

Customer Connections

Type: ☐ Project ☒ Program		Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220001571, 5220000257, 5220000259, 5220000260		Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☒ Customer Connections ☐ Mandated ☐ Reliability ☐ Non-Infrastructure			
Annual Program: ☒		Estimated Start Date:	Estimated In-Service Date:
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☒ On-Going (Programs Only)			
Sponsor: Klingler, Gerard L.		Business Contact: Poke, Tanasia	

Work Description:

KEDNY's Customer Connections program involves the installation of new main, services and meters that the Company is required to install pursuant to the regulations and its tariff to serve customer gas requests in the Company's service territory. This program also includes an analysis of electric heat alternatives for projects that meet certain criteria, and information on programs offered by electric utilities to educate customers about all heating options available.

The projected number of services and main that will be installed in connection with this program in the Rate Year and Data Years are provided below.

	FY 2028
Services	1,255
Main Footage	6,297

Justification Summary:

The growth forecast considers the implications of (a) changes in the various market segments; (b) large project inventories; (c) rate/regulatory changes; and (d) system constraint; including NYC Local Law 154, AEBA/CLCPA, and evolving entitlement policies. In preparing this proposal, the Company incorporated the repeal of the 100-foot rule allowances for residential customers (Section 31 of the Public Service Law modified by Chapter 709 of the Laws of 2025), anticipated to take effect in January 2027. The Company did not incorporate the All Electric Building Act, however, given the ongoing litigation and uncertainty surrounding the effective date. The forecast also considers factors that drive growth projections and the associated capital expenditures:

- Fuel Pricing – oil versus natural gas
- Inventory levels and turnover ratios
- NYC legislation restricting use of natural gas
- Potential changes to entitlements
- Saturation levels
- Designs and resourcing that supports the delivery of capital at efficient pricing.
- Economic Conditions / Building Starts
- Gas system constraints
- NYC permitting requirements that increase permitting/restoration costs.

Conversions. The growth forecast shows steady demand in the multifamily and commercial conversion markets. Residential conversions are forecasted to decrease due to high saturation. There is also the possibility that activity may be impacted during this rate period if changes are made to the existing entitlement structure.

New Construction. The most significant factor that will impact this market is the New York City law banning natural gas, with certain exceptions, in buildings 7 stories or more where applications for the approval of construction documents is submitted on or before July 1, 2027, and buildings less than 7 stories where applications for the approval of construction is submitted on or before December 31, 2023. There is also the possibility that activity may be impacted during this rate period if changes are made to the existing entitlement structure.

Electrification initiatives. National Grid is committed to identifying innovative, clean energy solutions for our customers. We continue to provide customers with helpful resources to learn more about the electrification options available via the local electric utilities, Con Edison and PSEG Long Island. All customers who inquire about connecting to the Company's natural gas network are provided with the appropriate electric utilities' website, call center phone number, and email address and with a frequently asked questions document. Reporting on the number of such customers referred to the electric utilities can be found in the Capacity Demand Metric Reports that the Company files on a quarterly basis with the Public Service Commission.

In addition, the Company is exploring how utility-owned thermal energy networks could serve as solution for customers. The Utility Thermal Energy Network and Jobs Act, signed into law on July 5, 2022, modifies the existing utility definition to allow for ownership of such systems. The Company is currently in the process of developing and proposing pilots under the terms of the legislation, which may reveal additional information about the sort of customers and/or situations best served by thermal energy networks. At this time, it is not possible to state a specific number of customers that will be served by a geothermal offering in the coming years, but the Company is committed to developing this option and will continue to provide updated forecasts as pilots, including those run by other utilities in NY, progress.

Customer Benefits:

The installation of new facilities allows the Company to serve new or expanded customer service needs, upon request, consistent with applicable regulatory obligations.

Funding Detail

Cost Breakdown:

	FY28
Customer Connections - Install Main – CAPEX	\$ 8,000,951
Customer Connections - Install Services - CAPEX	\$ 44,090,672
Customer Connections - Customer Contributions – CAPEX	\$ (28,927,957)

	Customer Connections - Install Meter/Regulator	\$ 3,002,888	
	OPEX		
	TOTAL	\$ 26,166,553	

Supplemental Information

Alternatives

Alternative 1: Do not connect new customers. The Company currently has an obligation to serve customers and cannot deny new applicants at this time.

Alternative 2: Non-Pipes Alternatives (“NPAs”) evaluated at the project level where applicable.

Risk of No Action: The Company would be out of compliance with tariff and New York State regulations.

NPA Suitability Screening

- Is the project construction expected to commence and be completed within 24 months?
☒ Yes ☐ No
- For KEDNY, is the cost of the project less than \$750?
☐ Yes ☒ No
- Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: Please see answers above. Additionally, an NPA analysis will be conducted on individual projects that consist of 500’ of main and greater where five or more customers are served and where the customers express interest.

CLCPA/GHG Analysis

- Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess

2. **If so, explain how was the routing determined and how will the project impact the surrounding area?** The Company has an obligation to serve customers and will install services across the territory, including DACs.
3. **Will the project contribute to GHG emission reductions on the Company's gas network?** ☐ Yes ☒ No
4. **Please explain the project's GHG impact.** Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☒ Diesel combustion from generators
- ☒ Dust from demolition of sidewalk / roads
- ☒ Noise pollution from trucks and equipment
- ☒ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☐ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:

Benefits

certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law]." Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

Reliability Benefits

- ☒ Supports growth forecast
- ☐ Addresses supply/capacity constraint or supply diversity needs
- ☐ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☒ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$ ____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☐ Enhances employee safety
- ☐ Increases automation (reduces human error)
- ☐ Enhances Public Safety
- ☐ Reduces Damages potential (*i.e., in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☐ Emissions Reduction
- ☒ Reduces use of Alt. Fuel
- ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)
- ☐ Other: _____

Gas System Reinforcement

Type: ☐ Project ☒ Program	Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220001155	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☒ Customer Connections ☐ Mandated ☐ Reliability ☐ Non-Infrastructure		
Annual Program: ☒	Estimated Start Date:	Estimated In-Service Date:
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☒ On-Going (Programs Only)		
Sponsor: Metzдорff, Peter	Business Contact: Santangelo, Amanda E.	

Work Description:

The Gas System Reinforcement Program consists of capital reinforcement projects required to maintain pressure above system minimum on the gas network during periods of peak demand, thereby maintaining continuous service to all gas customers within the Company's service territory.

Justification Summary:

Federal (49 CFR 192.623) and New York State (16 NYCRR 255.623) regulations require the Company to maintain minimum pressures on the gas system necessary to maintain reliable service to all firm customers. The Gas System Reinforcement Program identifies projects required to maintain service under peak day, peak hour conditions. KEDNY's gas system is designed for a peak day with an average temperature equal to 0°F (65HDD – Heating Degree Days), with five percent of the daily sendout as a peak hour. The peak demand is based on the same forecast utilized to develop the gas supply portfolio, and the Gas System Reinforcement program is a critical component for enabling delivery of that gas supply to firm customers. In some cases, even small to moderate increases in the overall forecast can result in significant reinforcements due to certain regions experiencing higher increases in forecasted demand while other regions may be experiencing lower or decreasing system demands.

Examples of distribution system reinforcement projects include, but are not limited to, the following:

- Replacing existing undersized mains with larger diameter mains. Leak-prone pipe is targeted whenever practical;
- Looping or connecting system endpoints by installing new main;
- System operating pressure upratings;
- Installing new district regulators as well as replacing and/or rebuilding existing undersized district regulators; and
- Transferring existing customers supplied from low-pressure mains to adjacent high-pressure mains (i.e., load shedding).

Customer Benefits:

Installing these reinforcements will ensure that service is maintained to all firm gas customers on the system. Without the reinforcement program, as many as 1,556 customers are at risk of experiencing pressures below minimum design pressures during the five-year heating season term and, therefore, at risk of losing service. The estimated cost to relight these customers is \$2.334M (approximately \$1,500 per customer based on previous experience). There would be incremental costs associated with customer relights should the work not be completed. A secondary benefit of the program is the elimination of leak-prone pipe wherever practicable. For example, the program represents a replacement rate of about 62 percent, approximately 3,334 feet (0.6 miles), of leak-prone pipe in the first year of the plan.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 10,293,589
OPEX	
TOTAL	\$ 10,293,589

Supplemental Information

Alternatives

Alternative 1: Do Nothing. This alternative is rejected because 1,556 customers are predicted to experience pressures below minimum design levels and be at risk of losing service if design conditions were to be experienced during the five-year heating season term under the current gas supply send-out forecast.

Alternative 2: Non-Pipes Alternative (“NPAs”) This alternative is rejected because it does not meet the suitability screening.

Risk of No Action: Without the project identified in the reinforcement program, customers are at risk of falling below minimum pressure and customer outages are possible if a design day occurs.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☒ Yes ☐ No
2. For KEDNY, is the cost of the project less than \$750?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☐ Yes ☒ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: This is a blanket program required for reinforcement support. Standard jobs within this Reinforcement Program are typically completed within 24 months.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area?
Some of the projects in this program may be in DAC regions. Project routing is determined based on distribution system need, constructability of below ground infrastructure, and cost. The impact on the surrounding area will be consistent with standard below ground utility infrastructure work, which is temporary in nature. The Company will minimize the construction impact on the community, where possible.
3. Will the project contribute to GHG emission reductions on the Company's gas network? ☒ Yes ☐ No
4. Please explain the project's GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission. impact.

Checklist of impacts:

- ☐ Vehicle emissions from truck rolls
- ☐ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☐ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☒ Other:

If other is checked, identify source: This program will involve the installation of new gas main to reinforce the system, which results in GHG emissions, but the program will also include the retirement of some leak prone pipe. This retirement leads to a net reduction in GHG emissions over the course of the rate case.

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☒ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (e.g., water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program: Synergi Modeling, 49 CFR 192.623, and 16 NYCRR 255.623

Benefits

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are "communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law]." Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

<u>Reliability Benefits</u> ☒ Supports growth forecast ☐ Addresses supply/capacity constraint or supply diversity needs ☐ Addresses storm/climate change resiliency <u>Other Customer Benefits:</u> ☒ Improves Customer Satisfaction ☐ Reflects efficiency savings of \$ ____ ☐ Reduction in Billing Errors and Re-Bills ☐ Supports implementation of Gas Business Enablement <u>Safety Benefits:</u> ☐ Enhances response time to Emergency Gas Leaks ☐ Enhances employee safety ☐ Increases automation (reduces human error) ☒ Enhances Public Safety ☐ Reduces Damages potential (<i>i.e., in the case of mapping system</i>) ☐ Addresses specific safety initiative: _____ <u>Societal Benefits/Externalities:</u> ☒ Emissions Reduction ☐ Reduces use of Alt. Fuel ☒ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks) ☐ Other: _____	
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Gas System Reinforcement - LTNY11751 – Forest Hills Gate (Kew Gardens Gate)



Type: ☒ Project ☐ Program		Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220100310		Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☒ Customer Connections ☐ Mandated ☐ Reliability ☐ Non-Infrastructure			
Annual Program: ☐	Estimated Start Date: April 2017		Estimated In-Service Date: December 2031
Status: ☐ Initiation/Planning ☒ In-Progress (Projects Only) ☐ On-Going (Programs Only)			
Sponsor: Metzдорff, Peter		Business Contact: Santangelo, Amanda	

Work Description:

The Forest Hills Gate Station project will install a new 350 psig to 15 psig regulator station in Forest Hills, Queens to maintain above minimum pressures on the gas network during periods of peak demand, thereby maintaining continuous service to all gas customers. The new regulator station will reduce dependency on deliveries from Con Edison through National Grid distribution regulator stations located in the second ward of Queens fed from Con Edison's transmission main. Property has been purchased to site the regulator station and heater on Metropolitan Ave near 70th Drive. This project assumes that equipment needed will include a heater, chromatograph, full telemetry, about 1,800 feet of 20" 350 psig ST main inlet pipe, and about 500 feet of 30" 15 psig ST outlet piping.

Justification Summary:

Federal (49 CFR 192.623) and New York State (16 NYCRR 255.623) regulations require the Company to maintain minimum pressures on the gas system necessary to maintain reliable service to all firm customers. KEDNY's gas system is designed for a peak day with an average temperature equal to 0°F (65HDD – Heating Degree Days), with five percent of the daily send-out as a peak hour. The peak demand is based on the same forecast utilized to develop the gas supply portfolio.

The Forest Hills Gate Station project is required to maintain service under peak day, peak hour conditions, and reduce dependence on transferring gas from Con Edison at National Grid's regulator stations in the second ward of Queens fed from Con Edison's transmission main. The installation of a new regulator station is the most cost-effective way to reinforce the area, provides the biggest benefit to the system, and is the most constructible. Additionally, this option also improves reliability through the installation of the new regulator station by providing a new source of gas in the area and allows for other stations in the area to be taken out of service for maintenance and/or contingencies to a lower temperature if needed.

Customer Benefits:

Installing this reinforcement project will ensure that service is maintained to all firm gas customers on the system.

Secondary benefits of the project include:

- Providing an additional source of gas in the second ward of Queens off National Grid's transmission infrastructure which reduces flows from existing National Grid regulator stations in the second ward of Queens fed from Con Edison's transmission mains.
- Reinforcing the Brooklyn/Queens high pressure system helps support replacement of low-pressure cast-iron mains with high pressure plastic.

Federal (49 CFR 192.623) and New York State (16 NYCRR 255.623) regulations require the Company to maintain minimum pressures on the gas system necessary to maintain reliable service to all firm customers. This project is part of the Gas System Reinforcement Program which consists of capital reinforcement projects required to maintain pressure above system

minimums on the gas network during periods of peak demand, thereby maintaining continuous service to all gas customers and complying with regulations.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 7,325,000
OPEX	
TOTAL	\$ 7,325,000

Supplemental Information

Alternatives

Alternative 1: Install new transmission to distribution regulator station. Install new Gate Station in Kew Gardens, off of NQ transmission main, on Metropolitan Ave near Park Lane South. Project assumes that equipment needed will include a heater, a chromatograph, full telemetry, about 400 feet of 20" 350 psig ST main inlet pipe, and about 500 feet of 30"15 psig ST outlet piping. This option was ultimately considered infeasible from a siting perspective.

Alternative 2: Non-pipe Alternative – Portable CNG Injection. Utilizing portable CNG injection was also considered and could temporarily improve system pressures and provide incremental localized supply. However, this option, based on a high-level constructability assessment, would likely be very challenging from a siting perspective, especially considering process safety concerns, and would only be a temporary solution without the sufficient capacity to meet the increase in demand projected in this area.

Alternative 3: Non-Pipes Alternative ("NPAs"). The Company has already explored this option by issuing an RFP Third-Party Solutions NPA to the market in December 2021. The Company received one proposal in response to that RFP, but it would not have satisfied the operational requirements that would have allowed the Companies to forgo the planned infrastructure investment described above; based on review of the proposal and discussion with DPS Staff, the Company did not make an award from that RFP. They continue to test the market for third-party solutions and, if they believe that the market has matured to the point that another RFP could result in viable bids, may issue one. The Company also continues to explore other means of increasing uptake of their energy efficiency and gas demand response offerings in this geographical area, but do not believe at this time that those would be viable alternatives to the project.

Alternative 4: Do Nothing. A decision to do nothing would ultimately lead to a failure to comply with the regulations defined by Federal and New York State codes as conditions would continue to decay resulting in customer outages. In addition, restrictions on sales activities would be required in constrained areas and the Company could find itself in violation of its tariff.

Risk of No Action: Failure to install this project could expose firm customers in the second ward of Queens to below minimum pressures and possibly customer outages. This could also lead to a failure to comply with the regulations defined by Federal and New York State codes. This could lead to overreliance on Con Edison's transmission main in the area and put the company in violation of the NY Facilities Agreement. Additionally, it could lead to less ability to replace low-pressure cast-iron mains in the area.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☒ Yes ☐ No
2. For KEDNY, is the cost of the project less than \$750k?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: See above; an NPA solution was previously investigated for this project and was unsuccessful.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☐ Yes ☒ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? N/A
3. Will the project contribute to GHG emission reductions on the Company’s gas network? ☐ Yes ☒ No
4. Please explain the project’s GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission. impact.

Checklist of impacts:

- ☐ Vehicle emissions from truck rolls
- ☐ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☐ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☒ Other:

If other is checked, identify source: This project will involve the installation of new gas main and regulation with a heater, which results in an increase in GHG emissions over the course of the rate case.

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].” Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☒ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program: Synergi Modeling

Benefits

Reliability Benefits

- ☒ Supports growth forecast
- ☒ Addresses supply/capacity constraint or supply diversity needs
- ☐ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☒ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☐ Enhances employee safety
- ☐ Increases automation (reduces human error)
- ☒ Enhances Public Safety
- ☐ Reduces Damages potential (*i.e., in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☐ Emissions Reduction
- ☐ Reduces use of Alt. Fuel
- ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)
- ☐ Other: _____

Gas System Reinforcement - Staten Island 15 psig System Retirement



Type: ☒ Project ☐ Program		Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220102177		Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☒ Customer Connections ☐ Mandated ☐ Reliability ☐ Non-Infrastructure			
Annual Program: ☐		Estimated Start Date: April 2027	Estimated In-Service Date: March 2028
Status: ☒ Initiation/Planning ☐ In-Progress (Projects Only) ☐ On-Going (Programs Only)			
Sponsor: Metzдорff, Peter		Business Contact: Santangelo, Amanda	

Work Description:

This project upgrades services on the single-feed, 15 psig system in Staten Island to the 60-psig system and retires the 15-psig gas system. This project involves installing 4.5 miles of new 2" or 4" 60 psig plastic main, transferring 480 customers to the 60-psig system, and retiring 5.9 miles of main. Of the 5.9 miles of main to be retired, approximately 1 mile is leak-prone cast iron. Once all customers are upgraded to 60 psig and the 15-psig system is retired, the Mariners Harbor 15 psig Gate Station can be retired as well, which was previously scheduled for replacement. This project is in the Mariners Harbor and Elm Park neighborhoods of Staten Island.

Justification Summary:

The purpose of this project is to improve gas system reliability in Staten Island. Currently the 15-psig system is a single-feed system, fed by Mariners Harbor 15- psig Gate Station. If the Mariners Harbor 15-psig Gate Station needs to be taken out of service, an interconnect valve connecting the 15 psig and 60 psig systems must be manually operated and monitored by I&R at all times. Retiring the 15-psig system and retiring Mariners Harbor 15 psig Gate Station Gate Station improves gas system reliability as the 60-psig system is more integrated and robust on Staten Island. Additionally, retiring Mariners Harbor 15 psig Gate Station would allow the Company to forgo station rebuild, thus saving associated construction costs as well as future operating and maintenance costs.

Customer Benefits:

The Staten Island 15 psig Retirement project ensures that service is maintained in the event of a failure at the Mariners Harbor 15-psig Gate Station. Reliability is improved by adding supply flexibility and integrating the 15-psig single-feed system with the 60-psig system. Without this program, greater numbers of customers are at risk of losing service in the event of a facility failure.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 23,388,985
OPEX	
TOTAL	\$ 23,388,985

Supplemental Information

Alternatives

Alternative 1: Do Nothing. The consequence of not completing this project would result in a failure to reduce service interruption risk and improve distribution system reliability in a proactive manner. This alternative would continue to expose customers to the risk of service loss in the event of a failure at Mariners Harbor 15 psig Gate Station.

