STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Petition of The Brooklyn Union Gas Company d/b/a National Grid NY for Authority to Defer Costs Associated with the Gas Demand Response Pilot	**)**	**Case 23-G-____**

PETITION OF THE BROOKLYN UNION GAS COMPANY D/B/A NATIONAL GRID NY FOR AUTHORITY TO DEFER COSTS ASSOCIATED WITH THE GAS DEMAND RESPONSE PILOT

The Brooklyn Union Gas Company d/b/a National Grid NY

Roni Epstein, Esq.
Senior Counsel I
25 Hub Driver
Melville, NY 11747
(516) 418-9135
Roni.Epstein@nationalgrid.com

Date: April 13, 2023

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I. INTRODUCTION

The Brooklyn Union Gas Company d/b/a National Grid NY ("National Grid" or the "Company") hereby petitions the New York State Public Service Commission (the "Commission") for authority to defer approximately $906,727 for future recovery from customers to conduct a Gas Demand Response Pilot Program (the "Pilot").

The Pilot is designed to determine whether otherwise underutilized electric heating sources may be leveraged to alleviate peak constraints on gas systems through participation in the Company's existing gas demand response programs. Data derived from the Pilot will enable the expanded use of demand response resources from multifamily and single-family customers. In addition, the Company believes the Pilot will identify opportunities for increased coordination among peer electric utilities as more customers adopt increased levels of electric heating. The Department of Energy ("DOE") awarded the Company a cost-share grant to conduct the Pilot, and the deferral amount represents the cost-share required for the effort to move forward.

II. DESCRIPTION OF THE PILOT

The Pilot is aligned with the goals of the Climate Leadership and Community Protection Act ("CLCPA") and it is supported by DOE's National Energy Technology Laboratory through a cost-sharing grant of approximately $950,188.

The five-year Pilot, as further detailed in Exhibit A, consists of two tracks, the: (i) Multifamily Track and (ii) Single-Family Track. As part of the Multifamily Track, the Company will implement a gas demand response-enabled hybrid heating solution at a low-to-moderate income multifamily building. The solution will include the installation of window unit heat pumps that are capable of being remotely controlled. The Company will test whether such units can be used to address heating needs and reduce peak during critical, peak days (*i.e.*, the coldest days of the year), when the units are not typically used. In addition, the Company will pair the window units with smart radiator covers and thermal storage to regulate apartment temperatures and allow for additional load shifting. The Company also seeks to collaborate with the New York City Housing Authority ("NYCHA"), the New York Power Authority ("NYPA"), and the New York State Energy Research and Development Authority ("NYSERDA") to further analyze the Pilot findings as part of the multifamily "Clean Energy for All Challenge."

Likewise, the Single-Family Track includes deploying control technologies to leverage existing, underutilized electric heating technologies to manage gas demand on peak days. The Company seeks to enroll approximately 70 residential customers, and to install controls that enable the Company to remotely turn on air-source heat pumps during select hours on peak winter days to supplement gas consumption. With the technology installed, the Company aims to supplement or replace gas heating to offset at least 25 percent of the participating customer's natural gas heating needs during peak days or hours. The Company will collaborate with

Consolidated Edison Company of New York, Inc. to identify customers who are well-positioned to participate in the Pilot.

Together, the Multifamily and Single-Family Tracks are intended to help the Company examine:

- Whether applying controls to existing electric heating technology can enable short duration gas peak reductions in demand response programs;
- The efficiency thresholds at which electric heating technology can be a cost-effective gas demand response solution at low temperatures;
- Cost and emissions impacts (both peak day and annually) from hybrid heating technologies enabled for gas demand response programs;
- Improvements to multifamily tenant comfort from increased control of heating;
- Potential for improved coordination between overlapping gas and electric utilities; and
- Scalability and benefit-cost analysis of all pilot elements.

The Pilot's length is expected to span five fiscal years, with 3 operational winters (starting with Winter 2023/24) bookended by a set-up and post-Pilot evaluation period.

