pilots and additional scope for the Troy Pilot that included design, construction, and operation of the Energy Center that originally was to be constructed by the Troy Land Development Corporation installing, owning and operating the borefield for the UTEN. In the Company's updated cost estimates provided with its Stage 1 Submittals, the Company also increased the amount of contingency for both pilots from slightly over 20% to 40% to account for unknowns and also to adequately allow for the additional degree of uncertainty presented by the early stage of pilot project development compounded by a nascent technology.

Since receiving the Stage 1 Compliance Letter, the Company requested and received from CHA, its design consultant, their schedule and estimates for the Troy Pilot and the Syracuse

Pilot to develop final project engineering including all documents required to apply for permits and to prepare the construction bid proposal. Using CHA's estimates, the Company has prepared the forecasted estimate of costs needed to complete Stage 2. The Company's Stage 1 submittals estimated total costs for the Troy Pilot and the Syracuse Pilot to be $52.6 million and $132.7 million, respectively. In the Guidance Order, the Commission directed that "[t]he Utility shall not incur costs greater than 10 percent of the total estimated costs, as indicated, from project inception through finalizing pilot project engineering design and Customer Protection Plans."[4] The amount used by the Commission for calculating the ten percent was based on the high-level estimates in the Company's January 9th proposal.

Applying the ten (10) percent cap to the current estimates would result in maximum funding for the Troy Pilot through Stage 2 of $5.2 million and for the Syracuse Pilot $13.3 million. However, the Company is only seeking $2.4 million for the Troy Pilot and $8.3 million for the Syracuse Pilot to progress these pilots through Stage 2.

III. Increasing Authorized Funding Request

In total, the Company forecasts needing up to $ 2.4 million to complete Stage 2 for the Troy Pilot and $8.3 million for the Syracuse Pilot, which is $ 2.8 million more than the combined current cost cap for the two pilots. However, it is approximately $7.8 million less than the $18.5 million cost cap that would apply to the two pilot projects if the updated pilot cost estimates are used to calculate the ten (10) percent funding cap. Through April 30, 2024, the Company has incurred $498.4 thousand in capital and operating expenses for the Troy Pilot and $836.8 in capital and operating expenses for the Syracuse Pilot. The Troy Pilot, having spent approximately $0.5 million of the $1.2 million authorized funding cap, will exceed that funding cap fairly soon. The

[4] UTEN Proceeding, UTEN Guidance Order, Appendix A at p.1.

Company has projected that it could exceed the authorized funding cap for the Troy Pilot as early as September, 2024.

Table 1 below provides the total forecasted costs to progress the Troy Pilot and the Syracuse Pilot through Stage 2 and the anticipated shortfall between the forecasted amount and the funding cap authorized by the Commission in the Guidance Order. All forecasted costs include escalation, 40% contingency, and incremental overheads as well as costs already incurred in advancement of the Troy Pilot and Syracuse Pilot through Stage 1.

Table 1. Summary of Forecasted Costs and Projected Funding Shortfall For Troy Pilot and Syracuse Pilot through Stage 2 (Millions)[5]

Cost Category	Troy ($M)	Syracuse ($M)
Forecasted Consultant Engineering Design Costs	$1.5	$6.8
Forecasted Internal Labor	$0.4	$0.5
Forecasted Permitting	$0.5	$1.0
Total Forecasted Costs through Stage 2	**$2.4**	**$8.3**
Total Authorized Funding Amount	$1.2	$6.7
Total Forecasted Shortfall through Stage 2 (Additional Funding Amount Requested)	**$1.2**	**$1.6**

Internal and external costs are categorized as either operating or capital expenses. Only internal labor that is incremental (i.e. not included in base rates) is allowed to direct charge to the pilots for an operating expense activity. Non-incremental internal labor is not allowed to charge to the pilot for operating expense activities but can charge to the pilot for capital expense activities related to construction of the pilot projects such as permitting, engineering, and real estate acquisition.

[5] Totals may differ slightly from actuals due to rounding.

The Company has categorized the following operating expense activities to which only internal labor that is incremental can charge:

- Development & Review of Pilot Site PSC Proposals
- Development of Pilot Proposals (except for activities considered engineering design below) for filing with PSC for approval and related activities such as responding to discovery
- Pilot Site Selection/Feasibility Study, site selection consultant RFP
- Customer Analysis, Research, Marketing & Recruitment
- Development and distribution of customer enrollment marketing materials
- Development, negotiation, and execution of customer letters of intent and agreements
- Development, drafting, and negotiation of commercial agreements not related to construction of the capital infrastructure
- Customer pilot informational mailings
- Ground Source Heat Pumps and Clean Heat program related work paid for by the pilot project but not owned by the Company
- Home Conversions (Energy Efficiency Improvements, Air Duct/Radiator Improvements, Appliance Conversions, Water Heaters)
- Evaluation, Measurement, and Verification

The Company has categorized the following as capital expense activities to which all internal labor can charge if engaging in that activity:

- Shared Loop System construction related work and expenses (excavation, pipe installation, construction, restoration)
- Test Bores and other site testing and analysis and related activities (needed for preliminary engineering and design)
- System Design/Engineering
- RFP for engineering, design or construction of geothermal network
- Thermal conductivity testing needed for design of geothermal network

- Stakeholder outreach to support project construction, etc.
- All permitting and municipal approvals and related outreach activity required for pilot construction
- Development, drafting, and negotiation property rights including easements, and site access and license agreements and commercial agreements related to the construction of the capital infrastructure

IV. Need for Expedited Review

For the reasons outlined herein, NMPC respectfully seeks the Commission's favorable determination of this petition prior to the exhaustion of the Company's engineering design budget for the Troy Pilot, which is projected to be on or about September of 2024. This will enable the timely completion of Stage 2 for the Troy Pilot and Syracuse Pilot, including associated engineering design, permitting, and customer protection plan deliverables. Delaying or pausing this work in the absence of adequate funding will result in substantial delays to pilot project design and development, permitting, and customer engagement, interruptions that would likely have deleterious impact on project cost estimates and project schedule - particularly for the Troy Pilot, which requires alignment of its construction schedule with the Troy LDC and also both pilots for those customers who have construction work planned for buildings intending to participate in the pilot.

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID

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