Alternative 2: Non-Pipes Alternatives (“NPAs”)

Risk of No Action: Without this project, customers are at risk of losing service in the event of a failure at Mariners Harbor 15 psig Gate Station.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☒ Yes ☐ No
2. For KEDNY, is the cost of the project less than \$750k? For KEDLI, is the cost of the project less than \$500k?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☐ Yes ☒ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: See above NPA Suitability Screening criteria. This project is not applicable as it is expected to be completed within the next 24 months.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? Routing for this project is based on the existing routing of the 15 psig system in Staten Island. New 60 psig plastic main will be installed to replace the existing single-feed system. This project will improve gas system reliability in the area.
3. Will the project contribute to GHG emission reductions on the Company’s gas network? ☒ Yes ☐ No
4. Please explain the project’s GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission. impact.

Checklist of impacts:

- ☐ Vehicle emissions from truck rolls
- ☐ Diesel combustion emissions from construction equipment

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].” Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☐ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☒ Other:

If other is checked, identify source: This project will involve the installation of new gas main to retire the existing 15 psig system and upgrade customers to the 60 psig system, which results in GHG emissions. However, this project will also include the retirement of leak-prone cast iron, protected steel, and plastic main. This retirement leads to a net reduction in GHG emissions.

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☒ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☒ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:

Benefits
<u>Reliability Benefits</u> ☐ Supports growth forecast ☒ Addresses supply/capacity constraint or supply diversity needs ☐ Addresses storm/climate change resiliency <u>Other Customer Benefits:</u> ☐ Improves Customer Satisfaction ☒ Reflects efficiency savings of \$____ by avoiding Mariners Harbor 15 psig Gate Station rebuild and operations/maintenance of the station. ☐ Reduction in Billing Errors and Re-Bills ☐ Supports implementation of Gas Business Enablement <u>Safety Benefits:</u> ☐ Enhances response time to Emergency Gas Leaks ☐ Enhances employee safety ☒ Increases automation (reduces human error) ☒ Enhances Public Safety ☐ Reduces Damages potential (<i>i.e., in the case of mapping system</i>) ☐ Addresses specific safety initiative: _____ <u>Societal Benefits/Externalities:</u> ☒ Emissions Reduction ☐ Reduces use of Alt. Fuel

	☒ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks) ☐ Other: _____	

Corrosion



Type: ☐ Project ☒ Program	Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220000294	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☒ Mandated ☐ Reliability ☐ Non-Infrastructure		
Annual Program: ☒	Estimated Start Date:	Estimated In-Service Date:
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☒ On-Going (Programs Only)		
Sponsor: Striffler, Michael	Business Contact: Fong, Carmen	

Work Description:

This program funds required annual corrosion work on the Company's gas system. Corrosion can lead to failures in plant infrastructure and equipment which are usually costly to repair. Decisions regarding the future integrity of a structure or its components depend entirely upon an accurate assessment of the conditions affecting its corrosion and rate of deterioration. The Corrosion department performs field testing, monitoring, upgrades and repairs to existing corrosion control systems in accordance with Federal and State code requirements, specifically, Federal CFR Title 49 Transportation, Subpart I Pipeline Safety Part 192 and 16 NYCRR Part 255 Transmission and Distribution of Gas, and with industry standards. This includes periodic testing, inspection, monitoring and diagnostic troubleshooting of existing corrosion control system. The Corrosion department provides engineering standards as well as the design and development of new cathodic protection system and upgrades to existing cathodic protection systems.

Corrosion mitigation for buried piping requires two items:

1. Protective Coating / Barrier – can be installed and tested at the mill or in the field and provides a protective barrier from the elements and the naturally occurring corrosion process.
2. Installation of Cathodic Protection System and acceptance testing of buried piping which is typically performed during the installation of the piping or shortly thereafter.

In addition, there are two types of Cathodic Protection Systems

1. Galvanic Anode System - provide direct current (DC) for cathodic protection through the use of sacrificial anodes (typically 17 lbs. of magnesium) that corrode and are consumed to mitigate corrosion of the pipe.
2. Impressed Current Systems (Rectifiers) - provide cathodic protection through the use of an external power supply, converting AC to DC, while utilizing specialized anodes that support the higher current demands for larger piping systems.

All cathodic protection systems require the following:

- Proper protective coatings
- Isolation from other metallic structures
- Test boxes with anodes & lead wires
- Periodic inspection and testing
- Periodic upgrades (remediation measures) to provide for extended life of the asset

Justification Summary:

The work identified above is part of applicable corrosion control programs and mandated by the CFR and Commission regulations.

The work can be either routine expense work or capital depending on the activity being performed. Typically testing and monitoring are normal operating expenses to maintain the asset. Capital work consists of recoating of mains on bridges, installation of test stations with anodes, and installation of insulator joints on mains and services which substantially extends the life of the asset.

Customer Benefits:

Minimal customer impact is expected during the performance of these corrosion control programs and construction of these projects. Customers can benefit from the program in the following ways:

- Improved public safety due to reduced risk of gas incidents;
- Fewer unplanned service interruptions; and
- Fewer unplanned disruptions to traffic on roads

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 1,008,197
OPEX	
TOTAL	\$ 1,008,197

Supplemental Information

Alternatives

Alternative 1: Discontinue the corrosion program. This is not an option as it conflicts with both state & federal pipeline safety codes as previously noted.

Alternative 2: Non-Pipes Alternative – N/A

Risk of No Action: This is not an option as it conflicts with both state & federal pipeline safety codes as previously noted.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☐ Yes ☐ No
2. For KEDNY, is the cost of the project less than \$750k?
☐ Yes ☐ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☐ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company's NPA Screening and Suitability Criteria?

☐ Yes ☒ No

Please briefly explain the results: NPA analysis is not applicable because the proposal does not include installation or replacement of gas pipe.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? This program is dependent on existing asset location and may fall within a DAC.
3. Will the project contribute to GHG emission reductions on the Company's gas network? ☐ Yes ☒ No
4. Please explain the project's GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☐ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☐ Use dust suppression measures (e.g., water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program: N/A

Benefits

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are "communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law]."

Reliability Benefits

- ☐ Supports growth forecast
- ☐ Addresses supply/capacity constraint or supply diversity needs
- ☐ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☐ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$ ____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

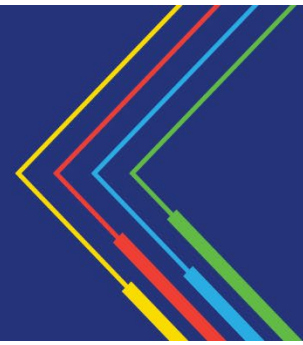
Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☐ Enhances employee safety
- ☐ Increases automation (reduces human error)
- ☒ Enhances Public Safety
- ☐ Reduces Damages potential (*i.e., in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☐ Emissions Reduction
- ☐ Reduces use of Alt. Fuel
- ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)
- ☐ Other: _____

CSC/Public Works - Non-Reimbursable



Type: ☐ Project ☒ Program		Category: ☐ Capital ☒ Both Capital & O&M	
Investment Code: 5220000414		Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☒ Mandated ☐ Reliability ☐ Non-Infrastructure			
Annual Program: ☒		Estimated Start Date:	Estimated In-Service Date:
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☒ On-Going (Programs Only)			
Sponsor: Vientos, Victor		Business Contact: Lahey, Christopher	

Work Description:

The City/State Construction Program for KEDNY (CSC) consists of work driven predominantly by the NYC Department of Design and Construction (NYCDDC) and NYC Department of Transportation (NYCDOT), as well as various private entities in the Boroughs of Queens, Brooklyn and Staten Island. The CSC program is directed at replacing infrastructure that will be compromised by third party construction activities.

Major categories of work include:

- Planned Municipal Projects
- When & Where Water Projects
- Emergency Sewer Projects
- Complex Curb Projects/Ped ramps
- Encroachments
- Green Infrastructure
- Support & Protection of Facilities

Justification Summary:

National Grid facilities are often in direct conflict with proposed municipal infrastructure or are required to be relocated based on regulatory and code requirements.

The CSC program was traditionally subdivided into three components: Reimbursable, Non-Reimbursable and Reimbursements. Projects are categorized into these buckets based on the project funding source. Capital projects initiated by the NYCDDC on behalf of the NYC Department of Environmental Protection (NYCDEP) are reimbursable and subject to the requirements of the NYC Gas Facility Cost Allocation Act (Gas Cost Sharing agreement). As per the NYC Gas Facility Cost Allocation Act (Gas Cost Sharing agreement) relocation costs incurred by National Grid on this project are eligible for reimbursement by the City of New York (CoNY), on an age of main basis (depreciated book value). Conversely, projects funded by the NYSDOT, NYCDOT and private entities are not eligible for reimbursement. The City of New York has decided not to continue the current Cost Sharing Agreement (CSA) for reimbursements following its expiration on 30 June 2025, but in-flight projects will continue to be covered as per the agreement. Require modification of CSC Capital Tracker and Deferral mechanism from a 90/10 sharing to a fully reconcilable (100%) tracker.

CSC deferral filings have been required and filed for each of the rate years under the existing JP 19-G-0309 & JP 19-G-0310 and are expected to continue throughout the proposed rate case. Under the existing CSC reconciliation mechanism, the Companies will defer for future recovery from or return to rate payers' 90 percent of the difference between the Companies'

actual capital spending for CSC, net of reimbursements from municipalities, and the forecasted CSC budgets for each Rate Year.

The Encroachment category ensures the protection and/or replacement of cast iron piping eight inches in diameter or less, which may become exposed and undermined or otherwise be subjected to undue stress because of its proximity to third-party excavations. Third Party Construction is defined as work performed by sewer, water, electric utility or any agency other than National Grid or its contractors.

The Support and Protection work supports utility facilities during the performance of City of New York sponsored contracts. Examples include the support and protection of utility facilities during trench crossings, installation and removal of catch basins and catch basin chute connection pipes, special care for excavation and backfilling, etc.

As part of New York City’s implementation of NYS Assembly Bill A10021B - Joint Bidding on contracts for Public Works projects, National Grid will be responsible for a portion of the “Shared Costs” of work performed by the City contractors. Examples of shared costs include: the maintenance of the construction site, field office, transportation, contract management and mobilization.

National Grid’s Government Liaisons work closely with NYC Department of Design and Construction Engineers and consultants to minimize any direct conflicts to the existing gas infrastructure located in the boroughs of Queens, Brooklyn and Staten Island. This work reduces Support and Protect (O&M) costs, maximizes remuneration, and reduces risk exposure to the Company.

Customer Benefits:

Minimal customer impact is expected during the construction of these projects; they are intended to ensure continuous service to customers.

Customers will benefit from the program in the following ways:

Synergistic opportunities are realized through National Grid CSC department’s coordination with other company Operational Program work including, but not limited to: Main & Service Replacement, Customer Driven Construction, Reliability, and Long-Term Planning. In addition, National Grid CSC group works closely with The City of New York to minimize impacts to local communities during project execution. This ensures businesses remain open and commerce continues.

National Grid also provides specific focus to ensure the protection and sustainability of The City of New York’s green infrastructure; such as bioswales, infiltration basins, permeable paving, etc., assuring the benefit to the community continues to be realized.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 373,102,054
OPEX	
TOTAL	\$ 373,102,054

Alternatives

Alternative 1: Do nothing. This is not an option as we are obligated by statute to remediate interference with municipal and state construction projects. Additionally, this would not provide for the safety of Company infrastructure and continued delivery of service in accordance with regulatory requirements. (Not Recommended)

Alternative 2: Non-Pipes Alternative (“NPAs”)

Risk of No Action: This is not an option as we are obligated by statute to remediate interference with municipal and state construction projects.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☒ Yes ☐ No
2. For KEDLI or NMPC, is the cost of the project less than \$500k? For KEDNY, is the cost of the project less than \$750k?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: Public Works City/State construction activities are reactive to municipal works projects scale & scheduling. Pursuant to Sections § 19-143 and § 24-521 of the New York City administrative code, utility companies are required to remove, shift or alter their structures so that the construction and/or repair work of the city will not be delayed.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a Disadvantaged Community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? Work is reactive to City of New York projects and any routing determinations are the result of associated infrastructure interference as part of the City of New York project. Pursuant to Sections § 19-143 and § 24-521 of the New York City administrative code, utility companies are required to remove, shift or alter their structures so that the construction and/or repair work of the city will not be delayed.
3. Will the project contribute to GHG emission reductions on the Company’s gas network? ☒ Yes ☐ No

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].”

4. **Please explain the project's GHG impact.** Please see Exhibit (GIOP-6) for the project's GHG emission impact.

* Source of Percentage of identified DACs: <https://climate.ny.gov/-/media/project/climate/files/LMI-dac-criteria-fact-sheet.pdf>

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☒ Diesel combustion from generators
- ☒ Dust from demolition of sidewalk / roads
- ☒ Noise pollution from trucks and equipment
- ☒ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (e.g., water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:

The program is supported by KEDNY's legal obligations under New York State code (including 16 NYCRR Part 255.755, Part 255.756, and Part 255.757), New York law (including NYS General Obligations Law Section 11-102 and Part 131 of NYSDOT Rules & Regulations, NYCRR Title 17 - Accommodation of Utilities within State Highway Right-of-Way) and the New York City Gas Facility Cost Allocation Act (Gas Cost Sharing agreement) which require replacement and/or support and protection of gas facilities during third-party construction.

Benefits

Reliability Benefits

- ☐ Supports growth forecast
- ☐ Addresses supply/capacity constraint or supply diversity needs
- ☐ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☒ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$ ____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☐ Enhances employee safety
- ☐ Increases automation (reduces human error)
- ☒ Enhances Public Safety
- ☐ Reduces Damages potential (*i.e., in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☒ Emissions Reduction
- ☐ Reduces use of Alt. Fuel
- ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)
- ☐ Other: _____

Large Diameter Pipe - CI Joint Encapsulation



Type: ☐ Project ☒ Program	Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220101849	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☒ Mandated ☐ Reliability ☐ Non-Infrastructure		
Annual Program: ☒	Estimated Start Date:	Estimated In-Service Date:
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☒ On-Going (Programs Only)		
Sponsor: Khan, Saadat	Business Contact: Peters, Kevin	

Work Description:

KEDNY is committed to delivering gas through 4,207 miles of distribution mains to our customers. The distribution infrastructure has been constructed over time using construction methods and materials available at the time – including Cast Iron (CI). CI pipe material has relative strengths and weaknesses. For example, CI pipes are highly resistant to corrosion in benign environments, but it does tend to break due to ground movements specifically small-diameter CI pipes. CI pipe equal to and greater than 16" have lower rate of Joint Leaks and breaks due to greater wall thickness. However, most of the CI mains were constructed with bell and spigot joints, and leaks have developed at those connections over time due to draying up of jute over time. Most leaks on 16" and larger cast iron pipes are due to joint failures The joint leaks are the only major issue with the 16" and larger CI pipeline serviceability. Encapsulation is a common repair method for this failure and will extend the useful life beyond the original expected life of the pipes. The process involves placing a sleeve around the joint and injecting a sealant to fill the voids.

Justification Summary:

The current leak repair rate of large-diameter cast iron distribution piping on the KEDNY system for CY25 is 1.58 leaks per mile (excluding damages), whereas the leak repair rate for leak prone pipe (LPP) is 1.4 leaks per mile. Leaks have increased significantly due to exceptionally cold weather during 2014 and early 2015 in the northeast US. The number of leak repairs due to CI joint leaks has also increased from 1,067 in 2022 to 1,353 in 2025. KEDNY has more than 100 miles of large diameter cast iron main. Encapsulation is considered a betterment of a large CI pipe which will extend the useful life beyond the original expected life of the pipe. PCLS (vender for National Grid's encapsulation kits) performed research by applying tensile strength, adhesive strength, tear strength, joint deflection, vibration, impact, axial pull, pressure, corrosion, and environmental and bacterial tests. Encapsulation has been shown to extend the life of the pipe for a minimum of 50 years on buried pipes under all known soil conditions.

Other benefits of CI Joint Encapsulation include:

- More cost-effective than replacing the large diameter pipe
- Improved public safety by reducing the risk for gas related incidents
- Improved system reliability and customer satisfaction
- Reduction in methane emissions

Customer Benefits:

This program will reduce customer cost impact of large diameter joint repairs and extend the life of the asset. In addition, this program will avoid full replacement of large diameter cast iron pipes which, due to the extensive excavation required in a congested urban environment, will minimize public disruptions.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 4,146,742
OPEX	
TOTAL	\$ 4,146,742

Supplemental Information**Alternatives**

Alternative 1: Do Nothing. Failing to repair large diameter CI pipe would result in increasing leak activity and increased risk to public safety. This may also result in violation of the Company's federally regulated DIMP and lead to regulatory penalties.

Alternative 2: Direct Replacement. The direct replacement alternative involves retiring and replacing the existing large diameter pipe. This alternative will require extensive costs for excavation, restoration, and labor and will cause major disruptions to the public. Therefore, it is not the preferred method.

Alternative 3: CISBOT/Lining. Other alternatives to remediate large diameter pipe are CISBOT, which utilizes a robot to internally seal the joints, and lining, which introduces a new protective layer to restore pipeline integrity. These alternatives have limitations as they can only be utilized on straight runs (no bends or tees)

Risk of No Action: Without cast iron joint encapsulation, there will be an increase in leak activity, an increase in greenhouse gas emissions and an increase in risk to public safety. This will accelerate system degradation and will increase the number of emergency repairs. This will result in regulatory compliance issues as well as violating the company's federally regulated DIMP.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☒ Yes ☐ No
2. For KEDNY, is the cost of the project less than \$750k? For KEDLI, is the cost of the project less than \$500k?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered "yes," the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company's NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: The Large Diameter Pipe – CI Joint Encapsulation program is not suitable for an NPA as it preserves the integrity of existing pipe that presently serve customers.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? DACs may be impacted as the locations are not selected prior to repair. The repairs are reactive based on the leaks discovered.
3. Will the project contribute to GHG emission reductions on the Company's gas network? ☒ Yes ☐ No
4. Please explain the project's GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☒ Diesel combustion from generators
- ☒ Dust from demolition of sidewalk / roads
- ☒ Noise pollution from trucks and equipment
- ☒ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☒ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☒ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:

Benefits

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are "communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law]." Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

Reliability Benefits

- ☐ Supports growth forecast
- ☐ Addresses supply/capacity constraint or supply diversity needs
- ☐ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☒ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☒ Enhances employee safety
- ☐ Increases automation (reduces human error)
- ☒ Enhances Public Safety
- ☐ Reduces Damages potential (*i.e., in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☒ Emissions Reduction
- ☐ Reduces use of Alt. Fuel
- ☒ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)
- ☐ Other: _____

Large Diameter Pipe Rehabilitation



Type: ☐ Project ☒ Program	Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220001532	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☒ Mandated ☐ Reliability ☐ Non-Infrastructure		
Annual Program: ☒	Estimated Start Date:	Estimated In-Service Date:
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☒ On-Going (Programs Only)		
Sponsor: Khan, Saadat	Business Contact: Peters, Kevin	

Work Description:

KEDNY utilizes several different types of main: cast iron, steel, and plastic. Cast iron mains were constructed with bell and spigot joints, and over time, leaks have begun to develop at these connections, whereas steel mains typically develop leaks due to corrosion.