III. PROPSED DEFERRAL

As stated above, the Company received federal funding from DOE for a portion of the Pilot in the amount of $950,188 cost-sharing grant over a 5-year period. In this Petition the Company requests authorization to defer $906,772 representing the cost-share match associated with the implementation and evaluation of the Pilot. As set forth in Exhibit A, the funds will be used to purchase the window units for the Multifamily Track, as well as the control technologies required for both tracks. The funds will also be used to secure customer participation, and to evaluate the customer response throughout the Pilot period. The Company proposes that such expenses be held in a deferral account for future recovery.

For the portions of the Pilot that incorporate or rely on previously authorized programs (*e.g.*, the existing demand response program), the customer incentives, as well as the metering costs associated with the multifamily customer's participation will be recovered consistent with and through those existing gas DR programs.

IV. CONCLUSION

For the reasons stated above, National Grid respectfully requests that the Commission approve deferral of the costs associated with the proposed Pilot for future recovery.

Respectfully submitted,

THE BROOKLYN UNION GAS COMPANY d/b/a NATIONAL GRID NY

By: Roni F. Epstein, Esq.

/s/ Roni F. Epstein
Senior Counsel I

Dated: April 13, 2023

EXHIBIT A

EXHIBIT A

NATIONAL GRID GAS DEMAND RESPONSE PILOT PROGRAM PROPOSAL AND IMPLEMENTATION PLAN

I. INTRODUCTION

The Brooklyn Union Gas Company d/b/a National Grid NY ("KEDNY" or the "Company") proposes a 5-year hybrid heating pilot project to analyze opportunities that will further reduce peak day gas usage from multifamily and single-family residential customers (the "Pilot"). The Company received an approximately $1 million cost-sharing grant from the Department of Energy ("DOE") to test strategies aimed at increasing the use of remotely controlled electric air-source heat pumps ("ASHPs") during the coldest winter days. With the information gleaned from the Pilot, the Company hopes to develop a better understanding of the strategies that can be used to further reduce gas usage. To complete the cost-share requirements, the Company proposes to defer $906,772 in Pilot costs for future recovery from customers.

II. BACKGROUND

KEDNY endeavors to drive innovation in the development of gas demand response ("DR") capabilities. In 2017, the Company initiated a model gas DR program for firm service customers, winning a "Utility Innovation in Gas Award" from the National Association of Regulatory Utility Commissioners ("NARUC"). National Grid has since expanded that program and has developed a robust portfolio of customer programs implemented as meaningful, cost-effective alternatives to traditional gas infrastructure. The Company continues to seek ways to assist customers and take action to achieve the Climate Leadership and Community Protection Act ("CLCPA") goals by adapting and improving its gas DR program offerings.

As National Grid strives to achieve New York State's goals for an affordable, reliable clean energy future, the Downstate New York service territories face looming gas supply shortfalls. To mitigate these future shortfalls in available gas supply the Company and its affiliate, which serves the Long Island gas territory, are accelerating demand-side solutions such as energy efficiency, DR, and non-pipe alternatives ("NPAs").

Unique among the demand-side solutions outlined above, the Company's gas DR programs have scaled at a rapid pace. Much of this success can be attributed to the nature of DR programs, which generally provide customers an opportunity to earn incentives by adjusting usage with minimal upfront cost.

The Company operates four firm gas DR programs, each tailored to a specific set of customers and customer capabilities:

- **Load Shedding:**
    - For commercial and industrial, as well as multifamily customers.
    - Incentivized program to reduce peak-day gas load on event days.
    - Monthly payments for commitment to reduce a preset quantity of gas.

- Performance incentive for measured load relief during an event.

- **Load Shifting:**
  - For commercial and industrial, as well as multifamily customers.
  - Peak shaving over a defined period on event days, without an alternative source.
  - Monthly payment for commitment to shift a preset quantity of gas.
  - Performance incentive for measured load relief during an event.