While there are cost-effective methods of repairing and reducing the leaks on small diameter mains, leak repairs on large diameter pipes greater than 12" typically cost more due to the location and the depth of the excavations required to access the pipe joints. KEDNY proposes continuing a program that leverages new technology to cost-effectively address large-diameter pipe leaks.

Where feasible, KEDNY is proposing to recondition large diameter cast iron and unprotected steel mains with cured in place lining, which can extend the life of the main for more than 50 years. If it is impractical to utilize this technology, KEDNY will replace that section of large diameter pipe to maintain the integrity of the system, albeit the difficulty and cost to replace will be high. This proven technology has been successfully used by the Company for several years. In congested urban streets, where it is almost impossible to find another lane in the roadway to install a new large-diameter main, the lining is the most cost-effective way to recondition the existing mains, reduce costs, and minimize disruptions to the public. KEDNY proposes to line one mile(s) per year from FY2028 through FY2031. This program consists of pipe which resides outside of the proactive main replacement program.

Justification Summary:

The current leak repair rate of large-diameter cast iron distribution piping on the KEDNY system for CY25 is 1.58 leaks per mile (excluding damages), whereas the leak repair rate for leak prone pipe (LPP) is 1.4 leaks per mile. The impact of cold weather on the system, and resultant leak rates, suggests that an accelerated response to large diameter pipe is warranted. However, the current LPP replacement program only addresses mains up to 12 inches.

KEDNY's lining program is also supported by the Company's recently-developed Distribution Integrity Management Plan (DIMP), which specifies that the Company should: (i) know its distribution piping system, (ii) understand the threats to the system, and (iii) evaluate the risks and prepare replacement programs for its leak-prone mains and services inventory to help mitigate those risks.

KEDNY has more than 100 miles of large diameter cast iron and unprotected steel main. Installation of the lining is the most cost-effective way to recondition the existing mains, reduce costs and minimize disruptions to the public.

The following are the key benefits of the large diameter lining program:

- More cost-effective than replacing the large diameter pipe

- Improved public safety by reducing the risk for gas related incidents
- Improved system reliability and customer satisfaction
- Compliance with federal and state code requirements including new US Department of Transportation (USDOT) Distribution Integrity Management Program requirements (DIMP)
- Increased efficiency resulting from reduced commodity loss
- Ability to focus more attention on retiring small diameter main segments with higher risk profiles
- Reduction in methane emissions

Customer Benefits:

Minimal customer impact is expected during the construction of these projects. Customers can benefit from the program in the following ways:

- Improved public safety due to reduced risk of gas incidents
- Improved system reliability and customer satisfaction
- Fewer unplanned service interruptions
- Fewer unplanned disruptions to traffic and roadways

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 16,548,886
OPEX	
TOTAL	\$ 16,548,886

Supplemental Information

Alternatives

Alternative 1: Minimal reconditioning of pipe. This option would treat only the quantity of main required, enabling the Company to hold leak rates to present levels. This option will have negative financial consequences as it would require more traditional methods of repair on the large diameter mains which are typically very expensive.

Alternative 2: Do Nothing. No proactive replace/reconditioning method would result in increasing leak activity and increased risk to public safety. This may also result in violation of the Company's federally regulated DIMP and lead to regulatory penalties.

Alternative 3: Non-Pipes Alternatives (NPAs)

Risk of No Action: Should the LDPR Lining program not be used to remediate leaks on large diameter mains (greater than 12"), National Grid is risking that potential leaks on large diameter mains will happen with higher frequency, take more time and resources to remediate, and cost more to do so.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?

☒ Yes ☐ No

2. For KEDNY, is the cost of the project less than \$750?

☐ Yes ☒ No

3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?

☒ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: The Large Diameter Main Rehabilitation Program is not suitable for an NPA as it preserves the integrity of existing pipe that presently serve customers.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? DACs may be impacted as the locations are not selected prior to repair. The repairs are reactive based on the leaks discovered.
3. Will the project contribute to GHG emission reductions on the Company’s gas network? ☒ Yes ☐ No
4. Please explain the project’s GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☒ Diesel combustion from generators
- ☒ Dust from demolition of sidewalk / roads
- ☒ Noise pollution from trucks and equipment
- ☒ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].” Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:

Benefits

Reliability Benefits

- ☐ Supports growth forecast
- ☐ Addresses supply/capacity constraint or supply diversity needs
- ☐ Addresses storm/climate change resiliency

Other Customer Benefits:

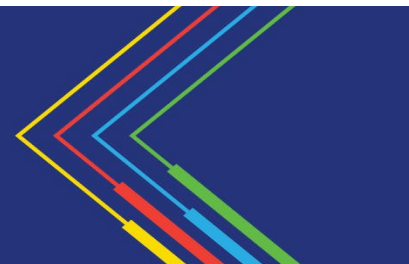
- ☒ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☒ Enhances employee safety
- ☐ Increases automation (reduces human error)
- ☒ Enhances Public Safety
- ☐ Reduces Damages potential (*i.e., in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☒ Emissions Reduction
- ☐ Reduces use of Alt. Fuel
- ☒ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)
- ☐ Other: _____



Large Diameter Pipe Rehabilitation - CISBOT

Type: ☐ Project ☒ Program		Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220000293		Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☒ Mandated ☐ Reliability ☐ Non-Infrastructure			
Annual Program: ☒		Estimated Start Date:	Estimated In-Service Date:
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☒ On-Going (Programs Only)			
Sponsor: Khan, Saadat		Business Contact: Peters, Kevin	

Work Description:

KEDNY utilizes several different types of main: cast iron, steel, and, more recently, plastic. Cast iron mains were constructed with bell and spigot joints, and over time, leaks have begun to develop at these connections, whereas steel mains typically develop leaks due to corrosion.

While there are cost-effective methods of repairing and reducing the leaks on small diameter mains, leak repairs on large diameter pipes 12 inch and larger typically cost more due to the location and the depth of the excavations required to access the pipe joints. KEDNY proposes continuing a program that leverages new technology to cost-effectively address large-diameter cast iron joint leaks.

The program uses a robotic internal sealing method known as CISBOT (Cast Iron Sealing Robot) for cast iron mains 16 to 42 inches. Unlike other methods of joint repair, CISBOT allows KEDNY to seal more than 80 joints from one excavation without shutting down the main. KEDNY is proposing to use CISBOT to address approximately one and half miles of large-diameter cast iron per year beginning in FY2028.

Justification Summary:

The current leak repair rate of large-diameter cast iron distribution piping on the KEDNY system for CY25 is 1.58 leaks per mile (excluding damages), whereas the leak repair rate for leak prone pipe (LPP) is 1.4 leaks per mile. Leaks have increased significantly due to exceptionally cold weather in the northeast US in 2014 and early 2015. The impact of cold weather on the system, and resultant leak rates, suggests that an accelerated response to large-diameter pipe is warranted. However, the current LPP replacement program only addresses mains up to 12 inches.

This response to leak prone large diameter pipe is also supported by the Company's recently developed Distribution Integrity Management Plan (DIMP), which specifies that the Company should: (i) know its distribution piping system, (ii) understand the threats to the system, and (iii) evaluate the risks and prepare replacement programs for its leak prone mains and services inventory to help mitigate those risks.

KEDNY has more than 100 miles of large-diameter cast iron. Most of the leaks on these mains are due to joint failures that CISBOT can address. CISBOT is the most cost-effective way to proactively seal the existing Cast Iron mains, reduce costs and minimize disruptions to the public.

Following are the key benefits of CISBOT:

- More cost-effective than replacing the large diameter pipe
- Improved public safety by reducing the risk for gas related incidents
- Improved system reliability and customer satisfaction

- Compliance with federal and state code requirements including new US Department of Transportation (USDOT) Distribution Integrity Management Program requirements (DIMP)
- Increased efficiency resulting from reduced commodity loss
- Ability to focus more resources on retiring small diameter main segments with higher risk profiles
- Reduction in Methane emission

Customer Benefits:

Minimal customer impact is expected during the construction of these projects. Customers can benefit from the program in the following ways:

- Improved public safety due to reduced risk of gas incidents;
- Fewer unplanned service interruptions; and
- Fewer unplanned disruptions to traffic and roadways.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 5,702,002
OPEX	
TOTAL	\$ 5,702,002

Supplemental Information

Alternatives

Alternative 1: Minimal reconditioning of pipe and cast-iron joint sealing. This option would treat only the quantity of main required, enabling the company to hold leak rates to present levels. This option will have negative financial consequences as it would require the more traditional OPEX repair methods to be used on the large diameter mains which are typically very expensive.

Alternative 2: Do Nothing. No proactive repair method would result in increased leak activity and increased risk to public safety. This will also result in a negative financial incentive and loss of credibility with regulators and put the Company in violation of its federally regulated DIMP

Alternative 3: Non-Pipes Alternatives (“NPAs”)

Risk of No Action: If the CISBOT program is not used to mitigate cast iron joint leaks, National Grid faces a higher likelihood of leaks occurring more frequently, requiring additional time and resources to remediate, and ultimately increasing overall costs.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?

☐ Yes ☒ No

2. For KEDNY, is the cost of the project less than \$750k?

☐ Yes ☒ No

3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?

☒ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: NPA analysis is not applicable because the proposal does not include installation or replacement of gas pipe.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area?
The CISBOT program projects are determined by addressing existing leaks on the system to leaks, which could be within DACs. It will provide increased reliability for the surrounding area of each project.
3. Will the project contribute to GHG emission reductions on the Company’s gas network? ☒ Yes ☐ No
4. Please explain the project’s GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☒ Diesel combustion from generators
- ☒ Dust from demolition of sidewalk / roads
- ☒ Noise pollution from trucks and equipment
- ☒ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☐ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].” Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:

Benefits

Reliability Benefits

- ☐ Supports growth forecast
- ☐ Addresses supply/capacity constraint or supply diversity needs
- ☐ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☒ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☒ Enhances employee safety
- ☐ Increases automation (reduces human error)
- ☒ Enhances Public Safety
- ☐ Reduces Damages potential (*i.e., in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☒ Emissions Reduction
- ☐ Reduces use of Alt. Fuel
- ☒ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)
- ☐ Other: _____

Main Replacement - Low Pressure Pocket Elimination



Type: ☐ Project ☒ Program	Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220102178	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☐ Mandated ☒ Reliability ☐ Non-Infrastructure		
Annual Program: ☒	Estimated Start Date:	Estimated In-Service Date:
Status: ☒ Initiation/Planning ☐ In-Progress (Projects Only) ☐ On-Going (Programs Only)		
Sponsor: Khan, Saadat	Business Contact: Peters, Kevin	

Work Description:

The Low Pressure (LP) System Elimination Program is a multi-year initiative to retire aging low-pressure mains and associated services across the KEDNY territory and convert customers to high-pressure (HP) systems. In FY2028 the program will install approximately 1.36 miles of new plastic mains.

This program addresses critical reliability concerns by removing infrastructure that is more susceptible to leaks and pressure fluctuations. It ensures compliance with federal and state regulations, supports long-term system integrity, and reduces methane emissions.

Justification Summary:

The purpose of this program is to increase the safety of customers on the Company's distribution system. Customer premises within a traditional low pressure (LP) system are protected from over pressurization by district regulator stations. Unlike in a high pressure (HP) system, there typically are not regulators or excess flow valves at each customer premise.

The Merrimac Valley Incident in Massachusetts in September 2018 showed what can happen when problems at a district regulator station led to over pressuring an entire LP system.

This program will transfer all customers on the selected LP systems to a nearby HP system by installing new distribution main and services. The new HP services will be installed to current standards with excess flow valves and regulators at each customer's premises.

The Low-Pressure System Elimination program will initially target systems that meet the following criteria:

- At least one Regulator Station within the LP system has been identified for replacement or refurbishment.
 - Replacement of these systems under this program will allow for funds to be spent improving regulator station safety elsewhere within the system.
- Main inventory contains low amounts of leak prone pipe (LPP).

Customer Benefits:

- Enhanced Safety: Reduces risk of gas leaks and associated hazards
- Improved Reliability: Eliminates isolated LP networks, reducing outage potential
- Better Service Quality: Customers benefit from stable pressure and fewer emergency interruptions
- Environmental Benefits: Lower methane emissions contribute to state climate goals

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 4,236,412
OPEX	
TOTAL	\$ 4,236,412

Supplemental Information

Alternatives

Alternative 1: Complete Work Under Existing Programs. This option would limit the potential scope of work due to available resources. Also, this would require the current low pressure regulator stations to be rebuilt at an average cost of \$2.186M-\$3.119M

Alternative 2: No Replacement: This option does not allow the company to begin to systematically eliminate the safety concerns associated with LP systems that have been brought to light by the September 2018 Merrimac Valley incident.

Risk of No Action: Failure to eliminate low-pressure systems will lead to a significant increase in leak frequency and severity, creating elevated risks to public safety. Inaction would result in non-compliance with the Company's federally mandated Distribution Integrity Management Program (DIMP) and PSC reliability requirements, exposing the Company to enforcement actions and penalties. Additionally, the continued operation of aging infrastructure would drive up maintenance and emergency repair costs, while contributing to higher methane emissions that conflict with state climate goals and could trigger environmental penalties. These factors, combined with the growing likelihood of service interruptions, would negatively impact customer satisfaction and undermine system reliability.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☐ Yes ☒ No
2. For KEDNY, is the cost of the project less than \$750k? For KEDLI, is the cost of the project less than \$500k?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered "yes," the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company's NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: This program is not suitable for an NPA as it affects the critical reliability of the gas system and mitigates integrity concerns. No NPA, or combination of NPAs, would remove the need for this project at this time.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? This program consists of a portfolio of projects which are selected based on the risk assessment of low-pressure regulator stations that are to be retired. A project's location inside or outside of DAC does not impact the risk assessment.
3. Will the project contribute to GHG emission reductions on the Company's gas network? ☒ Yes ☐ No
4. Please explain the project's GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☒ Diesel combustion from generators
- ☒ Dust from demolition of sidewalk / roads
- ☒ Noise pollution from trucks and equipment
- ☒ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☐ Use dust suppression measures (e.g., water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:

Benefits

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are "communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law]." Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

Reliability Benefits

- ☐ Supports growth forecast
- ☒ Addresses supply/capacity constraint or supply diversity needs
- ☐ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☒ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☐ Enhances employee safety
- ☐ Increases automation (reduces human error)
- ☒ Enhances Public Safety
- ☐ Reduces Damages potential (*i.e., in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☒ Emissions Reduction
- ☐ Reduces use of Alt. Fuel
- ☒ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)
- ☐ Other: _____

Main Replacement – Proactive – Leak Prone Pipe

Type: ☐ Project ☒ Program		Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220000429		Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☒ Mandated ☐ Reliability ☐ Non-Infrastructure			
Annual Program: ☒		Estimated Start Date:	Estimated In-Service Date:
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☒ On-Going (Programs Only)			
Sponsor: Khan, Saadat		Business Contact: Peters, Kevin	

Work Description:

Leak prone pipe (“LPP”) in the KEDNY service territory is defined as including all 12 inch and smaller pipe that is (i) unprotected (i.e., non-cathodically protected) steel pipe (whether bare or coated), (ii) cast and wrought iron pipe, (iii) unprotected steel/wrought iron mains and unprotected steel, vintage HDPE and copper services (associated services).

KEDNY’s existing rate plan (Case 23-G-0225) requires the Company to replace 152 miles of leak prone pipe over three years (i.e., CY2024, CY2025, and CY2026).

For the reasons described below, the Company is recommending the proactive base LPP replacement target shown below.

	CY 2027
Proactive LPP, miles	25
Total LPP Replacement*, miles	51.25

Note: * LPP replacement includes miles from City State Construction, Reinforcement and Reliability programs.

Justification Summary:

The December 31st, 2025, inventory of LPP of 12 inch and smaller pipe was 1,160 miles (317 miles of unprotected steel and 843 miles of cast iron/wrought iron), which represents approximately 27 percent of the distribution system in KEDNY’s territory. The current leak rate for all distribution piping on the KEDNY system is 0.4 leaks per mile excluding leaks due to damages, decreased from 0.76 leaks per mile in 2016. The current leak rate for LPP is 1.4 leaks per mile reduced from 1.88 leaks per mile in 2016.

The proposed replacement of LPP is also supported by the Company’s recently developed Distribution Integrity Management Plan (DIMP), which specifies that the Company: (i) know its distribution piping system, (ii) understand the threats to the system, and (iii) evaluate the risks and prepare replacement programs for its leak prone mains and services inventory to help mitigate those risks.

Leak predictive models show that main replacement levels below a certain threshold will cause leak rates to increase exponentially. Replacement levels below this amount will cause leaks to increase to a point where the Company may not be able to reasonably react to the quantity of new leaks in a timely manner. Furthermore, such increased leak activity will classify

larger quantities of mains as actively corroding which will require replacement just the same. The model shows that there is a practical limit to how many leaks a system can have and continues to operate safely.

LPP accounts for 27 percent of the KEDNY distribution main inventory yet accounts for 96 percent of main leak repairs (excluding damages). Accelerated replacement of this pipe will improve safety, reliability, and customer satisfaction. The key benefits of an accelerated replacement program for LPP include:

- Improved public safety by reducing the risk for gas related incidents
- Improved system reliability and customer satisfaction
- Compliance with federal and state code requirements, including new US Department of Transportation’s DIMP requirements
- Increased efficiency resulting from reduced commodity loss
- Reduction of methane emissions helping to reduce greenhouse gas emissions

Customer Benefits:

Customers can benefit from the program in the following ways:

- Improved public safety due to reduced risk of gas incidents
- Fewer unplanned service interruptions
- Fewer unplanned disruptions to traffic and roadways
- Fewer nuisance gas leaks and lowered greenhouse gas emissions

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 328,944,966
OPEX	
TOTAL	\$ 328,944,966

Supplemental Information

Alternatives

Alternative 1: Minimal Replacement. This option would replace only the quantity of main required to hold leak rates to present levels. This option increases safety risks and does not align with the Company’s or the Commission’s goals to continue to reduce leak rates.

Alternative 2: No Replacements. No main replacement will result in increasing leak activity and increased risk to public safety. This will result in regulatory compliance issues and will put the Company in violation of its federally regulated DIMP.

Risk of No Action: Failing to proactively replace leak prone pipe will result in an increase in leak activity, increasing greenhouse gas emissions and increasing risk to public safety. This will result in regulatory compliance issues as well as violating the company’s federally regulated DIMP. If leak prone pipe is not replaced, there will be an increase in emergency repairs needed.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☒ Yes ☐ No
2. For KEDNY, is the cost of the project less than \$750k?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: The Company is required to complete LPP replacement as part of its regulatory commitments. Five projects under the Main Replacement Proactive Program were identified as NPA candidates but none of them were able to proceed due to lack of customer interest. The Company will continue to identify candidates in the future, but the success will depend on customer consent.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? This program consists of a portfolio of projects which are selected based on ENG04030 which risk ranks based on leak history and corrosion to prioritize LPP replacement. A project’s location inside or outside of DAC does not impact the risk score.
3. Will the project contribute to GHG emission reductions on the Company’s gas network? ☒ Yes ☐ No
4. Please explain the project’s GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☒ Diesel combustion from generators
- ☒ Dust from demolition of sidewalk / roads
- ☒ Noise pollution from trucks and equipment
- ☒ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].” Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

Studies/References That Support the Program: Joint Proposal in Case 23-G-0225

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☒ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☒ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Benefits

Reliability Benefits

- ☒ Supports growth forecast
- ☐ Addresses supply/capacity constraint or supply diversity needs
- ☒ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☒ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$ ____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☐ Enhances employee safety
- ☐ Increases automation (reduces human error)
- ☒ Enhances Public Safety
- ☐ Reduces Damages potential (*i.e., in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☒ Emissions Reduction
- ☐ Reduces use of Alt. Fuel
- ☒ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)
- ☐ Other: _____

Main Replacement – Reactive - Maintenance



Type: ☐ Project ☒ Program		Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220000297		Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☒ Mandated ☐ Reliability ☐ Non-Infrastructure			
Annual Program: ☒		Estimated Start Date:	Estimated In-Service Date:
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☒ On-Going (Programs Only)			
Sponsor: Khan, Saadat		Business Contact: Peters, Kevin	

Work Description:

This program funds the replacement of sections of main segments and associated services identified during leak repairs that leak clamps could not repair. This program allows Field Operations to quickly make decisions on-site to replace actively deteriorated pipe segments. The program covers the Company's inventory of pipe that is (i) unprotected (i.e., non-cathodically protected) steel pipe (whether bare or coated), (ii) cast and wrought iron pipe, (iii) pre-1985 vintage Aldyl-A plastic pipe, and (iv) unprotected steel/wrought iron, copper and Aldyl-A plastic services ("associated services").

Justification Summary:

The goal of this program is to quickly replace the small sections of actively corroded mains and reduce the risk associated with leak prone pipe in KEDNY's distribution system. The replacement of LPP and associated services is also supported by the Company's Distribution Integrity Management Plan (DIMP), which specifies that the company implement measures to know its system; understand the threats to its distribution piping system; and evaluate risks and prepare replacement programs to help mitigate the risks associated with its leak prone mains and services inventory.

Customer Benefits:

This program minimizes customer impact by enabling Field Operations to determine when a section of main is beyond repair and must be replaced on site, minimizing the duration of field work and associated inconvenience to the public. The benefits of performing this work include improved community and government relations and reduced greenhouse gas emissions.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 16,297,339
OPEX	
TOTAL	\$ 16,297,339

Supplemental Information

Alternatives

Alternative 1: Reduce the Reactive Main Replacement Program. This alternative would result in increased O&M costs for leak response and repair, and delay the current plan for replacement of all leak prone pipe in the Company's territory. It would also increase the exposure to risk associated with leak prone pipes and may increase customer complaints.

Alternative 2: Eliminate the Reactive Main Replacement Program. This alternative would result in increased O&M costs for leak response and repair and delay the current plan for replacement of all leaks prone pipe in the Company's territory. It would also increase the exposure to risk associated with leak prone pipes and may increase customer complaints.

Risk of No Action: Without the reactive main replacement program, there will be the risk of an increase in leak activity, increasing greenhouse gas emissions and increasing risk to public safety. There will also be an increase in O&M costs for leak response and repair and delay the current plan for replacing all leak prone pipe in KEDNY.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☒ Yes ☐ No
2. For KEDNY, is the cost of the project less than \$750k?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered "yes," the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company's NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: NPAs are not suitable for this program as it is reactive to address repairs for on-system assets currently serving customers.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? The program supports make-safe activities wherever existing leaks are found, which could be within DACs.
3. Will the project contribute to GHG emission reductions on the Company's gas network? ☒ Yes ☐ No
4. Please explain the project's GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are "communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law]." Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

- ☒ Diesel combustion from generators
- ☒ Dust from demolition of sidewalk / roads
- ☒ Noise pollution from trucks and equipment
- ☒ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☐ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:

Benefits

Reliability Benefits

- ☐ Supports growth forecast
- ☐ Addresses supply/capacity constraint or supply diversity needs
- ☐ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☒ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☒ Enhances employee safety
- ☐ Increases automation (reduces human error)
- ☒ Enhances Public Safety
- ☐ Reduces Damages potential (*i.e.*, *in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☒ Emissions Reduction
- ☐ Reduces use of Alt. Fuel
- ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)
- ☐ Other: _____

Meter Work - ERT Replacements



Type: ☐ Project ☒ Program	Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220000547	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☒ Mandated ☐ Reliability ☐ Non-Infrastructure		
Annual Program: ☒	Estimated Start Date:	Estimated In-Service Date:
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☒ On-Going (Programs Only)		
Sponsor: Khan, Saadat	Business Contact: Tambra, Muhammad	

Work Description:

This program covers the material and installation costs associated with replacing ERT units that have reached the end of their battery life.

An analysis was conducted to determine the percentage of ERTs expected to reach end-of-life over the coming years, based on age and current battery failure rates. To prevent a growing number of failed ERTs, the optimal replacement schedule for the next ten years was calculated. Implementing this replacement strategy will significantly reduce the number of failed ERTs within the next five years, improving system reliability and minimizing operational disruptions.

	FY28
ERTs	50,000

Justification Summary:

When ERTs reach the end of their battery life, they stop transmitting meter readings, forcing the Company to either perform manual meter reads or issue estimated bills. This can lead to inaccurate billing and potential underbilling for customers. By proactively replacing aging ERT units, the Company will improve meter reading accuracy, reduce the number of estimated bills, and minimize costs associated with manual reads, billing errors, and customer complaints. Additionally, this initiative supports regulatory requirements for accurate meter readings and billing, ensuring compliance and enhancing customer satisfaction.

Customer Benefits:

This project ensures accurate and reliable billing for customers by maintaining the health and integrity of the Automatic Meter Reading (AMR) system. By replacing aging ERT units, the Company can deliver actual meter readings rather than estimates, supporting billing accuracy and regulatory compliance.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 9,967,572
OPEX	

	TOTAL	\$ 9,967,572	

Supplemental Information

Alternatives

Alternative 1: Do Nothing. If no action is taken, meter readings and customer billing will become increasingly inaccurate. By end FY28, the number of non-functional ERTs will rise significantly, resulting in a sharp increase in estimated bills. This will lead to billing errors, customer dissatisfaction, and potential compliance risks.

Alternative 2: Read meters manually. This approach will result in a more time-consuming process and require additional FTEs to manually read meters, ultimately increasing operational costs and placing a greater financial burden on ratepayers.

Alternative 3: Non-Pipes Alternatives (“NPAs”)

Risk of No Action: If no action is taken, stopped or damaged ERTs will remain in service and will not be replaced, directly impacting meter readings and customer billing accuracy. As ERT failures increase, meter data will become increasingly unreliable, leading to billing errors, delayed or estimated bills, and revenue leakage.

Inaccurate billing will drive higher customer complaints, increased call center volume, and reduced customer trust. Prolonged billing inaccuracies also expose the company to regulatory and compliance risks, including potential audit findings, penalties, or required customer bill adjustments and refunds.

Operationally, continued reliance on non-functioning ERTs will increase manual reads and field investigations, resulting in higher labor costs, reduced workforce efficiency, and increased safety exposure for field personnel. Over time, deferred replacements may compound asset degradation, increasing future capital requirements and limiting flexibility in managing system reliability.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☐ Yes ☐ No
2. For KEDNY, is the cost of the project less than \$750k?
☐ Yes ☐ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☐ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☐ Yes ☒ No

Please briefly explain the results: NPA analysis is not applicable because the proposal does not include installation or replacement of gas pipe.

CLCPA/GHG Analysis

1. **Is the project/program located in an area designated as a disadvantaged community (DAC)¹?** ☒ Yes ☐ No
2. **If so, explain how was the routing determined and how will the project impact the surrounding area?** Some of the projects in this program may be in DAC regions. Project routing is determined based on distribution system need, constructability of below ground infrastructure, and cost. The impact on the surrounding area will be consistent with standard utility infrastructure work, which is temporary in nature. The Company will minimize the construction impact on the community, where possible.
3. **Will the project contribute to GHG emission reductions on the Company's gas network?** ☐ Yes ☒ No
4. **Please explain the project's GHG impact.** Please see Exhibit _____ (GIOP-6) for the project's GHG emission. impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☐ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☐ Noise pollution from trucks and equipment
- ☒ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☐ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☐ Use dust suppression measures (e.g., water during saw cutting) to reduce fugitive emissions.
- ☒ N/A

Studies/References That Support the Program: N/A

Benefits

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are "communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law]." Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

Reliability Benefits ☐ Supports growth forecast ☐ Addresses supply/capacity constraint or supply diversity needs ☐ Addresses storm/climate change resiliency Other Customer Benefits: ☒ Improves Customer Satisfaction ☒ Reflects efficiency savings of \$ ____ ☒ Reduction in Billing Errors and Re-Bills ☐ Supports implementation of Gas Business Enablement Safety Benefits: ☐ Enhances response time to Emergency Gas Leaks ☐ Enhances employee safety ☒ Increases automation (reduces human error) ☐ Enhances Public Safety ☐ Reduces Damages potential (<i>i.e., in the case of mapping system</i>) ☐ Addresses specific safety initiative: _____ Societal Benefits/Externalities: ☐ Emissions Reduction ☐ Reduces use of Alt. Fuel ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks) ☐ Other: _____	
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Meter Work - M2M Devices

Type: ☐ Project ☒ Program	Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220101967	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☒ Mandated ☐ Reliability ☐ Non-Infrastructure ☐ Indirect ☐ FOH ☐ Operator Qualification Program		
Annual Program: ☒	Estimated Start Date:	Estimated In-Service Date:
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☒ On-Going (Programs Only)		
Sponsor: Smith, Thomas & Rodriguez, Philip	Business Contact: Herrity, Dawn & Rooney, John	

Work Description:

This paper supports Tariff “Non-Firm Demand Response Sales Service, SC 22” for the purchase and installation of machine-to-machine automated gas fuel-switching devices. This is a continuous program intended to replace legacy devices installed in 2015–2016, which are beginning to fail. Curtailment events are initiated when forecasted temperatures fall below 20 degrees.

Justification Summary:

The Non-Firm Demand Response program is a critical temperature curtailment program mandated by the PSC that remotely switches large commercial and industrial customers to an alternate fuel to help preserve gas supply for Firm customers.

Customer Benefits:

Commercial and industrial customers receive a discounted gas rate. During curtailment events, this supply is indirectly shifted to residential customers.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 1,172,571
OPEX	
TOTAL	\$ 1,172,571

Supplemental Information

Alternatives

Alternative 1: No alternatives. An RFP was completed in 2023, and the incumbent vendor was selected as the only functional, reliable, and cost-effective option.

Alternative 2: Non-Pipes Alternative (“NPAs”)

Risk of No Action: See Alternative 1.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☐ Yes ☐ No
2. For KEDNY, is the cost of the project less than \$750k? For KEDLI, is the cost of the project less than \$500k?
☐ Yes ☐ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☐ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☐ Yes ☒ No

Please briefly explain the results: This program does not install or replace main and is therefore not eligible for an NPA.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? The program supports the installation of machine to machine gas automated fuel switching devices, which could be within DACs depending on customer location.
3. Will the project contribute to GHG emission reductions on the Company’s gas network? ☐ Yes ☒ No
4. Please explain the project’s GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☐ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☐ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].” Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

- ☐ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☐ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.
- ☒ N/A

Studies/References That Support the Program:

Benefits
<u>Reliability Benefits</u> ☐ Supports growth forecast ☒ Addresses supply/capacity constraint or supply diversity needs ☒ Addresses storm/climate change resiliency <u>Other Customer Benefits:</u> ☐ Improves Customer Satisfaction ☐ Reflects efficiency savings of \$____ ☒ Reduction in Billing Errors and Re-Bills ☐ Supports implementation of Gas Business Enablement <u>Safety Benefits:</u> ☐ Enhances response time to Emergency Gas Leaks ☒ Enhances employee safety ☒ Increases automation (reduces human error) ☒ Enhances Public Safety ☐ Reduces Damages potential (<i>i.e., in the case of mapping system</i>) ☐ Addresses specific safety initiative: _____ <u>Societal Benefits/Externalities:</u> ☐ Emissions Reduction ☐ Reduces use of Alt. Fuel ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks) ☐ Other: _____

Meter Work - Meter Changes



Type: ☐ Project ☒ Program	Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220000307	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☒ Mandated ☐ Reliability ☐ Non-Infrastructure ☐ Indirect ☐ FOH ☐ Operator Qualification Program		
Annual Program: ☒	Estimated Start Date:	Estimated In-Service Date:
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☒ On-Going (Programs Only)		
Sponsor: Rodriguez, Philip	Business Contact: Rodriguez, Philip	

Work Description:

The KEDNY Gas Meter Change Blanket Program funds the changing of gas meters that are retired from service or abandoned to comply with the specific periodic testing requirements set forth by the New York State Public Service Commission. Additionally, the Company also completes requests to change meters. These meters are known as "change for cause meters".

Justification Summary:

The Commission's regulations require random sampling of gas meter performance on an annual basis. Meters are classified based on manufacturer/model, and the number of meters to be tested within each of these classifications is determined by the population size. The Commission's regulations also require remediation of meters that do not meet the required level of accuracy. The Company is typically allowed eight years to remove and replace a "failed" meter population. In addition, the regulations allow for the retirement of meter groupings. KEDNY currently has meters in each of the meter change program types (random, remediation, and retirement). The quantity of meters changed annually is based on the prior year's performance and remediation program status.

In addition to the mandated programs, the Company also completes requests to change meters based on performance. These meters are known as "change for cause" meters.

Customer Benefits:

Testing and replacing meters support accurate meter reading and customer billing.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 6,535,791
OPEX	
TOTAL	\$ 6,535,791

Supplemental Information

Alternatives

Alternative 1: Do not conduct the required meter changes. Not an option as this is a mandated program.

Alternative 2: Non-Pipes Alternatives (“NPAs”)

Risk of No Action: This is a mandated program, and failure to proceed would result in noncompliance with regulatory requirements.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☐ Yes ☐ No
2. For KEDNY, is the cost of the project less than \$750k?
☐ Yes ☐ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☐ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☐ Yes ☒ No

Pease briefly explain the results: This program does not install or replace main and is therefore not eligible for an NPA.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? Not a specific project or installation and program applies across the service territory.
3. Will the project contribute to GHG emission reductions on the Company’s gas network? ☐ Yes ☒ No
4. Please explain the project’s GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☐ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☐ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].” Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☐ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☐ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.
- ☒ N/A

Studies/References That Support the Program: General Code Part 226 Gas Meters & Accessories-Testing & Reporting, section 26.8 Domestic meters- in-test programs and 226.9 Large volume meters- in-test programs

Benefits

Reliability Benefits

- ☐ Supports growth forecast
- ☐ Addresses supply/capacity constraint or supply diversity needs
- ☐ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☒ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☐ Enhances employee safety
- ☐ Increases automation (reduces human error)
- ☐ Enhances Public Safety
- ☐ Reduces Damages potential (*i.e.*, *in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☐ Emissions Reduction
- ☐ Reduces use of Alt. Fuel
- ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)
- ☒ Other: Regulatory Compliance

Meter Work - Purchase Meters (New/Replacements)



Type: ☐ Project ☒ Program	Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220000306	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☒ Mandated ☐ Reliability ☐ Non-Infrastructure		
Annual Program: ☒	Estimated Start Date:	Estimated In-Service Date:
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☒ On-Going (Programs Only)		
Sponsor: Khan, Saadat	Business Contact: Tambra, Muhammad	

Work Description:

This program includes the procurement, testing and processing of gas meters, ERTs, and associated instrumentation to support the Mandated Meter Testing and Replacement Program, meet growth objectives, and maintain ongoing Customer Meter Services (CMS) operations. The projected meter/ERT quantities to sustain both programs for FY28 are as follows:

Meters	FY28
Total units	25,239

ERTs	FY28
Total units	20,781

National Grid plans to begin purchasing 30% of 250 and 400-class meters from the total purchasing quantity as smart meters, with the share increasing by 5% each fiscal year. As smart meter adoption grows, the need for separate ERT purchases will decrease, since ERT/Module functionality is integrated into the smart meter.

National Grid is required to statistically sample and remove meters annually for accuracy testing. The quantity of meters tested ensures a 95% statistical confidence level. Test results are entered into a program that performs calculations in accordance with an approved American National Standards Institute (ANSI) standard. The New York Public Service Commission establishes accuracy limits for residential and commercial meter types. Any meter groups that exceed these limits are designated for retirement and subsequently removed from service.

This program does not include the installation of meters (see Meter Change program).

Justification Summary:

The primary driver for meter and metering instrumentation purchases is compliance with state regulations governing meter accuracy and gas usage measurement for customer billing. Public Service Commission (PSC) requirements mandate a random sampling process and an associated remediation and retirement program for installed gas meters. Beyond the mandated meter replacement program, additional meters are required to meet customer connection targets and support CMS operational needs, including load changes, meter or service relocations, damage repairs, and stopped meters.

Customer Benefits:

- Ensure metering and billing accuracy to maintain compliance and customer trust.
- Reduce unplanned service interruptions through proactive maintenance and reliable equipment
- Maintain safety standards by ensuring all meters meet regulatory and operational requirements.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 19,972,435
OPEX	
TOTAL	\$ 19,972,435

Supplemental Information

Alternatives

Alternative 1: Partial Deferral of meter replacements. This option is not viable, as it would result in partial non-compliance with regulatory requirements for mandated meter change programs, negatively impact customer satisfaction, and prevent us from meeting fiscal year customer connection targets.

Alternative 2: Do Nothing – Leave as is. This option is not viable as it would result in a violation of regulatory requirements or result in our inability to support the replacement of failed units, mandated meter change programs, and fiscal year customer connections.

Alternative 3: Non-Pipes Alternatives (“NPAs”) - N/A

Risk of No Action: Taking no action would immediately halt our ability to support PSC-mandated meter change programs and the replacement of failed units, resulting in violations of regulatory requirements. Stopped or damaged meters would remain in service and would not be replaced, and new customers would be unable to receive meters—directly impacting system growth and delaying customer connections. Allowing failed units to remain in service also introduces safety risks, as malfunctioning or inaccurate meters may not properly register gas flow, potentially leading to hazardous conditions.

In addition, we would not be compliant with the PSC-mandated meter random sampling program, which would result in penalties, and our inability to perform required CMS meter change work would further compound regulatory and operational exposure. The lack of available field work would disrupt operational workflow, delay customer and reliability work, and potentially create conflict with the union due to significant reductions in available work.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?

☐ Yes

☐ No

2. For KEDNY, is the cost of the project less than \$750k?

☐ Yes ☐ No

3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?

☐ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☐ Yes ☒ No

If yes, please briefly explain the results: NPA analysis is not applicable because the proposal does not include installation or replacement of gas pipe.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☐ Yes ☒ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? N/A
3. Will the project contribute to GHG emission reductions on the Company’s gas network? ☐ Yes ☒ No
4. Please explain the project’s GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☐ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☐ Noise pollution from trucks and equipment
- ☒ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☐ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].” Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

- ☐ Use dust suppression measures (e.g., water during saw cutting) to reduce fugitive emissions.
- ☒ N/A

Studies/References That Support the Program: N/A

Benefits

Reliability Benefits

- ☒ Supports growth forecast
- ☐ Addresses supply/capacity constraint or supply diversity needs
- ☐ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☒ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$ ____
- ☒ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☒ Enhances employee safety
- ☐ Increases automation (reduces human error)
- ☒ Enhances Public Safety
- ☐ Reduces Damages potential (*i.e., in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☐ Emissions Reduction
- ☐ Reduces use of Alt. Fuel
- ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)
- ☐ Other: _____

Pipeline Integrity – IMP – Brooklyn Backbone/ Original Extension to Transco approx. 42,767



Type: ☒ Project ☐ Program		Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220101743		Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☒ Mandated ☐ Reliability ☐ Non-Infrastructure			
Annual Program: ☐		Estimated Start Date: 4/2024	Estimated In-Service Date: October 15, 2027
Status: ☐ Initiation/Planning ☒ In-Progress (Projects Only) ☐ On-Going (Programs Only)			
Sponsor: Kern, Mike		Business Contact: Conklin, Kevin	

Work Description:

This project will ILI enable the Brooklyn Backbone/Original Extension to Transco, it's total length approximately 42,767 feet, to accept a robotic ILI. Works scope includes installation of 2 stopple fittings, install 12 charging/communication points, and permanent vaults to facilitate inspections on a seven-year cycle.