- **Remote Load Control/Bring-Your-Own-Thermostat ("BYOT"):**
  - For residential and small commercial customers.
  - Load shifting during peak events of up to 4 hours.
  - One-time instant incentive when connected thermostat is installed.
  - Annual incentive when participating in at least 70 percent of event hours.

- **Behavioral:**
  - For residential and small commercial customers.
  - Non-incentivized program.
  - Various channels to request customers decrease peak-day gas usage.

Despite the high rate of adoption of these programs in the initial years, the Company anticipates that the rate of growth will level off over the next 5 years. The Load Shedding program, which accounts for over 95 percent of peak day and peak hour reductions within the portfolio is reaching a high level of saturation by volume. The proliferation of ASHP equipment installed in homes and buildings that maintain gas heating is one application of new technology that warrants study under gas DR programs. Unlocking an additional participation pathway in gas DR will help to further limit expected demand growth on the Company's gas system.

III. PILOT DESCRIPTION

The Company seeks to implement the Pilot, which is designed to determine whether underutilized electric heating sources can be leveraged on peak winter days to alleviate gas system constraints through participation in one of the Company's firm gas DR programs. The Company anticipates the data derived from the Pilot will unlock additional DR potential in the multifamily building and single-family residential sectors, as well as effectuate increased coordination among the Company and the incumbent electric utility, Consolidated Edison Company of New York, Inc. ("Con Edison").

In addition to its direct alignment with the goals of the CLCPA, the Pilot has the support of DOE's National Energy Technology Laboratory. In response to a solicitation from the DOE that sought to fund gas DR projects, National Grid secured a $1 million cost sharing grant for the Pilot. National Grid's proposal consists of two tracks: (1) a DR-enabled hybrid heating and control solution for a low-to-moderate income multifamily building (the "Multifamily Track"); and (2) management of gas demand for single-family residential customers through deployment of control technologies that will leverage existing, underutilized electric heating technologies (the "Single-Family Track").

The Pilot will explore:

- Whether application of controls to existing electric heating technology can enable short-duration gas peak reductions as part of existing DR programs;
- The efficiency thresholds at which hybrid heating technology can be a cost-effective DR solution at low temperatures;
- Cost and emissions impacts (both peak day and annually) from hybrid heating technologies enabled for gas DR programs;
- Improvements to multifamily tenant comfort from increased control of heating;
- Potential for improved coordination between overlapping gas and electric utilities; and
- Scalability and benefit-cost analysis of all Pilot elements.

Heating Electrification and Natural Gas Demand

The electrification of space and water heating is a crucial component of achieving New York State's emissions goals, as it will help reduce annual gas consumption across the building sector. However, electrification is not a "one-size-fits-all" solution for customer heating needs. While the term "heat electrification" is often broadly referenced as a complete displacement of gas heating (and other smaller gas end uses), in practice that is not always the case.

New York State households and buildings range greatly in heating needs, levels of efficiency, climate zones and economic makeup. While converting to electric heating may be viable for some customers, others may have economic or technical challenges due to upfront costs or the difficulty of retrofitting buildings. This is a particular challenge in the multifamily building sector in Downstate New York. Indeed, the Climate Action Council Scoping Plan notes that:

> Larger multifamily, mixed-use, or complex commercial buildings may have logistical constraints (*e.g.*, limited roof area) that result in heat pump systems needing supplemental heat (*e.g.*, electric resistance or pre-existing gas-fired system) on the coldest days.[1]

Likewise, the New York State Energy Research and Development Authority ("NYSERDA") Carbon Neutral Buildings Roadmap points to further evidence that pairing heat electrification with backup combustion heating is likely to be adopted by certain customers to provide resiliency benefits and limit adverse electric system impacts:

> Systems with combustion heat backup have the potential to substantially reduce grid impacts and may also offer reliability and resilience benefits. These systems have emerged as a promising technology strategy across a range of European heat decarbonization studies and pilot projects there have begun to explore the operations and business models of partial electrification.[2]