KEDNY proposes an updated IMP that incorporates the elements of the current IMP along with proactive programs such as retrofitting pipelines for ILI including free swimming, robotic and tethered tools. The proposed IMP enhancements provide the greatest amount of risk reduction, thereby improving system safety and reliability. Additionally, it is anticipated that the program will better enable the Company to comply with future regulatory requirements.

Justification Summary:

Pursuant to the 2002 Act, the DOT promulgated rules on managing the integrity of transmission pipelines used by the gas and hazardous liquids industries under 49 CFR Part 192.901 – 192.951, which became effective on January 14, 2004. These regulations require pipeline operators to develop and implement an IMP for “covered” transmission pipelines, which are defined as certain pipelines in high consequence areas (HCA). The program required that the first cycle of pipeline assessments be completed no later than 2012. Reassessments are required to be completed at intervals not exceeding seven years thereafter from the last assessment. The assessments are comprised of external corrosion direct assessment (ECDA) and ILI. The results of each operator's program are summarized and reported to the DOT on an annual basis.

Pipeline safety laws and regulations constantly evolve, driving progressive changes in utility operations and asset management. San Bruno and several other high profile pipeline incidents have set in motion recommendations, proposed rulemaking, and the 2011 Act signed into law on January 3, 2012. In 2019 & 2022 PHMSA issued two rules (RIN 1 & RIN 2) that will address the 2011 Act mandates and implement several additional changes to the regulations for gas pipelines. The rule includes the following significant item that affects the IMP program:

- Advised operators to make all pipeline segments operating at or over 20 percent SMYS ILI enabled

Additionally, performing an ILI will assist the Company to identify anomalies in the pipeline allowing the Company to evaluate and remediate them prior to their failure.

Customer Benefits:

ILI enablement will allow for the enhanced operational safety of the Company's transmission system. Through ILI enablement, the Company can proactively inspect existing transmission assets to identify anomalies or other issues that might adversely affect the integrity of the system and result in gas safety concerns for the system and our customers while meeting regulatory requirements.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 5,207,000
OPEX	
TOTAL	\$ 5,207,000

Supplemental Information

Alternatives

Alternative 1: Maintain Current IMP Using ECDA Testing Method. This does not support PHMSA's (NTSB) recommendation that operators retrofit pipelines to be ILI enabled.

Alternative 2: Non-Pipes Alternatives ("NPAs")

Risk of No Action: The risk of no action exposes the Company to regulatory non-compliance.

NPA Suitability Screening

- Is the project construction expected to commence and be completed within 24 months?
☐ Yes ☒ No
- For KEDNY, is the cost of the project less than \$750k?
☐ Yes ☒ No
- Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered "yes," the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company's NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: This mandated work is required by federal regulations and cannot be replaced with an NPA.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? Project location was selected based on location of existing assets and could not be avoided. The project will only have a temporary impact on the surrounding area and, where possible, the Company will seek to minimize its time at the location.
3. Will the project contribute to GHG emission reductions on the Company's gas network? ☐ Yes ☒ No
4. Please explain the project's GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission. impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☐ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☐ Use dust suppression measures (e.g., water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:

Benefits

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are "communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law]." Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

Reliability Benefits ☐ Supports growth forecast ☐ Addresses supply/capacity constraint or supply diversity needs ☐ Addresses storm/climate change resiliency Other Customer Benefits: ☐ Improves Customer Satisfaction ☐ Reflects efficiency savings of \$ ____ ☐ Reduction in Billing Errors and Re-Bills ☐ Supports implementation of Gas Business Enablement Safety Benefits: ☐ Enhances response time to Emergency Gas Leaks ☐ Enhances employee safety ☐ Increases automation (reduces human error) ☒ Enhances Public Safety ☐ Reduces Damages potential (<i>i.e., in the case of mapping system</i>) ☐ Addresses specific safety initiative: _____ Societal Benefits/Externalities: ☐ Emissions Reduction ☐ Reduces use of Alt. Fuel ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks) ☒ Other: Regulatory Compliance	
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Pipeline Integrity - IMP - Greenpoint LN-1.1.0

Robotic ILI approx. 11,750 feet



Type: ☒ Project ☐ Program	Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220101744	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☒ Mandated ☐ Reliability ☐ Non-Infrastructure		
Annual Program: ☐	Estimated Start Date: 4/2024	Estimated In-Service Date: 12/2028
Status: ☐ Initiation/Planning ☒ In-Progress (Projects Only) ☐ On-Going (Programs Only)		
Sponsor: Kern, Mike	Business Contact: Conklin, Kevin	

Work Description:

Pipeline Integrity - IMP - Greenpoint LN-1.1.0 Robotic ILI approx. 11,750 feet, installation of 6 charging/communication ports, 2 2-inch TOR fittings and installation of 2 16-inch stopple fittings for robotic ILI access points as required. This work will include traffic control; excavation of the pipeline; welding, non-destructive testing and pressure testing of fittings; recoating of the pipeline and surface restoration.

Justification Summary:

Pursuant to the 2002 Act, the DOT promulgated rules on managing the integrity of transmission pipelines used by the gas and hazardous liquids industries under 49 CFR Part 192.901 – 192.951, which became effective on January 14, 2004. These regulations require pipeline operators to develop and implement an IMP for “covered” transmission pipelines, which are defined as certain pipelines in high consequence areas (HCA). The program required that the first cycle of pipeline assessments be completed no later than 2012. Reassessments are required to be completed at intervals not exceeding seven years thereafter from the last assessment. The assessments are comprised of external corrosion direct assessment (ECDA) and ILI. The results of each operator’s program are summarized and reported to the DOT on an annual basis.

Pipeline safety laws and regulations constantly evolve, driving progressive changes in utility operations and asset management. San Bruno and several other high profile pipeline incidents have set in motion recommendations, proposed rulemaking, and the 2011 Act signed into law on January 3, 2012. In 2019 & 2022 PHMSA issued two rules (RIN 1 & RIN 2) that will address the 2011 Act mandates and implement several additional changes to the regulations for gas pipelines. The rule includes the following significant item that will affect the IMP program:

- Advised operators to make all pipeline segments operating at or over 20 percent SMYS ILI enabled

Customer Benefits:

ILI enablement will allow for the enhanced operational safety of the Company’s transmission system. Through ILI enablement, the Company can proactively inspect existing transmission assets to identify anomalies or other issues that might adversely affect the integrity of the system and result in gas safety concerns for the system and our customers while meeting regulatory requirements.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 2,729,282

	OPEX	
	TOTAL	\$ 2,729,282

Supplemental Information

Alternatives

Alternative 1: Maintain Current IMP using ECDA testing method. This does not support PHMSA's (NTSB) recommendation that operators retrofit pipelines to be ILI enabled.

Alternative 2: Non-Pipes Alternatives ("NPAs")

Risk of No Action: The risk of no action exposes the Company to regulatory non-compliance.

NPA Suitability Screening

- Is the project construction expected to commence and be completed within 24 months?
☐ Yes ☒ No
- For KEDLI or NMPC, is the cost of the project less than \$500k? For KEDNY, is the cost of the project less than \$750k?
☐ Yes ☒ No
- Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered "yes," the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company's NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: This mandated work is required by federal regulations and cannot be replaced with an NPA.

CLCPA/GHG Analysis

- Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
- If so, explain how was the routing determined and how will the project impact the surrounding area? Project location was selected based on location of existing assets and could not be avoided. The project will only have a

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are "communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law]." Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

temporary impact on the surrounding area and, where possible, the Company will seek to minimize its time at the location.

3. Will the project contribute to GHG emission reductions on the Company's gas network? ☐ Yes ☒ No

4. Please explain the project's GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☐ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

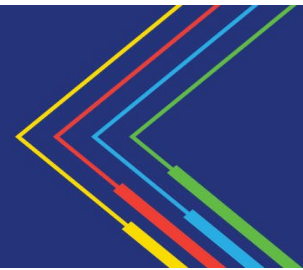
- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☐ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:

Benefits
Reliability Benefits ☐ Supports growth forecast ☐ Addresses supply/capacity constraint or supply diversity needs ☐ Addresses storm/climate change resiliency
Other Customer Benefits: ☐ Improves Customer Satisfaction ☐ Reflects efficiency savings of \$____ ☐ Reduction in Billing Errors and Re-Bills ☐ Supports implementation of Gas Business Enablement
Safety Benefits: ☐ Enhances response time to Emergency Gas Leaks ☐ Enhances employee safety ☐ Increases automation (reduces human error) ☒ Enhances Public Safety

☐ Reduces Damages potential (<i>i.e., in the case of mapping system</i>) ☐ Addresses specific safety initiative: _____ Societal Benefits/Externalities: ☐ Emissions Reduction ☐ Reduces use of Alt. Fuel ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks) ☒ Other: Regulatory Compliance	
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Pipeline Integrity - IVP - Coney Island Bridge Crossing



Type: ☒ Project ☐ Program	Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220101540	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☒ Mandated ☐ Reliability ☐ Non-Infrastructure		
Annual Program: ☐	Estimated Start Date: 4/2023	Estimated In-Service Date: 3/2026
Status: ☐ Initiation/Planning ☒ In-Progress (Projects Only) ☐ On-Going (Programs Only)		
Sponsor: Kern, Mike	Business Contact: Conklin, Kevin	

Work Description:

This project addresses the missing pressure test documents for this section of the Brooklyn Backbone Spur to Coney Island. This project will replace the entire Coney Island Bridge Crossing, approx. 180-foot long, off the Brooklyn Backbone which was determined to be missing adequate documentation to prove an original pressure was conducted or perform a new documented pressure. This relates to a regulatory requirement to verify original pressure test, also referred to as Part R requirement.

Justification Summary:

The recent PHMSA rule making (RIN1) has directed operators to address pipelines that do not have adequate or missing records such as pressure test charts, material reports and weld records (CFR 49 192.24). Compliance requirements are for 50% of inventory to be addressed by 2027 and 100% to be addressed by 2035. A comprehensive records review undertaken by the company has identified that this pipeline has inadequate records for compliance.

Customer Benefits:

Replacement of pipe with inadequate records will allow for the enhanced operational safety of the Company's transmission system. Through replacement, the Company can comply with new Federal code requirements and address material issues that might adversely affect the integrity of the system and result in gas safety concerns for the system and our customers.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 2,960,000
OPEX	
TOTAL	\$ 2,960,000

Supplemental Information

Alternatives

Alternative 1: Do nothing. This approach will result in the pipeline being out of compliance and could result in a fine and other regulatory action.

Alternative 2: Non-Pipes Alternatives (“NPAs”)

Risk of No Action: The risk of no action exposes the Company to a regulatory non-compliance of section 192.624.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☐ Yes ☒ No
2. For KEDLI, is the cost of the project less than \$500k?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: This mandated work is required by federal regulations and cannot be replaced with an NPA.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? Project location was selected based on location of existing assets and could not be avoided. The project will only have a temporary impact on the surrounding area and, where possible, the Company will seek to minimize its time at the location.
3. Will the project contribute to GHG emission reductions on the Company’s gas network? ☐ Yes ☒ No
4. Please explain the project’s GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission. impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☐ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].” Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☐ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:

Benefits

Reliability Benefits

- ☐ Supports growth forecast
- ☐ Addresses supply/capacity constraint or supply diversity needs
- ☐ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☐ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☐ Enhances employee safety
- ☐ Increases automation (reduces human error)
- ☒ Enhances Public Safety
- ☐ Reduces Damages potential (*i.e., in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☐ Emissions Reduction
- ☐ Reduces use of Alt. Fuel
- ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)
- ☒ Other: Regulatory Compliance

Pipeline Integrity - IVP - LN-1.4.0 – Spur to Con Ed Nar Gen



Type: ☒ Project ☐ Program	Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220101538	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☒ Mandated ☐ Reliability ☐ Non-Infrastructure		
Annual Program: ☐	Estimated Start Date: 4/2023	Estimated In-Service Date: 3/2028
Status: ☐ Initiation/Planning ☒ In-Progress (Projects Only) ☐ On-Going (Programs Only)		
Sponsor: Kern, Mike	Business Contact: Conklin, Kevin	

Work Description:

This project replaces the entire spur, approx. 874-foot long, Spur to Con Ed Nar Gen off the Brooklyn Backbone which was determined to be missing adequate documentation to prove an original pressure was conducted.

Justification Summary:

The recent PHMSA rule making (RIN1) has directed operators to address pipelines that do not have adequate or missing records such as pressure test charts, material reports and weld records (CFR 192.624) . Compliance requirements are for 50% of inventory to be addressed by 2027 and 100% to be addressed by 2035. A comprehensive records review undertaken by the company has identified that this pipeline has inadequate records for compliance.

Customer Benefits:

Replacement of pipe with inadequate records will allow for enhanced operational safety of the Company's transmission system. Through replacement, the Company can comply with new Federal code requirements and address material issues that might adversely affect the integrity of the system and result in gas safety concerns for the system and our customers.

Program Benefits Include:

- Reduces operational risk
- Public safety increased
- Meet regulatory requirements

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 5,040,000
OPEX	
TOTAL	\$ 5,040,000

Supplemental Information

Alternatives

Alternative 1: Do Nothing. This approach will result in the pipeline being out of compliance and could result in a fine and other regulatory action.

Alternative 2: Non-Pipes Alternatives (“NPAs”)

Risk of No Action: The risk of no action exposes the Company to a regulatory non-compliance of section 192.624.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☐ Yes ☒ No
2. For KEDLI or NMPC, is the cost of the project less than \$500k? For KEDNY, is the cost of the project less than \$750k?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: This mandated work is required by federal regulations and cannot be replaced with an NPA.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? Project location was selected based on location of existing assets and could not be avoided. The project will only have a temporary impact on the surrounding area and, where possible, the Company will seek to minimize its time at the location.
3. Will the project contribute to GHG emission reductions on the Company’s gas network? ☐ Yes ☒ No
4. Please explain the project’s GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission. impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☐ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].” Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☐ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:

Benefits

Reliability Benefits

- ☐ Supports growth forecast
- ☐ Addresses supply/capacity constraint or supply diversity needs
- ☐ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☐ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☐ Enhances employee safety
- ☐ Increases automation (reduces human error)
- ☒ Enhances Public Safety
- ☐ Reduces Damages potential (*i.e., in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☐ Emissions Reduction
- ☐ Reduces use of Alt. Fuel
- ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)
- ☒ Other: Meet regulatory requirements

RCV - LTNY12051 - BQ1019



Type: ☒ Project ☐ Program		Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220100672		Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☒ Mandated ☐ Reliability ☐ Non-Infrastructure			
Annual Program: ☐		Estimated Start Date: 02/2025	Estimated In-Service Date: 9/4/2027
Status: ☐ Initiation/Planning ☒ In-Progress (Projects Only) ☐ On-Going (Programs Only)			
Sponsor: Metzдорff, Peter		Business Contact: Santangelo, Amanda	

Work Description:

Installation of RCV BQ1019 on Lorimer St and Meeker Ave in East Williamsburg, Brooklyn. Replace existing 24" plug valve BQ1019, install a remote operator with the actuator in a vault, and install a RTU and mechanical cabinet to remotely control the valve. RCV BQ1019 would sectionalize the 350-psig transmission system in Brooklyn, more specifically, the Brooklyn Backbone and the Spur to NYPA Power Plant North 1st Street from the Spur to Greenpoint.

Justification Summary:

PHMSA regulations promulgated in response to the Pipeline Safety Act of 2011 mandate the installation of system valves. Remote Control Valve installation will allow gas control to isolate and shutdown a portion of the transmission system and mitigate further damage, resulting in a smaller and faster shutdown. The use of RCVs also eliminates the need to locate and excavate manual valves. The RCV program increases safety and reliability, protects the system against pressure collapse in case of a rupture, maintains customers, reduces quantity of gas released, and reduces response time. This program affects the critical reliability of the gas system and is required in direct response to regulatory mandate.

Customer Benefits:

KEDNY's goal is to proactively upgrade the existing valves or install new valves in certain high-volume and high-risk locations to enhance reliability and safety by reducing the amount of time needed to stop the flow of gas in the event of a pipeline failure thereby mitigating the consequences of any such event. Installation of RCVs will be undertaken in a manner that will ultimately comply with regulatory guidance. The purpose of the RCV projects is to increase safety and reliability, maintain service to customers, reduce quantity of gas released, and reduce response time in the event of a pipeline or facility failure.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 10,646,000
OPEX	
TOTAL	\$ 10,646,000

Supplemental Information

Alternatives

Alternative 1: Do nothing Leave BQ1019, a 24" plug valve installed in 1950, as a manual valve. This option does not provide remote system shut down capability and would leave the Company in violation of industry code requirements.

Alternative 2: Non-Pipes Alternatives ("NPAs") This alternative is rejected because it does not meet the suitability screening.

Risk of No Action: If RCVs are not installed, a pipeline failure would require a manual shutdown of the transmission pipe. This may result in longer time to contain the incident and could result in more damage. Also, by not adding any RCVs the isolation area could be large in some instances, resulting in a larger loss of service to customers. Given PHMSA regulations, this option would leave the Company in violation of industry code requirements.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☒ Yes ☐ No
2. For KEDNY, is the cost of the project less than \$750k? For KEDLI, is the cost of the project less than \$500k?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered "yes," the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company's NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: See above NPA Suitability Screening criteria. This project is not applicable as it affects the critical reliability of the gas system and is in response to regulatory mandate.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☐ Yes ☒ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? N/A
3. Will the project contribute to GHG emission reductions on the Company's gas network? ☒ Yes ☐ No
4. Please explain the project's GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission. impact.

Checklist of impacts:

- ☐ Vehicle emissions from truck rolls
- ☐ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are "communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law]." Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

- ☐ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☒ Other:

If other is checked, identify source: In the event of a pipeline failure on the Brooklyn Backbone, the Spur to NYPA Power Plant North 1st Street, or the Spur to Greenpoint Gate, RCV BQ1019 would be remotely closed to isolate and shutdown a portion of the transmission system. Closing this valve, in conjunction with other RCVs on the affected transmission main, would reduce the gas released by the quantity of gas in the main (line pack) from this valve to the next closed RCVs.