[1] Climate Action Council's Scoping Plan, Page 190
[2] "The Future of Buildings: New York's Carbon Neutral Roadmap," Page 71

Large customers in the Company's service territory have also described plans to adopt hybrid heating systems. As part of an Action Plan to reduce greenhouse gas emissions, the City of New York and the New York City Department of Citywide Administrative Service state:

> The City will focus on transitioning fossil fuel-heated buildings to electric heat pumps and use hybrid space heating systems where full space heat electrification is not cost-effective, given that some buildings may require significant investments.[3]

In addition, results from the New York Clean Heat Program ("Clean Heat Program") identify a significant number of residential customers retaining gas heating systems when purchasing an ASHP. Of the 17,000 heat pump projects installed in New York State in 2021, approximately 70 percent were sized to serve the full heating load of the customer.[4] The level of full-load ASHP adoption is even lower when focusing on National Grid's Downstate New York service territory with 65 percent and 26 percent full-load ASHP installations in 2021 for the Con Edison service territory and the Long Island Power Authority service territory, respectively.[5] Further, full-load ASHPs, as defined by the Clean Heat Program, do not necessarily correlate to the removal of gas equipment, though new decommissioning incentives seek to address that issue.

This distinction is important when considering the impact to the New York gas utilities. Gas utilities size supply and distribution needs based on the expected gas usage during a "Design Day." For KEDNY, a Design Day represents customer consumption when temperatures average zero degrees Fahrenheit for a 24-hour period. Customers utilizing partial load ASHPs typically switch to backup gas heating during Design Days and other severely cold periods (0-30 degrees Fahrenheit).

Though the proliferation of partial load ASHPs can have a large impact on annual gas consumption and related emissions, it does not reduce peak day gas demand. The primary goal of the Pilot is to determine what impact otherwise dormant heat pump technology can provide to the gas system during DR events.

A. Pilot Design

The Pilot focuses on two customer groups within KEDNY's service territory: large multifamily buildings and single-family residential homes. Both customer segments represent a significant portion of the Company's annual throughput and Design Day gas demand. The Pilot's "two track" approach features a Multifamily Track ("Multifamily Track") and a Single Family Track ("Single Family Track") that will address the unique characteristics believed to limit the respective gas DR participation and levels of electrification within each sector.

1. Multifamily Track

[3] "Local Law 97 Implementation Action Plan", NYC DCAS, Page 54
[4] New York State Clean Heat Program, 2021 Annual Report, Table 3
[5] New York State Clean Heat Program, 2021 Annual Report, Table 3 and Appendix C

Multifamily buildings represent roughly 15 percent of National Grid's entire Downstate New York service area, which includes the KEDNY and KeySpan Gas East Corporation d/b/a National Grid ("KEDLI") territories. That figure is more significant in KEDNY's territory, which has a higher share of large multifamily housing within a dense urban area. As illustrated in Table 1, many of the multifamily buildings face significant barriers to electrification, including upfront installation cost and disruption from retrofitting steam-heated buildings with ASHPs.

A study by the Urban Green Council focused on multifamily electrification estimated that installing "central" electric heating systems costs an average of $18,200 per apartment, while "unitary" systems average $14,900 per apartment.[6] Table 1 provides an illustrative comparison of the costs of upgrading to a central or unitary electric heating system for a 100-unit building currently heated by a natural gas boiler.

Table 1: Sample Comparison of Full Electrification vs. Existing Natural Gas[7] (Illustrative 100-unit building)

Category	Natural Gas Heating	Central VRF System	Unitary ASHPs
Annual Heating Volume	8,500 Dths	697,000 kWh	697,000 kWh
Upfront Install Cost $	$0	$1,820,000	$1,490,000
Annual Gas Cost $	$85,000	$0	$0
Added Elec. Heating $	$0	$139,400	$139,400
Annual Emissions (lbs CO2e)	994,500	385,441	385,441

In addition to the upfront installation cost, multifamily buildings in New York City also face higher annual heating costs from electric heating than from natural gas due to relatively high electric rates. These points support the findings of the Climate Action Council's Scoping Plan that large multifamily buildings, particularly those with boilers not approaching end of their useful lives, are likely to implement a hybrid heating system rather than fully electrifying.

Accordingly, the Pilot will analyze an end state where multifamily customers adopt partial heat electrification systems, while continuing to rely on gas heating during the coldest days of the year. Such an arrangement lowers volumetric gas consumption without decreasing the Design Day supply needs of a gas utility. To solve for this issue, the Pilot will test the controls of new, to-be-installed window-unit ("window unit") heat pumps[8] that typically serve tenant heating needs during mild temperatures. The window units will be remotely controllable and allow for

[6] Urban Green Council; "Going Electric: Retrofitting NYC's Multifamily Buildings", Page 19

[7] Hourly gas interval data was used to model the ASHP efficiency at various temperatures, with a resulting average COP of 2.85.

[8] National Grid applied to the DOE for funding for this Pilot contemporaneous to the launch of the "Clean Heat for All Challenge" by NYCHA, NYPA, and NYSERDA.

temporary heating support during critical, peak gas days (*i.e.*, event days). In addition, such window units would be paired with smart radiator covers and thermal storage to regulate apartment temperatures and allow for additional load shifting. This approach will:

- Test the ability of a gas utility to limit peak day gas consumption during an event day;
- Provide customers with a partial electrification pathway that also limits peak day gas use;
- Allow for the study of costs and efficiency levels of partial electrification system to determine appropriate switchover temperatures;
- Investigate the ability of recurring DR incentives to offset higher electric costs; and
- Enable the study of tenant comfort during event days.

The Pilot will focus on the controls, switchover thresholds, and enabled gas DR reductions. Separately, the New York City Housing Authority ("NYCHA"), New York Power Authority ("NYPA"), and NYSERDA are collaborating on the "Clean Heat for All Challenge," which seeks to advance the development of cold-climate window-unit ASHPs in multifamily buildings.

The Company has been discussing potential implementation sites with NYCHA, the desired customer for the Multifamily Track of the Pilot. Through partnership with NYCHA under the Pilot, the Company will study how the controls data and DR strategies could be applied to the newer window units being tested in the Clean Heat for All Challenge.

To advance the goal of determining how much gas load reduction can be achieved by partial electric heating equipment during gas DR events, the Company anticipates testing several strategies. The Company, its vendors and the customer would determine the recommended strategy (or strategies) in advance of each winter season. The Company anticipates leveraging the new equipment using one of the five curtailment strategies listed below.

Table 2: Gas DR Curtailment Strategies

Protocol	Description	Pros	Cons
A	Gas Pre-Heating, Reduced Event Boiler Use	• Avoids ASHP use at low efficiency • Thermal storage testing	• Does not leverage ASHPs • Limited full day gas reduction • Low tenant comfort
B	Gas Pre-Heating, No Event Boiler Use, ASHP Event Heating	• Higher full day gas reduction potential • High level of tenant comfort • Thermal storage testing	• Relies on low efficiency ASHP for limited event window
C	Reduced Event Boiler Use, ASHP Event Support	• Tests "dual fuels" in parallel • Higher full day gas reduction potential	• Lower event reductions

D	No Event Boiler Use, ASHP Event Heating	• High event and full day gas reductions	• Low efficiency/output from ASHPs
E	Elec ASHP Pre-Heat, Reduced Event Boiler Use, ASHP Event Support	• Higher full day gas reduction potential	• Lower tenant comfort • High use of ASHP over longer periods

Of the strategies identified in Table 2, Protocol B appears to best balance tenant comfort, equipment capabilities, event reductions, and pre-heat and snapback effects. Other strategies will be explored through collaboration with the Company, vendors, and customers as an ongoing feature of the Pilot.