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☒ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program: Synergi Modeling

Benefits
<u>Reliability Benefits</u> ☐ Supports growth forecast ☐ Addresses supply/capacity constraint or supply diversity needs ☐ Addresses storm/climate change resiliency <u>Other Customer Benefits:</u> ☐ Improves Customer Satisfaction ☐ Reflects efficiency savings of \$____ ☐ Reduction in Billing Errors and Re-Bills ☐ Supports implementation of Gas Business Enablement <u>Safety Benefits:</u> ☒ Enhances response time to Emergency Gas Leaks ☒ Enhances employee safety ☒ Increases automation (reduces human error) ☒ Enhances Public Safety ☒ Reduces Damages potential (<i>i.e., in the case of mapping system</i>) ☐ Addresses specific safety initiative: _____ <u>Societal Benefits/Externalities:</u> ☒ Emissions Reduction ☐ Reduces use of Alt. Fuel ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks) ☐ Other: _____

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RCV - LTNY21040 - BQ1048



Type: ☒ Project ☐ Program		Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220101843		Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☒ Mandated ☐ Reliability ☐ Non-Infrastructure			
Annual Program: ☐	Estimated Start Date: April 2026		Estimated In-Service Date: October 2028
Status: ☒ Initiation/Planning ☐ In-Progress (Projects Only) ☐ On-Going (Programs Only)			
Sponsor: Metzдорff, Peter		Business Contact: Santangelo, Amanda	

Work Description:

Installation of RCV BQ1048 on Avenue S and West 6 Street in Gravesend, Brooklyn. Replace existing 12" plug valve BQ1048 with a ball valve, install a remote operator with the actuator in a vault, and install a RTU and mechanical cabinet to remotely control the valve. RCV BQ1048 would sectionalize the 350-psig transmission system in Brooklyn, more specifically, the Spur to Coney Island from the Jamaica Bay Line.

Justification Summary:

PHMSA regulations promulgated in response to the Pipeline Safety Act of 2011 mandate the installation of system valves. Remote Control Valve installation will allow gas control to isolate and shutdown a portion of the transmission system and mitigate further damage, resulting in a smaller and faster shutdown. The use of RCVs also eliminates the need to locate and excavate manual valves. The RCV program increases safety and reliability, protects the system against pressure collapse in case of a rupture, maintains customers, reduces quantity of gas released, and reduces response time. This program affects the critical reliability of the gas system and is required in direct response to regulatory mandate.

Customer Benefits:

KEDNY's goal is to proactively upgrade the existing valves or install new valves in certain high-volume and high-risk locations to enhance reliability and safety by reducing the amount of time needed to stop the flow of gas in the event of a pipeline failure thereby mitigating the consequences of any such event. Installation of RCVs will be undertaken in a manner that will ultimately comply with regulatory guidance. The purpose of the RCV projects is to increase safety and reliability, maintain service to customers, reduce quantity of gas released, and reduce response time in the event of a pipeline or facility failure.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 1,000,000
OPEX	
TOTAL	\$ 1,000,000

Supplemental Information

Alternatives

Alternative 1: Do nothing Leave BQ1048, a 12" plug valve installed in 1960, as a manual valve. This option does not provide remote system shut down capability and would leave the Company in violation of industry code requirements.

Alternative 2: Non-Pipes Alternatives ("NPAs") This alternative is rejected because it does not meet the suitability screening.

Risk of No Action: If RCVs are not installed, a pipeline failure would require a manual shutdown of the transmission pipe. This may result in longer time to contain the incident and could result in more damage. Also, by not adding any RCVs, the isolation area could be large in some instances, resulting in a larger loss of service to customers. Given PHMSA regulations, this option would leave the Company in violation of industry code requirements.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☐ Yes ☒ No
2. For KEDNY, is the cost of the project less than \$750k? For KEDLI, is the cost of the project less than \$500k?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered "yes," the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company's NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: See above NPA Suitability Screening criteria. This project is not applicable as it affects the critical reliability of the gas system and is in response to regulatory mandate.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☐ Yes ☒ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? N/A
3. Will the project contribute to GHG emission reductions on the Company's gas network? ☒ Yes ☐ No
4. Please explain the project's GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☐ Vehicle emissions from truck rolls
- ☐ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are "communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law]." Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

- ☐ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☒ Other:

If other is checked, identify source: In the event of a pipeline failure on either the Spur to Coney Island or Jamaica Bay Line, RCV BQ1048 would be remotely closed to isolate and shutdown a portion of the transmission system. Closing this valve, in conjunction with other RCVs on the affected transmission main, would reduce the gas released by the quantity of gas in the main (line pack) from this valve to the next closed RCVs.

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☒ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program: Synergi Modeling

Benefits
<u>Reliability Benefits</u> ☐ Supports growth forecast ☐ Addresses supply/capacity constraint or supply diversity needs ☐ Addresses storm/climate change resiliency <u>Other Customer Benefits:</u> ☐ Improves Customer Satisfaction ☐ Reflects efficiency savings of \$____ ☐ Reduction in Billing Errors and Re-Bills ☐ Supports implementation of Gas Business Enablement <u>Safety Benefits:</u> ☒ Enhances response time to Emergency Gas Leaks ☒ Enhances employee safety ☒ Increases automation (reduces human error) ☒ Enhances Public Safety ☒ Reduces Damages potential (<i>i.e., in the case of mapping system</i>) ☐ Addresses specific safety initiative: _____ <u>Societal Benefits/Externalities:</u> ☒ Emissions Reduction ☐ Reduces use of Alt. Fuel ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks) ☐ Other: _____

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Replace Pipe on Bridges



Type: ☐ Project ☒ Program	Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220101289	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☒ Mandated ☐ Reliability ☐ Non-Infrastructure		
Annual Program: ☒	Estimated Start Date:	Estimated In-Service Date:
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☒ On-Going (Programs Only)		
Sponsor: Khan, Saadat	Business Contact: Peters, Kevin	

Work Description:

This program will repair, rehabilitate, modify, or replace aboveground gas pipe crossings that have deficiencies that: a) are primarily identified during periodic atmospheric corrosion inspections, and b) pose an integrity risk to the aboveground crossing. This program also includes crossings submerged in water that are not otherwise protected by buried-pipe corrosion prevention systems.

The program will generate multiple individual projects that typically have relatively shorter schedules and spend/construction periods and can be managed via Standard NDP engineering. A separate stand-alone white paper will be generated if a project requires using Complex NDP engineering due to its scope, schedule, and cost.

Justification Summary:

The gas distribution system includes aboveground piping that crosses roads, railroads, waterways, other municipal facilities, or other geographic features where underground installations were not installed or possible. These crossings may be supported by Company or third-party bridges, drainage culverts, or other structures at the beginning and end of the crossing. Crossings may also be pipe-free spans supported at fixed end points.

As these pipe crossings are exposed to atmospheric conditions, Corrosion Engineering (CE) is responsible for the physical inspection and maintenance every three (3) years to mitigate and prevent external pipe corrosion. This maintenance includes pipe coating repair and replacement. It may also extend to the pipe support system but would be generally limited to nominal components that can be mechanically repaired with the contractor's available tools and equipment.

Crossing installations span the age of the system itself over decades of service. Major repairs and replacements extend facility life, reduce public safety risks, and help maintain customer service and reliability. Deficiencies may develop in the piping, supports, or other appurtenances due to the following:

- General system deterioration
- Pipe corrosion (both internal and external)
- Physical damage
- Nonconformance with current (National Grid/industry/regulatory) design standards
- Significant public exposure to vehicular traffic accidents

Although the pipe coating and other corrosion prevention features fall under CE's inspection responsibility, inspection of the pipe and major Company-owned support structures does not. The scope of this program is to include adequate SME and/or consultant assessments when necessary to verify and maintain the integrity of these structures. This includes Company-owned pipe crossings using structural bridges comprised of suspension cables and/or trusses.

When the physical condition of the crossing pipe and/or support system is beyond CE's capabilities and responsibilities, capital expenditures are required to perform major repairs or replacements to extend facility life, to design and construct alternate facilities to maintain the crossing integrity and capacity or to design and construct a crossing at an alternate location to maintain the same level of system reliability.

Expenditures required for these projects are not covered by other Gas Distribution programs such as Proactive Main Replacement - Leak Prone Pipe and Large Diameter Pipe Rehabilitation.

Customer Benefits:

This project will help improve the reliability and enhance safety of gas infrastructure.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 3,968,038
OPEX	
TOTAL	\$ 3,968,038

Supplemental Information

Alternatives

Alternative 1: Do Nothing. This option is not deemed viable due to integrity concerns identified by the Corrosion inspection program and risk of structural failure and possible gas leaks.

Alternative 2: Remove/Retire Crossing. The crossing could be removed if the service area is radially fed but overall system reliability would likely be impacted.

Alternative 3: Install Underground Crossing. May be technically feasible if technology and ROW options exist, but usually not economically feasible.

Alternative 4: Non-Pipes Alternative ("NPAs")

Risk of No Action: Should the Replace Pipe on Bridges program not be used to mitigate issues with gas assets on bridge crossings, funding and outside resources would need to be pulled from other programs to bring about a resolution, hindering those programs from their primary focus. If the issues surrounding gas assets are not addressed at all, National Grid risks not meeting compliance metrics and could potentially involve major concerns to public safety.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?

☒ Yes ☐ No

2. For KEDNY, is the cost of the project less than \$750k?

☐ Yes ☒ No

3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?

☒ Yes ☐ No

If questions are answered "yes," the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company's NPA Screening and Suitability Criteria?

☒ Yes ☐ No

If yes, please briefly explain the results: Project is not suitable for an NPA as it affects the critical reliability of the gas system and mitigates integrity concerns. No NPA, or combination of NPAs, would remove the need for this project at this time.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? This program will make repairs to existing natural gas assets that may serve areas designated as DAC.
3. Will the project contribute to GHG emission reductions on the Company's gas network? ☒ Yes ☐ No
4. Please explain the project's GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☒ Diesel combustion from generators
- ☒ Dust from demolition of sidewalk / roads
- ☒ Noise pollution from trucks and equipment
- ☒ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☐ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are "communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law]." Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (e.g., water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program: N/A

Benefits

Reliability Benefits

- ☐ Supports growth forecast
- ☐ Addresses supply/capacity constraint or supply diversity needs
- ☐ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☒ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☐ Enhances employee safety
- ☐ Increases automation (reduces human error)
- ☒ Enhances Public Safety
- ☐ Reduces Damages potential (*i.e., in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☒ Emissions Reduction
- ☐ Reduces use of Alt. Fuel
- ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)
- ☐ Other: _____

Service Replacement - Atmospheric Corrosion Inside Inspection (Remediation)

Type: ☐ Project ☒ Program	Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220000287	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☒ Mandated ☐ Reliability ☐ Non-Infrastructure		
Annual Program: ☒	Estimated Start Date:	Estimated In-Service Date:
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☒ On-Going (Programs Only)		
Sponsor: Khan, Saadat	Business Contact: Peters, Kevin	

Work Description:

To plan and execute a proactive service inspection program for all gas services within the KEDNY service territory. The program will include remediation, replacement and retirement of substandard service lines in accordance with established safety standards. FY25 work plan includes 199 jobs but is subject to change depending on the outcome of the inspections.

Justification Summary:

Successful execution of the program will improve the safety of gas service piping exposed to atmospheric corrosion. Allocating dedicated funding provides for a prompt managed replacement program. This program will enhance public safety and gas system reliability for years. Inside gas service leaks require a prompt emergency response. It should be recognized that we have been successful in managing leaks and leak backlog. However, inside atmospheric corrosion, leaks represent a low probability, high consequence risk.

Additional benefits highlighted include:

- Reduced risk associated with exposed service piping
- Enhanced customer satisfaction while achieving synergy savings through integration with other programs (e.g. leak survey etc.)
- Improved public, community, and government relations due to decreased odor calls
- Improved system performance
- Contribution towards the Company's greenhouse gas reduction goals

Customer Benefits:

For inside meter sets, the wall penetration of the gas service pipe is the weakest point which is prone to corrosion and cannot be visually inspected. The service line requires the replacement of the inside and outside below-grade piping. This program will help improve customer safety.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 2,481,375
OPEX	
TOTAL	\$ 2,481,375

Supplemental Information

Alternatives

Alternative 1: Do Nothing. This alternative is not feasible as this program is mandated. (Not Recommended)

Alternative 2: Non-Pipes Alternatives (“NPAs”)

Risk of No Action: Ignoring service line inspections will increase the risk of potential hazardous leaks and increase the risk to public safety. Inspections are mandatory under state and local law. Failure to do so will result in regulatory compliance issues.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☒ Yes ☐ No
2. For KEDNY, is the cost of the project less than \$750k?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

If yes, please briefly explain the results: NPAs are not suitable for this program this program is reactive to address repairs for on-system assets currently serving customers.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? Not a specific project or installation and applies across the service territory. Remediating or replacing substandard service lines improves asset conditions and reduces potential leaks.
3. Will the project contribute to GHG emission reductions on the Company’s gas network? ☒ Yes ☐ No
4. Please explain the project’s GHG impact. Please see Exhibit (GIOP-6) for the project’s GHG emission impact.

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].” Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☒ Diesel combustion from generators
- ☒ Dust from demolition of sidewalk / roads
- ☒ Noise pollution from trucks and equipment
- ☒ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:**Benefits****Reliability Benefits**

- ☐ Supports growth forecast
- ☐ Addresses supply/capacity constraint or supply diversity needs
- ☐ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☒ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☒ Enhances employee safety
- ☐ Increases automation (reduces human error)
- ☒ Enhances Public Safety
- ☐ Reduces Damages potential (*i.e.*, *in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☒ Emissions Reduction

	☐ Reduces use of Alt. Fuel ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks) ☐ Other: _____	

Service Replacement - Inactive Service Retirement



Type: ☐ Project ☒ Program	Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220101216	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☒ Mandated ☐ Reliability ☐ Non-Infrastructure		
Annual Program: ☒	Estimated Start Date:	Estimated In-Service Date:
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☒ On-Going (Programs Only)		
Sponsor: Khan, Saadat	Business Contact: Costanzo, Nicholas	

Work Description:

The reactive Inactive Service Retirement program funds the demolition of services due to inactivity that are beyond the scope of NYCRR 255.726, which mandates the demolition of inactive unprotected steel services.

To lower the risk associated with inactive services of other leak-prone materials, including copper and Alydl-A, the scope of this program will include the retirement of an additional 500 inactive services per year that have historically not been targeted.

Justification Summary:

The goal of this program is to enhance the safety and reliability of the Company's system by reducing the risks associated with damages on service abandonments due to inactivity. Currently, NYCRR 255.726 mandates the demolition of unprotected steel services when the accounts associated with the service reach 3 years of inactivity. That work is currently done under the service replacement non-leaks investment. This program expands the scope of inactive services targeted for demolition to other non-steel services to lower risk associated with all inactive services, regardless of material type.

The program budget consists of costs to replace due to damages, service abandonments due to inactivity or demolition requests, customer-driven relocation of existing services, and other substandard conditions.

Customer Benefits:

This program will reduce the risk associated with these services and reduce the field and outage impact on customers.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$2,745,831
OPEX	
TOTAL	\$2,745,831

Alternatives

Alternative 1: Do Nothing. These work activities are random, emergency driven, mandated and customer driven in nature. Therefore, there is not an alternative to completing these activities.

Alternative 2: Non-Pipes Alternative (“NPAs”)

Risk of No Action: Failure to perform reactive service replacements will result in significant safety, reliability, and compliance risks. Leaks on existing services will persist and potentially worsen, increasing the likelihood of hazardous gas incidents that endanger public and employee safety. Inaction would also lead to non-compliance with regulatory requirements, including federally mandated Distribution Integrity Management Program (DIMP) obligations, exposing the Company to enforcement actions and penalties. Operationally, emergency leak responses will become more frequent, straining resources and negatively impacting reliability metrics and customer satisfaction. Additionally, unrepaired leaks contribute to elevated methane emissions, conflicting with state and federal climate goals and potentially subjecting the Company to environmental penalties and reputational harm. Escalating maintenance and emergency repair costs, coupled with increased liability exposure, will further compound the financial and operational risks of not executing this program.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☒ Yes ☐ No
2. For KEDLI or NMPC, is the cost of the project less than \$500k? For KEDNY, is the cost of the project less than \$750k?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: NPAs are not suitable for this program as it is reactive to address repairs for on-system assets currently serving customers.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].”

2. If so, explain how was the routing determined and how will the project impact the surrounding area? The program supports make-safe activities wherever existing conditions warrant, which could be within DACs.
3. Will the project contribute to GHG emission reductions on the Company's gas network? ☒ Yes ☐ No
4. Please explain the project's GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☒ Diesel combustion from generators
- ☒ Dust from demolition of sidewalk / roads
- ☒ Noise pollution from trucks and equipment
- ☒ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (e.g., water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program: N/A

Benefits	
<u>Reliability Benefits</u>	
☐	Supports growth forecast
☐	Addresses supply/capacity constraint or supply diversity needs
☐	Addresses storm/climate change resiliency
<u>Other Customer Benefits:</u>	
☒	Improves Customer Satisfaction
☐	Reflects efficiency savings of \$____
☐	Reduction in Billing Errors and Re-Bills
☐	Supports implementation of Gas Business Enablement
<u>Safety Benefits:</u>	
☐	Enhances response time to Emergency Gas Leaks
☐	Enhances employee safety
☐	Increases automation (reduces human error)
☒	Enhances Public Safety

☐ Reduces Damages potential (<i>i.e., in the case of mapping system</i>) ☐ Addresses specific safety initiative: _____ <u>Societal Benefits/Externalities:</u> ☒ Emissions Reduction ☐ Reduces use of Alt. Fuel ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks) ☐ Other: _____	

Service Replacement - Reactive – Leaks



Type: ☐ Project ☒ Program	Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220000295	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☒ Mandated ☐ Reliability ☐ Non-Infrastructure		
Annul Program: ☒	Estimated Start Date:	Estimated In-Service Date:
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☒ On-Going (Programs Only)		
Sponsor: Khan, Saadat	Business Contact: Peters, Kevin	

Work Description:

The reactive service replacement program consists of non-discretionary work randomly generated through public leak reports, programmed leak surveys, mandated activities, and customer-generated requests. The drivers for this category are safety and reliability.

Justification Summary:

The goal of this program is to reduce the risk associated with leaks on existing services to enhance the safety and reliability of the Company's system. The program provides funding for the reactive replacement of gas services to address work activities outside the normal scope of the integrity, reliability, public works, and growth programs. The proactive main and service replacement programs upgrade existing customer services prioritized in the main replacement program by risk based on pressure, material, vintage, location, and select other variables. The reactive service replacement program addresses leakage and other maintenance activities on the remaining services.

The program budget consists of costs to replace leaking services, damages, service abandonments due to inactivity or demolition requests, customer-driven relocations of existing services, and other substandard conditions.

Customer Benefits:

This program will reduce the risk associated with these services and reduce leaks and emissions.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 11,653,834
OPEX	
TOTAL	\$ 11,653,834

Alternatives

Alternative 1: Do Nothing. These work activities are random, emergency driven, mandated and customer driven in nature. Therefore, there is not an alternative to completing these activities.