The Pilot study will also extend beyond gas DR events. As further described below, the Company will be collecting several data points on gas consumption, electric use, and temperatures to help optimize the electric-to-gas switchover point under non-event conditions.

Initially the Company anticipates customers will utilize electric heating when air temperatures are greater than 32 degrees Fahrenheit. Based on hourly load data from multifamily customers in the Company's current gas DR programs, approximately 71 percent of the heating load would be served by electric ASHPs during the winter under this scenario. When compared with a full electrification model that lowers annual emissions by 61 percent, moving 71 percent of the heating load to ASHPs reduces annual emissions by 46 percent while limiting electric costs.[9] The Company will work with the designated Multifamily Track customer to further model efficiencies at different temperatures and the resulting heating costs from electric and gas services, with the goal of setting the most optimal switchover point.

2. Single-Family Residential Track

In contrast to the multifamily and commercial customer segments, electric heat pump adoption is growing among the residential customer segment. However, many heat pumps purchased by residential customers are **not** being used for heating on the coldest days.

Other heat pump purchases may be used by customers exclusively for cooling purposes, with little customer understanding of the equipment's heating potential. This includes customers purchasing mini-split systems for some or all portions of a residence without the added expense of installing ductwork.

The Single-Family Track of the Pilot seeks to make use of existing customer heating equipment that is underutilized on peak winter days. As with the Multifamily Track, the Pilot involves the

[9] This analysis uses annual emission factors for electricity, but monthly or temperature-based emissions factors would provide a better view of the true emissions impacts. Temporal-based data would result in an even larger reduction in the hybrid scenarios due to the current electric generation make-up of New York City in the winter, where more electricity is produced by oil than in other times of the year.

installation of controls that remotely turn on ASHPs for select hours during peak winter days to supplement gas consumption.

Since the Single-Family Track takes advantage of existing equipment, the control technology will not be embedded in the indoor unit(s) of the ASHP. Instead, the Company will install a separate control device for each indoor unit following an evaluation of available technology vendors. The evaluation will serve as a core component of the Single Family Track, seeking to address gaps that exist with separately controlled heating sources in homes.

The Company intends to enroll approximately 70 residential customers for the Single Family Track. The Company will screen potential customers based on the presence of central gas heating systems and supplemental ASHP technology that serves the same space. The Pilot aims to screen for customers whose electric systems provide sufficient coverage to supplement or replace gas heating to offset at least 25 percent of natural gas heating needs during peak days or hours. This determination will be made by nameplate BTU output of ASHPs as compared to natural gas equipment. The Company will also prioritize enrollments that utilize more efficient ASHPs where possible.

The Single Family Track will explore some of the same gas curtailment methods described in the Multifamily Track, including:

- Heating solely with electric ASHPs operating at electric resistance-level efficiency for short durations (4 hours) in lieu of gas;
- Dispatching both ASHPs and gas heating equipment simultaneously to evaluate any gas reductions relative to baselines; and
- Pairing ASHP use to mitigate pre-heat and snapback effects in the Company's BYOT program.

The Company anticipates that the Pilot approach set forth in the Single Family Track will help address a limitation in the Company's residential-focused BYOT program by achieving peak hour reductions that are sustained through the entire gas day (*i.e.*, no snapback).

B. Customer Acquisition

In the Multifamily Track, the Company is seeking to work with a customer with two similarly sized buildings (approximately 100 units each) in Brooklyn, Queens, or Staten Island. Only one building would receive the equipment, with the other evaluated for comparison purposes.

The Company is currently in discussions with NYCHA to serve as the Multifamily Track customer for the Pilot. NYCHA is well suited for this role, as the Company is seeking a customer whose units are occupied by low-to-moderate income tenants, or who is otherwise located in a disadvantaged community – such customers are the most likely to have high barriers to full adoption of electrification. The Company also prefers a multifamily customer whose electric costs are included in rents, meaning tenants are less likely to directly bear the increased electric costs associated with the ASHPs.

For the Single-Family Track, the Company will leverage a collaboration with Con Edison's Clean Heat Program to identify eligible residential customers who: have installed ASHPs, did not decommission gas equipment, and continue to use gas during peak winter conditions. Additional parameters will be applied to the pool of potential customers to ensure that the ASHP can offset at least 25 percent of the heating need during peak winter conditions.

The Company anticipates enrolling customers over the first 2 years of the Pilot, with 40 residential customers enrolled in the first year, and another 30 residential customers enrolled in the second year. Customers will be located within the Company's New York City gas service territory in the boroughs of Brooklyn, Queens or Staten Island. The Company will send e-mail offers to a down selected list of eligible customers with a dedicated sign-up page for participation.

C. Customer Incentives and Program Design

In addition to the installation of enabling technology, the Company plans to offer participating customers incentives for their participation and performance as part of the Company's existing firm DR programs (*i.e.*, Load Shifting, Load Shedding, and BYOT). In the Multifamily Track, the participating customer will enroll in one of the Company's firm gas DR programs. Based on the anticipated gas load reduction strategy, the Company anticipates the customer is most likely to enroll in the Load Shifting program. The participating customer will be required to comply with the same program rules and earn the same incentives as the other customers in the program.[10]

The customers participating in the Pilot may be asked to curtail gas consumption for more days than other program participants. These additional demonstration tests will be conducted to ensure that sufficient data is collected should mild winter conditions limit the number of actual gas DR events. Performance during these additional Pilot-only events would not count towards a customer's performance factor and resulting program incentives.

Unlike the Multifamily Track, the Single-Family Track does not readily have a program that Pilot participants can easily fit into. The most comparable program is the residential BYOT program, where customer Wi-Fi connected thermostats are remotely controlled by the Company in exchange for annual fixed incentives.

The Single-Family Track will utilize a similar program structure that offers customers an annual performance-based incentive of $250 that can be earned following each winter season of participation. The Company will include the incentive amounts in the incentive statement filing required under the P.S.C. No. 12 Tariff (Rule 64, Leaf 138.82).

D. Evaluation

[10] The Pilot participant will be subject to the rules in place for the applicable winter, which may change based on updates to gas DR program design.

To aid in evaluation, the Pilot will collect customer data including, but not limited to, account-level hourly gas consumption, account-level electricity consumption, equipment-level power consumption, ASHP on/off states, ASHP setpoints and indoor temperatures.

The Company will perform multiple evaluations under the Pilot. First and foremost, the Company will perform an analysis of peak day and peak hour gas load reductions enabled by the curtailment strategy implemented during gas DR events. The Company will employ its established gas DR baseline method[11] to evaluate impacts, using data from control groups to refine those impact estimates. Since the Pilot will use alternate heating sources in lieu of natural gas, the evaluation will also include an analysis of the increases in electricity consumption during events.

The Company will also assess customer comfort in areas heated by ASHA through participant surveys. The surveys will explore both the pre- and post-event impacts on tenant comfort in the Multifamily Track, as well as assessing the impacts to customer comfort during DR events in both tracks.

Lastly, the Company will take a larger view of the annual changes in energy consumption and costs for the Multifamily Track customer. This will include calculating the reduction in annual gas consumption (dths), the heating and non-heating increases in electricity consumption (kWh), impacts to monthly kW demand charges and CO2e emissions reductions. The Company proposes to report on the progress of the Pilot as part of its annual gas DR reporting requirements each June. Specific to this Pilot, the report will include a lookback on progress from the preceding year, plans for the coming year, evaluated energy impacts, lessons learned, as well as benefits and costs.

IV. Budget and Cost Recovery

The data derived from the Pilot are critical to the effective implementation of strategies that will achieve the emissions reduction goals and will facilitate a more empirically tailored implementation of programs that further the goals of the CLCPA. For this reason, the Company believes the cost of the Pilot is a recoverable expense.