Alternative 2: Non-Pipes Alternatives (“NPAs”)

Risk of No Action: Failing to repair leaking services can cause gas to accumulate, creating an ignition risk which poses a threat to public safety. This will result in regulatory compliance issues. There will also be an increase in greenhouse gas emissions and the inability to make timely repairs can result in further deterioration that would require more complex repairs.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☒ Yes ☐ No
2. For KEDNY, is the cost of the project less than \$750k?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

If yes, please briefly explain the results: NPAs are not suitable for this program as it is reactive to address repairs for on-system assets currently serving customers.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? The program supports make-safe activities wherever existing leaks are found, which could be within DACs.
3. Will the project contribute to GHG emission reductions on the Company’s gas network? ☒ Yes ☐ No
4. Please explain the project’s GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☒ Diesel combustion from generators

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].” Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

- ☒ Dust from demolition of sidewalk / roads
- ☒ Noise pollution from trucks and equipment
- ☒ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program: N/A

Benefits

Reliability Benefits

- ☐ Supports growth forecast
- ☐ Addresses supply/capacity constraint or supply diversity needs
- ☐ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☒ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☒ Enhances response time to Emergency Gas Leaks
- ☐ Enhances employee safety
- ☐ Increases automation (reduces human error)
- ☒ Enhances Public Safety
- ☐ Reduces Damages potential (*i.e., in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☒ Emissions Reduction
- ☐ Reduces use of Alt. Fuel
- ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)
- ☐ Other: _____

Service Replacement- Reactive – Non-Leaks

Type: ☐ Project ☒ Program	Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220000296	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☒ Mandated ☐ Reliability ☐ Non-Infrastructure		
Annual Program: ☒	Estimated Start Date:	Estimated In-Service Date:
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☒ On-Going (Programs Only)		
Sponsor: Khan, Saadat	Business Contact: Peters, Kevin	

Work Description:

The reactive non-leak service replacement program consists of non-discretionary work that is randomly generated through compliance needs and mandated activities.

Justification Summary:

The goal of this program is to enhance the safety and reliability of the Company's system by reducing the risks associated with damages, service abandonments due to inactivity or demolition requests, customer-driven relocations of existing services, and other substandard conditions. The program provides approved funding for the reactive replacement of gas services to address non-leak work activities outside the normal scope of the integrity, reliability, public works, and growth programs.

The proactive main and service replacement programs upgrade existing customer services prioritized in the main replacement program by risk based on pressure, material, vintage, location, and select other variables. The reactive service replacement program addresses deficiencies on the remaining services.

The program budget consists of costs to replace services due to damages, service abandonments due to inactivity or demolition requests, customer-driven relocation of existing services, and other substandard conditions.

Customer Benefits:

This program will reduce the risk associated with these services and reduce the field and outage impact on customers.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 6,985,323
OPEX	
TOTAL	\$ 6,985,323

Supplemental Information

Alternatives

Alternative 1: Do Nothing. These work activities are random, emergency driven, mandated and customer driven in nature. Therefore, there is not an alternative to completing these activities.

Alternative 2: Non-Pipes Alternatives (“NPAs”)

Risk of No Action: Failing to replace inactive and substandard services will increase the risk of potential hazardous leaks and increase the risk to public safety. Inspections are mandatory under state and local law. Failing to do so will result in regulatory compliance issues

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☒ Yes ☐ No
2. For KEDNY, is the cost of the project less than \$750k?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: NPAs are not suitable for this program as it is reactive to address repairs for on-system assets currently serving customers.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? The program supports make-safe activities wherever existing conditions warrant, which could be within DACs.
3. Will the project contribute to GHG emission reductions on the Company’s gas network? ☒ Yes ☐ No
4. Please explain the project’s GHG impact. Please see Exhibit ____ (GIOP-6) for the project’s GHG emission impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☒ Diesel combustion from generators

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].” Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

- ☒ Dust from demolition of sidewalk / roads
- ☒ Noise pollution from trucks and equipment
- ☒ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program: N/A

Benefits

Reliability Benefits

- ☐ Supports growth forecast
- ☐ Addresses supply/capacity constraint or supply diversity needs
- ☐ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☒ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☐ Enhances employee safety
- ☐ Increases automation (reduces human error)
- ☒ Enhances Public Safety
- ☐ Reduces Damages potential (*i.e., in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☒ Emissions Reduction
- ☐ Reduces use of Alt. Fuel
- ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)
- ☐ Other: _____

Transmission Station Integrity-PHMSA- Canarsie Gate Station



Type: ☒ Project ☐ Program	Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220101581	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☒ Mandated ☐ Reliability ☐ Non-Infrastructure		
Annual Program: ☐	Estimated Start Date: 04/01/2024	Estimated In-Service Date: 04/01/2028
Status: ☐ Initiation/Planning ☒ In-Progress (Projects Only) ☐ On-Going (Programs Only)		
Sponsor: Leyble, Dennis	Business Contact: Adesina, Risikat	

Work Description:

Canarsie gate station is a 1958/1961 vintage station located in Brooklyn, NY 11236. The inlet and outlet pressures are 350 psig and 60 psig, respectively. This station has a max flow of 3659 MCFH. The station has four runs, each with a 6" Fisher 1098 HEGR safety regulator and an 8" Fisher 667 ET Flow Control Valve in the district vault. There are two (2) 2" Garret relief valves as the over pressurization protection for the four runs. Gas entering the station is heated with a triple 770 CWT dry line heater. Due to missing material test reports and hydrostatic testing records, this station falls out of compliance with PHMSA regulations. To bring the station back into compliance, a station refurbishment will be completed. The scope of work will include:

- Replacement of station piping with missing DOT CMTR and hydrostatic testing records. All piping shall be below 20% SMYS at MAOP
- Installation of OPP and strainer
- Replacement of safety and district vaults
- Installation of bilco doors and associated drainage systems for new vaults
- Replacement of vent poles
- Upgrade of all telemetry and I&C equipment
- Removal of blowoff stack and associated appurtenances
- Removal of legacy odorizer vault and any remaining tubing that leads to the odorizer building
- Removal of obsolete gas scrubbers (3) and replacement with a new basket strainer
- Installation of new primary regulators/pilots
- Installation of new dry line heater and heater fuel line
- Installation of new vaults and maintenance of existing vaults

Justification Summary:

In alignment with recent PHMSA regulatory updates, 49 CFR §192.624 (Maximum Allowable Operating Pressure Reconfirmation) and 49 CFR §192.517 (Pressure Test Recordkeeping Requirements), National Grid has completed a comprehensive review of all regulating station records subject to these provisions.

The review evaluated the accuracy and completeness of:

- Material specifications for installed assets.
- Hydrostatic pressure test documentation for associated piping and equipment.

Where records were found to be incomplete, unverifiable, or non-compliant with the new standards, National Grid has determined that full replacement of affected piping and equipment is the most effective and prudent approach to achieve compliance. This decision ensures adherence to PHMSA's requirements for traceable, verifiable, and complete records.

Under the current PHMSA mandate, all corrective actions, including replacement, must be completed no later than July 1, 2035.

Current Condition of the Station:

- Sections of station piping are missing DOT CMTR and hydrostatic testing records
- All through-wall penetrations are encased in concrete
- No OPP is installed
- 16" piping operating at 22% SMYS
- 24" piping operating at 26% SMYS
- Aging equipment in the primary vaults
 - Obsolete actuators on motor operated valves
 - Gate valves used as isolation valves
 - Regulators are 40+ years old with aging pilots
 - Various unused legacy equipment is still located in the primary vaults
- The function of the 24" check valve is no longer required; Bypass is left wide open
- Class III leak at check valve
- Check valve pit is in severe disrepair (partially excavated, corroded ladder; access doors no longer function)
- Gas scrubber is obsolete, and the manufacturing company is no longer in business
- Gas heater approaching expected useful life (20 years at time of construction)
- Gas heater does not consistently maintain vacuum seal
- Odorization is no longer performed at the station; Legacy odorizer equipment and pit only clutter the station
- Existing 12" blowdown stack/valve is no longer necessary
- Existing chromatograph is an obsolete, analog piece of equipment

Customer Benefits:

The scope of work proposed will improve the current condition of Canarsie gate station and will bring the station into compliance with the PHMSA ruling while improving system reliability. The new enhancements will provide improved over-pressurization protection for critical station assets thereby maintaining system integrity under abnormal operating conditions and ensuring a higher level of safety for downstream customers.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 11,729,000
OPEX	
TOTAL	\$ 11,729,000

Supplemental Information

Alternatives

Alternative 1: Rebuild in Place

- Build a new station from inlet to outlet valve on existing property
- Install new vaults / maintain existing secondary building
- Install new gas heater
- Remove gas scrubbers and legacy odorizing equipment
- Remove existing 24" 60# check valve; replace with new remote outlet valve

Alternative 2: Different Refurbishment Strategy

- Replace regulator runs 3 & 4 (1961) from the inlet header to the outlet header
- Maintain outlet header and piping if Hardness, Strength, and Ductility (HSD) Testing confirms X60 or greater
- Maintain primary vault No. 2 & regulator runs 1 & 2 (1958)
- Maintain existing secondary building and legacy odorizer building
- Replace / remove check valve and restore site
- Replace rehabbed pieces of pipe
- Maintain scrubber & gas heater

Alternative 3: Non-Pipes Alternatives ("NPAs")

Risk of No Action: Failure to execute this project would result in non-compliance with applicable PHMSA regulations, including mandated safety, integrity management, and recordkeeping requirements. Non-action increases the likelihood of regulatory enforcement, civil penalties, and operational restrictions, while also elevating system risk due to unmet minimum federal safety standards.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☒ Yes ☐ No
2. For KEDNY, is the cost of the project less than \$750k?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered "yes," the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company's NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: The project is not eligible for an NPA solution because it impacts the critical reliability of the local gas system, and it will be completed within 24 months of the construction start date.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☐ Yes ☒ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? This project is not located in an area designated as a disadvantaged community (DAC) and will not impact the existing routing.
3. Will the project contribute to GHG emission reductions on the Company's gas network? ☐ Yes ☒ No
4. Please explain the project's GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☐ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☒ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☒ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☒ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☒ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☒ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (e.g., water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:

Benefits

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are "communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law]." Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

Reliability Benefits ☐ Supports growth forecast ☐ Addresses supply/capacity constraint or supply diversity needs ☐ Addresses storm/climate change resiliency Other Customer Benefits: ☐ Improves Customer Satisfaction ☐ Reflects efficiency savings of \$____ ☐ Reduction in Billing Errors and Re-Bills ☐ Supports implementation of Gas Business Enablement Safety Benefits: ☐ Enhances response time to Emergency Gas Leaks ☒ Enhances employee safety ☒ Increases automation (reduces human error) ☒ Enhances Public Safety ☒ Reduces Damages potential (<i>i.e., in the case of mapping system</i>) ☐ Addresses specific safety initiative: _____ Societal Benefits/Externalities: ☐ Emissions Reduction ☐ Reduces use of Alt. Fuel ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks) ☐ Other: _____	
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Transmission Station Integrity – PHMSA - Van Wyck Gate Station



Type: ☒ Project ☐ Program	Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220101578	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☒ Mandated ☐ Reliability ☐ Non-Infrastructure		
Annual Program: ☐	Estimated Start Date: 04/01/2023	Estimated In-Service Date: 03/31/2028
Status: ☐ Initiation/Planning ☒ In-Progress (Projects Only) ☐ On-Going (Programs Only)		
Sponsor: Leyble, Dennis	Business Contact: Adesina, Risikat	

Work Description:

Van Wyck Gate Station is a 1974 vintage station located in Queens, NY. The station has an inlet pressure of 350 psig and an outlet pressure of 15 psig. The current max flow through each the north line and south line of the station is 1350 MCFH. Van Wyck Gate Station is a three-stage station with four runs in parallel consisting of four (4) 8" FISHER 1098 HEGR in parallel for the first stage, four (4) 8" FISHER 667ED in parallel for the second stage, and four (4) 6" GARRETT TYPE "E" RELIEF in parallel for the third layer of Over Pressure Protection.

Work Scope will include:

- Replacement of all piping, including control lines missing DOT CMTR and hydrostatic test records
- Replacement of district and safety vaults
- Replacement of vent poles
- New manholes
- Replacement of regulators
- Installation of strainers
- Replace third layer of protection (OPP)

Justification Summary:

In alignment with recent PHMSA regulatory updates, 49 CFR §192.624 (Maximum Allowable Operating Pressure Reconfirmation) and 49 CFR §192.517 (Pressure Test Recordkeeping Requirements)—National Grid has completed a comprehensive review of all regulating station records subject to these provisions.

The review evaluated the accuracy and completeness of:

- Material specifications for installed assets.
- Hydrostatic pressure test documentation for associated piping and equipment.

Where records were found to be incomplete, unverifiable, or non-compliant with the new standards, National Grid has determined that full replacement of affected piping and equipment is the most effective and prudent approach to achieve compliance. This decision ensures adherence to PHMSA's requirements for traceable, verifiable, and complete records.

Under the current PHMSA mandate, all corrective actions, including replacement, must be completed no later than July 1, 2035.

Current condition of the station:

- Current station piping missing DOT CMTR and hydrostatic test records
- All through wall pipe penetration in concrete
- Outdated Remote Terminal Unit (RTU) equipment

Customer Benefits:

The reconstruction of the regulating station, followed by hydrostatic pressure testing, will ensure the gate station meets PHMSA compliance requirements and enhances system integrity. The upgraded station design will increase capacity, improving operational reliability and ensuring adequate supply to meet peak customer demand

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 10,000,000
OPEX	
TOTAL	\$ 10,000,000

Supplemental Information

Alternatives

Alternative 1: Build new station and retire old station. Complete rebuild of the station in a new location, install new station piping, install new vaults, access doors, install new telemetry cabinets, new vent poles, strainer and add OPP. This alternative was not selected as the primary option because the existing location of the station is adequate. (Not recommended)

Alternative 2: Do Nothing/Deferral. The consequences of not completing the work could ultimately result in the station being out of compliance with PHMSA regulations and lead to substantial fines. (Not Recommended)

Alternative 3: Non-Pipes Alternatives (“NPAs”)

Risk of No Action: Failure to execute this project would result in non-compliance with applicable PHMSA regulations, including mandated safety, integrity management, and recordkeeping requirements. Non-action increases the likelihood of regulatory enforcement, civil penalties, and operational restrictions, while also elevating system risk due to unmet minimum federal safety standards.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☒ Yes ☐ No
2. For KEDNY, is the cost of the project less than \$750k?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: This project does not qualify for replacement with an NPA as it is projected to be completed within 24 months.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☐ Yes ☒ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? This project is dependent on existing asset location and does not fall within a DAC.
3. Will the project contribute to GHG emission reductions on the Company’s gas network? ☐ Yes ☒ No
4. Please explain the project’s GHG impact. Please see Exhibit _____ (GIOP-6) for the project's GHG emission impact.

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].” Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

Checklist of impacts:

- ☐ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☒ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☒ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☒ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☒ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☒ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:**Benefits****Reliability Benefits**

- ☐ Supports growth forecast
- ☐ Addresses supply/capacity constraint or supply diversity needs
- ☐ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☐ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☒ Enhances employee safety
- ☒ Increases automation (reduces human error)
- ☒ Enhances Public Safety
- ☒ Reduces Damages potential (*i.e., in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☒ Emissions Reduction
- ☐ Reduces use of Alt. Fuel
- ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)
- ☐ Other: _____

Gas Reliability

Type: ☐ Project ☒ Program	Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220000311	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☐ Mandated ☒ Reliability ☐ Non-Infrastructure		
Annual Program: ☒	Estimated Start Date:	Estimated In-Service Date:
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☒ On-Going (Programs Only)		
Sponsor: Metzдорff, Peter	Business Contact: Santangelo, Amanda E.	

Work Description:

The Gas System Reliability program includes capital projects required to maintain system minimum pressures on the gas network in the event of an abnormal operating condition (failure involving a regulator station, gate station, critical main or other major pressure facility on the system).

Justification Summary:

Gas planning reliability concerns include transmission and distribution systems with a limited number of feeds (*i.e.*, take stations or regulator stations), systems that are either weakly integrated or consist of long single-feed laterals, networks that contain a wide variety of operating pressures, and varying design philosophies associated with system and supply redundancy (*e.g.*, production plants, take stations, regulator stations).

Projects in this program are aimed at improving overall system reliability and include, but are not limited to, eliminating farm-tap installations, eliminating distribution systems fed by a single district regulator (*i.e.*, single-feed systems) and isolated LP systems, eliminating nonstandard pressure systems, and resiliency projects aimed at addressing areas of the system where greater than 5,000 customers would lose service if a critical pipeline facility becomes inoperable when the average daily temperature is 15 degrees Fahrenheit.

Customer Benefits:

The Gas System Reliability program ensures that service is maintained in the event of a failure on a major pressure facility. Reliability is improved by adding supply flexibility, integrating single feed systems, and making progress to eliminate single feed systems. Without this program, greater numbers of customers are at risk of losing service in the event of a facility failure.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 20,040,723
OPEX	
TOTAL	\$ 20,040,723

Alternatives

Alternative 1: Do Nothing. The consequences of not completing the proposed work would result in a failure to take advantage of cost-effective ways to reduce service interruption risk and improve distribution system reliability in a proactive manner as discussed above. This alternative would continue to expose customers to the risk of service loss in the event of abnormal operating conditions (e.g., unexpected shutdown of a pipeline facility) or severe flooding.

Alternative 2: Non-Pipes Alternative (“NPAs”) This alternative is rejected because it does not meet the suitability screening.

Risk of No Action: Removal of the Gas Planning Reliability program increases risk of system failures including pressures below minimum design levels and possible customer outages.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☒ Yes ☐ No
2. For KEDNY, is the cost of the project less than \$750k?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

If yes, please briefly explain the results: See above NPA Suitability Screening criteria. This program is not applicable as these standard projects affect the critical reliability of the gas system.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? Some of the projects in this program fall under and around DAC regions. The locations were determined based on specific on-system need and existing local infrastructure that will maximize affect. Moreover, projects routing is determined based on distribution system need, constructability of below grade infrastructure, and cost. The impact on the surrounding

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].” Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

area will be consistent with standard utility infrastructure work, which is temporary in nature. The Company will minimize the construction impact on the community, where possible.

3. Will the project contribute to GHG emission reductions on the Company's gas network? ☒ Yes ☐ No

4. Please explain the project's GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☐ Vehicle emissions from truck rolls
- ☐ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☐ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☒ Other:

If other is checked, identify source: This program will increase GHG emissions over the course of the rate case based on the total amount of new plastic main that is expected to be installed.

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☒ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (e.g., water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program: Synergi Modeling

Benefits

Reliability Benefits

- ☐ Supports growth forecast
- ☐ Addresses supply/capacity constraint or supply diversity needs
- ☐ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☐ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☒ Enhances response time to Emergency Gas Leaks
- ☐ Enhances employee safety
- ☐ Increases automation (reduces human error)

☒ Enhances Public Safety ☐ Reduces Damages potential (<i>i.e., in the case of mapping system</i>) ☐ Addresses specific safety initiative: _____ <u>Societal Benefits/Externalities:</u> ☒ Emissions Reduction \$ ☐ Reduces use of Alt. Fuel ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks) ☐ Other: _____	
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Gas Reliability - Newtown Creek Crossing Relocation



Type: ☒ Project ☐ Program		Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220102106		Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☐ Mandated ☒ Reliability ☐ Non-Infrastructure			
Annual Program: ☐		Estimated Start Date: April 2027	Estimated In-Service Date: December 2029
Status: ☒ Initiation/Planning ☐ In-Progress (Projects Only) ☐ On-Going (Programs Only)			
Sponsor: Metzдорff, Peter		Business Contact: Santangelo, Amanda	

Work Description:

The Newtown Creek Crossing Relocation project installs approximately 825 feet of 24" 350 psig ST transmission main on Ash St, between Manhattan Ave and McGuinness Blvd, to connect with Con Edison's relocated Newtown Creek metering station. This project ensures that the gas infrastructure remains interconnected, thereby maintaining all the benefits and reliability of the New York Facilities system.