The Pilot is expected to span 5 fiscal years, with 3 operational winters beginning with the Winter 2023- 2024. The Company further intends to bookend the effort with a pre- and post-Pilot evaluation period. As stated above, the Company has received a federal cost-sharing grant from the DOE, which covers approximately $950,188 of the 5-year costs.

As detailed in its award from the DOE, the total 5-year cost is estimated to be $1,987,459. Table 3 details the proposed allocation of the Pilot costs – the Company is seeking deferred recovery of $906,772.

Elements of the Pilot, specifically anticipated participation of the Multifamily Track customer in the existing Load Shifting firm gas DR program, will overlap with existing authorized program

[11] Currently the Gas DR programs use a ‘5 of 10’ rolling baseline, adjusted for weather, to evaluate customer reductions during events.

recovery. Costs for the Multifamily Track customer's hourly metering are already included in base rates, and any incentives earned through the Load Shifting program will be recovered via the Demand Response Operations and Maintenance ("DROM") surcharge. The amounts are detailed in Table 3 as well. The Company proposes that the $906,772 in Pilot expenses be held in a deferral account for future recovery.

Table 3: 5-Year Pilot Costs

Category	**Description**	**Cost**
Pilot Cost	Total cost of the Pilot.	$1,987,459
DOE Award Funding	Federal funding that offsets ~48 percent of total project cost.	($950,188)
Estimated Multifamily Track Customer Load Shifting Gas DR Incentive	Potential incentives earned by the Multifamily Track customer enrolled in the Company's existing Load Shifting program. Load Shifting program incentives costs are currently recovered through the Company's DROM.	($127,500)
Multifamily Track Customer Gas DR Metering Costs	Metering costs associated with the Multifamily Track customer enrolling in the Company's existing Load Shifting program. Metering costs associated with the Load Shifting program are currently recovered through base rates.	($3,000)
Proposed Deferral Amount	**Remaining Pilot Costs**	**$906,772**

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION
NOTICE OF PROPOSED RULEMAKING

Pursuant to the provisions of the State Administrative Procedure Act, notice is hereby given of the following proposed rulemaking:

1. **Proposed Action:** The Public Service Commission is considering a petition filed by The Brooklyn Union Gas Company d/b/a National Grid NY ("Company" or "National Grid) to defer costs associated with a gas demand response pilot program.

2. **Statutory Authority:** Public Service Law Sections 65 and 66.

3. **Subject of the Proposed Rule:** Deferral of Costs associated with Gas Demand Response Pilot Program.

4. **Purpose of Proposed Rule:** To further the goals of the Climate Leadership and Community Protection Act by facilitating empirically tailored demand response technologies.

5. **Substance of the Proposed Rule:** The Commission is considering a request filed by National Grid on April 13, 2023, to approve the deferral of costs associated with a Gas Demand Response Pilot Program.

6. **Text of proposed rule and required statements and analyses may be obtained by filing a Document Request Form (F-96) located on the Commission's website http://www.dps.state.ny.us/f96dir.htm. For questions, contact:** Central Operations, Public Service Commission, Bldg. 3, Empire State Plaza, Albany, NY 12223-1350, (518) 474-6530.

7. **Data, views, or arguments may be submitted to:** Michelle L. Phillips, Secretary, Public Service Commission, Bldg. 3, Empire State Plaza, Albany, NY 12223-1350, (518) 474-6530, email: secretary@dps.ny.gov.

8. **Public comment will be received until:** 60 days after publication of this notice.

9. **Regulatory Impact Statement, Regulatory Flexibility Analysis for Small Business and Rural Area Flexibility Analysis:** Statements and analyses are not submitted with this notice because the rule is within the definition contained in section 102(2)(a)(ii) of the State Administrative Procedure Act.

Roni F. Epstein
Senior Counsel I
National Grid
25 Hub Drive
Melville NY 11747
(516) 418-9135
roni.epstein@nationalgrid.com