Justification Summary:

Federal (49 CFR 192.623) and New York State (16 NYCRR 255.623) regulations require the Company to maintain minimum pressures on the gas system necessary to maintain reliable service to all firm customers. KEDNY's gas system is designed for a peak day with an average temperature equal to 0°F (65HDD – Heating Degree Days), with five percent of the daily send-out as a peak hour. The peak demand is based on the same forecast utilized to develop the gas supply portfolio.

This project maintains the interconnection at Newtown Creek in response to Con Edison's project to relocate the custody transfer metering station and main crossing. Without this project, there would be a significant supply shortfall in the KEDNY service territory with customer outages likely at design conditions.

Customer Benefits:

Con Edison is relocating their Newtown Creek custody transfer metering station from Queens to Brooklyn to address system integrity concerns for the existing Newtown Creek custody transfer metering station and the Newtown Creek main crossing. This project is in response to Con Edison's project to ensure that National Grid's transmission main remains interconnected with the relocated Newtown Creek custody transfer metering station. This will maintain continuity of the New York Facilities assets across both companies, retaining the reliability and supply deliverability provided through the New York Facilities Agreement. Without this project, there would be a significant supply shortfall with customer outages likely at design conditions.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 1,000,000
OPEX	
TOTAL	\$ 1,000,000

Supplemental Information

Alternatives

Alternative 1: Do Nothing – This alternative is rejected as it would reduce reliability and result in a supply shortfall with customer outages likely.

Alternative 2: Non-Pipes Alternatives (“NPAs”) – This alternative is rejected as it affects the critical reliability of the gas system and does not meet the NPA Screening and Suitability Criteria.

Risk of No Action: A decision to do nothing would lead to a failure to comply with the regulations defined by Federal and New York State codes as a supply shortfall would exist and conditions would continue to decay resulting in customer outages. In addition, restrictions on sales activities would be required in constrained areas and the Company could find itself in violation of its tariff.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☐ Yes ☒ No
2. For KEDNY, is the cost of the project less than \$750k? For KEDLI, is the cost of the project less than \$500k?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: This project is not eligible as it affects the critical reliability of the gas system and an NPA effort would not mitigate that risk.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? Project routing is determined based on system need, constructability of below ground infrastructure, and cost. The impact on the surrounding area will be consistent with below ground utility infrastructure work, which is temporary in nature. The Company will minimize the construction impact on the community, where possible.
3. Will the project contribute to GHG emission reductions on the Company’s gas network? ☐ Yes ☒ No

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].” Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

4. Please explain the project's GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☐ Vehicle emissions from truck rolls
- ☐ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☐ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☒ Other:

If other is checked, identify source: This project will involve the installation of new gas main, which results in a marginal increase in GHG emissions over the course of the rate case.

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☒ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program: Synergi Modeling

Benefits

Reliability Benefits

- ☒ Supports growth forecast
- ☒ Addresses supply/capacity constraint or supply diversity needs
- ☐ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☐ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☐ Enhances employee safety
- ☐ Increases automation (reduces human error)
- ☐ Enhances Public Safety
- ☐ Reduces Damages potential (*i.e., in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

	<u>Societal Benefits/Externalities:</u> ☐ Emissions Reduction ☐ Reduces use of Alt. Fuel ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks) ☐ Other: _____	

Gas Reliability - System Automation



Type: ☐ Project ☒ Program		Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220000323		Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☐ Mandated ☐ Reliability ☐ Non-Infrastructure			
Annual Program: ☒		Estimated Start Date:	Estimated In-Service Date:
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☒ On-Going (Programs Only)			
Sponsor: Leyble, Dennis		Business Contact: Adesina, Risikat	

Work Description:

This program will deploy Remote Terminal Units (RTUs) across multiple gate and regulator stations within KEDNY's service territory. RTUs will collect and transmit critical operational data—such as temperature, pressure, and flow—directly to the Gas Control Room. Where required, RTUs will also monitor gas detectors and intrusion alarms, while enabling Gas Control to remotely adjust flow and pressure set points at regulator stations. Data will be transmitted securely via phone lines or cellular networks.

The automation scope includes installing raise/lower controllers for remote pressure adjustments and integrating gas analyzers to measure gas composition and BTU content. These enhancements will provide real-time visibility and control, improving system responsiveness, reliability, and safety.

Justification Summary:

The system automation program is essential to improving system reliability and operational efficiency. By increasing automation at pressure regulating stations, Gas Control can quickly detect abnormal operating conditions, identify root causes, and take corrective action. This proactive approach aligns with federal Control Room Management regulations, which emphasize enhanced system awareness and timely response to abnormal conditions.

The program also supports the standardization of telemetry across KEDNY's gas transmission and distribution network. Leveraging automation and telemetry data improves network model calibration, enabling more accurate system analysis and better forecasting of future capital investments. This leads to optimized resource allocation and more efficient infrastructure planning.

Currently, a low percentage of KEDNY's pressure regulating stations rely on outdated paper chart recorders, while some existing telemetry equipment—such as modems and metering devices—has become obsolete. Upgrading these assets will ensure compliance with evolving regulatory requirements and industry best practices.

Customer Benefits:

This program will deliver a more reliable and resilient gas system, reducing the likelihood of customer outages. Enhanced automation and telemetry allow Gas Control to quickly identify the source and location of any system issue from the control center, enabling immediate crew dispatch and faster resolution. This proactive approach minimizes reliance on customer outage reports and significantly shortens response times.

Replacing outdated paper chart recorders with modern telemetry provides accurate, real-time pressure data, improving operational decision-making and supporting Gas Planning activities. These upgrades not only enhance system performance but also strengthen safety and compliance, ensuring customers benefit from a more secure and efficient gas network.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 1,921,510
OPEX	
TOTAL	\$ 1,921,510

Supplemental Information

Alternatives

Alternative 1: Do Nothing. Doing nothing does not meet the long-term company objective to actively manage system pressures and leak activity. This alternative will leave approximately 33% of this region without the ability to remotely manage operating pressures.

Alternative 2: Non-Pipes Alternatives (“NPAs”)

Risk of No Action: Failing to implement the system automation program creates significant regulatory and safety risks. Without upgraded telemetry, automation, and modern RTUs, Gas Control may be unable to meet federal Control Room Management requirements for real-time system awareness, reliable alarm monitoring, and timely response to abnormal operating conditions. Aging and obsolete equipment increases the likelihood of data gaps, delayed detection of unsafe pressure conditions, and slower emergency decision-making—all of which elevate the risk of safety incidents, service disruptions, and potential regulatory violations. Completing this program is essential to maintaining compliance, protecting system integrity, and ensuring the safety of both the public and field personnel.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☒ Yes ☐ No
2. For KEDNY, is the cost of the project less than \$750k?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☐ Yes ☒ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: This program does not qualify for replacement with an NPA as it addresses critical reliability of assets directly serving current customers.

CLCPA/GHG Analysis

1. **Is the project/program located in an area designated as a disadvantaged community (DAC)¹?** ☒ Yes ☐ No
2. **If so, explain how was the routing determined and how will the project impact the surrounding area?** This program is dependent on existing asset location and may fall within a DAC.
3. **Will the project contribute to GHG emission reductions on the Company's gas network?** ☐ Yes ☒ No
4. **Please explain the project's GHG impact.** Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☐ Vehicle emissions from truck rolls
- ☐ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☒ Dust from demolition of sidewalk / roads
- ☒ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☒ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☒ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☒ Use construction technologies that do not require venting.
- ☐ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:

Benefits

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are "communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law]." Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

Reliability Benefits

- ☐ Supports growth forecast
- ☐ Addresses supply/capacity constraint or supply diversity needs
- ☒ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☐ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$ ____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☒ Enhances employee safety
- ☒ Increases automation (reduces human error)
- ☒ Enhances Public Safety
- ☒ Reduces Damages potential (*i.e., in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☐ Emissions Reduction
- ☐ Reduces use of Alt. Fuel
- ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)
- ☐ Other: _____

Heater Upgrade Program - Burner Management System Upgrade & Fuel Train Replacement

Type: ☐ Project ☒ Program	Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220000316	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☐ Mandated ☒ Reliability ☐ Non-Infrastructure		
Annual Program: ☒	Estimated Start Date:	Estimated In-Service Date:
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☒ On-Going (Programs Only)		
Sponsor: Leyble, Dennis		Business Contact: Adesina, Risikat

Work Description:

The Company's gas heaters are designed to safely heat natural gas and prevent issues associated with low gas temperatures, such as thermal contraction, reduced material toughness and ice formation. The Heater Management Program is designed to deliver capital upgrades, system improvements, and new installations of gas heaters, boilers, and heat exchangers.

This initiative includes critical process safety enhancements, installation of advanced Burner Management System (BMS) controls, and fuel train upgrades. These improvements will strengthen system safety, reliability, operational efficiency, and reduce emissions. As part of the program, the company will upgrade BMS at three sites annually. Additional scope includes replacing heater glycol due to poor sample quality, flushing heaters with a non-acidic solution to clean heat exchangers and associated piping, and replenishing with new glycol. The project also encompasses installing new heater gaskets, adding Vortex Pilot heaters on high-pressure fuel trains, recoating heater piping, and implementing advanced insulation solutions to extend asset life.

Justification Summary:

This program is an annual capital improvement initiative designed to ensure the continued safety and reliability of the gas system. To establish the work plan and scope, all heaters in New York City undergo inspection and risk ranking. Data from annual Performance Testing (PT), Cathodic Protection (CP) testing, risk assessments, on-site inspections, and technical evaluations are analyzed for each pressure regulating station. These assessments consider factors such as pipe and equipment condition, operating pressure, regulator performance, and other critical data. Combined with the potential customer impact of a station outage, this information is used to prioritize and schedule projects within the capital improvement plan. The program addresses process safety concerns by upgrading burner management systems to modern standards, reducing operational risk and enhancing compliance.

Company policy, "Management of Cold Gas Temperatures," recommends heater installations where pressure reductions of 200 psi or more occur. A 200 psi pressure drop can lower gas temperature by approximately 14°F, causing outlet temperatures to fall below freezing if heat is not added. On a cold day, flowing gas temperatures may average 40°F or less; after a 200 psi reduction, gas may reach 26°F or lower. At these temperatures, frost heave can occur as ice forms below 32°F, and piping strength diminishes significantly below 20°F, increasing brittleness and failure risk.

The heaters included in this program are earmarked for full replacement as they approach the end of their service life. Constructed from carbon steel and containing a glycol-water mixture similar to automotive antifreeze, these heaters typically last about 25 years, depending on maintenance practices. Over time, steel tube integrity can degrade, leading to leaks.

Because these heaters are connected to transmission piping operating at high pressures, a leak or tube failure could have catastrophic consequences.

Customer Benefits:

The Heater Management Program delivers significant benefits to customers and the gas system by enhancing safety, reliability, and environmental performance. By replacing obsolete equipment and upgrading existing heaters, the program reduces the risk of pipeline failure, outages, and associated damages or incidents. These improvements help prevent service disruptions and minimize the likelihood of roadway or infrastructure interruptions.

In addition to reliability gains, the program supports environmental objectives by installing more efficient heater systems that lower emissions. Modernized burner management systems and fuel train upgrades will improve operational efficiency and reduce greenhouse gas output, aligning with sustainability goals. Overall, these enhancements ensure a safer, more resilient gas network while providing customers with dependable service and contributing to cleaner energy operations.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 1,505,969
OPEX	
TOTAL	\$ 1,505,969

Supplemental Information

Alternatives

Alternative 1: Process safety upgrades to burner management safety systems. These new systems provide safer and more efficient operation of the current heaters.

Alternative 2: Do Nothing. No action will negatively impact both the efficiency and operational safety of the heaters. Continued operation under unregulated conditions will cause the heaters to be overworked, leading to accelerated wear and a significant reduction in their expected service life.

Alternative 3: Non-Pipes Alternatives (“NPAs”)

Risk of No Action: No action will negatively impact both the efficiency and operational safety of the heaters. Continued operation under unregulated conditions will cause the heaters to be overworked, leading to accelerated wear and a significant reduction in their expected service life.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?

☒ Yes

☐ No

2. For KEDNY, is the cost of the project less than \$750k?

☐ Yes ☒ No

3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?

☐ Yes ☒ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: This project does not qualify for replacement with an NPA as it is projected to be completed within 24 months.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? This program/project is dependent on existing asset location and may fall within a DAC.
3. Will the project contribute to GHG emission reductions on the Company’s gas network? ☐ Yes ☒ No
4. Please explain the project’s GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☐ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☐ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☒ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☒ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].” Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

- ☒ Use construction technologies that do not require venting.
- ☐ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:

Benefits

Reliability Benefits

- ☐ Supports growth forecast
- ☐ Addresses supply/capacity constraint or supply diversity needs
- ☒ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☐ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$ ____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☒ Enhances employee safety
- ☒ Increases automation (reduces human error)
- ☒ Enhances Public Safety
- ☐ Reduces Damages potential (*i.e.*, *in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☐ Emissions Reduction
- ☐ Reduces use of Alt. Fuel
- ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)
- ☐ Other: _____

I&R - Reactive



Type: ☐ Project ☒ Program	Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220000510	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☐ Mandated ☒ Reliability ☐ Non-Infrastructure		
Annual Program: ☒	Estimated Start Date:	Estimated In-Service Date:
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☒ On-Going (Programs Only)		
Sponsor: Buczek, Jason	Business Contact: Buczek, Jason	

Work Description:

This program funds the capital repairs of deficiencies at pressure regulating facilities found during inspections and maintenance.

Justification Summary:

Instrumentation and Regulation (I&R) maintains and operates equipment critical for directing gas through the system and ensuring supply is made available when needed. This equipment consists of take stations, pressure regulating stations, critical valves and some commercial customer installations, and supports compressed natural gas (CNG) / non-pipes alternatives.

I&R reactive projects are unplanned capital work resulting from emergency situations, including, but not limited to, the replacement of station valves, pressure regulators and overpressure protection, and instrumentation. Emergency conditions may be identified during the course of mandated operations and maintenance (O&M) work or may be the result of external events (weather, vehicle, power surges, etc.).

The I&R reactive program supports capital replacements that must be completed at or near the time of discovery to maintain safe and reliable pressure regulation. Identified work that is not immediately required for safe and reliable operation of the pipeline can be incorporated into a long-term planning and replacement program.

Customer Benefits:

This program maintains pressure regulating facility reliability by facilitating rapid replacement of smaller individual pieces of equipment critical to safe operations. The primary benefit is the safe and reliable supply of natural gas to customers, free of unplanned outages due to facility shutdowns or malfunctions.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 1,113,346
OPEX	
TOTAL	\$ 1,113,346

Supplemental Information

Alternatives

Alternative 1: Do nothing / defer the work until it can be added to a long-term capital work plan. Without the ability to make Capital investments to remediate immediate risks, the department may be required to choose between safety and reliability in an emergency. Possible results include loss of service to customers, uncontained emissions to atmosphere, or serious injury to field workers.

Alternative 2: Non-Pipes Alternatives (“NPAs”)

Risk of No Action This is a reactive program to address repairs for on-system assets. If no action is taken the assets could be in jeopardy of non-compliance, or worse, it could lead to failures of the assets and public safety incidents.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☒ Yes ☐ No
2. For KEDLI or NMPC, is the cost of the project less than \$500k? For KEDNY, is the cost of the project less than \$750k?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: NPAs are not suitable for this program as it is reactive to address repairs for on-system assets.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? The program supports make-safe activities wherever existing I&R equipment is currently in service, which could be within DACs.
3. Will the project contribute to GHG emission reductions on the Company’s gas network? ☐ Yes ☒ No
4. Please explain the project’s GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].” Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☐ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☐ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:**Benefits****Reliability Benefits**

- ☒ Supports growth forecast
- ☒ Addresses supply / capacity constraint or supply diversity needs
- ☒ Addresses storm / climate change resiliency

Other Customer Benefits:

- ☐ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☒ Enhances employee safety
- ☒ Increases automation (reduces human error)
- ☒ Enhances Public Safety
- ☐ Reduces Damages potential
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☐ Emissions Reduction

	☐ Reduces use of Alt. Fuel ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks) ☐ Other: _____	

LNG - Blanket



Type: ☐ Project ☒ Program	Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220000350	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☐ Mandated ☒ Reliability ☐ Non-Infrastructure		
Annual Program: ☒	Estimated Start Date:	Estimated In-Service Date:
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☒ On-Going (Programs Only)		
Sponsor: Leyble, Dennis	Business Contact: Lumokso, Ray	

Work Description:

KEDNY's Liquefied Natural Gas ("LNG") Blanket Program provides for the safe, reliable, and compliant operation of the Greenpoint LNG Facility through procurement, installation, modification and/or enhancements to equipment, systems, and facilities. An effective LNG capital program allows for replacement of obsolete and/or deteriorating equipment, systems and facilities that are reaching the end of their useful lives, along with modifications to enhance the safe, reliable, compliant, and efficient operation. This program will extend the service life of critical production facilities and institute process safety improvements for plant equipment. Capital investments in the program consist of projects identified and planned for the fiscal year as well as projects to address emerging issues during the year.

The capital work to be sanctioned under this program includes, but is not limited to, the following:

- Upgrades and improvements to mechanical equipment and systems
- Upgrades to and replacement of electrical and control systems including safety shutdown systems
- Structural improvements of plant and facilities
- Procurement of capital tools and equipment
- Preliminary engineering and design of capital projects
- Retirement and/or decommissioning of equipment, plant, and facilities

The LNG Operations Capital Blanket provides for the replacement/modification of obsolete and/or deteriorating equipment and systems to ensure reliable and safe operation of the facilities. These efforts will extend the service life of critical production facilities. Capital investments in the program consist of projects identified in advance of the fiscal year as well as projects to address emerging issues during the year.

Justification Summary:

The LNG Blanket Program provides funding for near-term and emergent capital projects needed to maintain safety and reliability at the Greenpoint LNG facility by:

- (i) replacing obsolete and/or deteriorating equipment, systems, and facilities that are near the end of their useful lives; and
- (ii) modifying/enhancing equipment needed to operate facilities safely and reliably.

Customer Benefits:

The primary customer benefit is the continuous, safe, and reliable supply of natural gas without unplanned outages due to facility shutdowns. Serving as the principal source of "Peak Shaving" for New York City customers, the plant also plays a strategic role in the company's gas supply portfolio. The facility has two (2) LNG storage tanks with a total design capacity of 1.6 BCF of LNG. Greenpoint LNG facility has a design output of 290 MMSCFD of natural gas. LNG peak shaving facilities operates intermittently, supplying natural gas pipelines during periods of peak need as required.

This project will add further benefits by providing for the replacement/modification of obsolete and/or deteriorating equipment and systems to ensure reliable and safe operation and extend the service life of the facility. These efforts will ensure that we meet mandate requirements and contribute to the overall reliability of the plants. Capital investments in the blanket program consist of projects identified in advance of the fiscal year as well as projects to address emerging issues during the year.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 3,918,920
OPEX	
TOTAL	\$ 3,918,920

Supplemental Information

Alternatives

Alternative 1: Portable CNG. The only comparable alternative to LNG is portable CNG. The Company currently utilizes portable CNG skids to manage pressure conditions on the gas system. This is effective for boosting pressures at specific low points on the system. This alternative is rejected because replacing LNG with portable CNG is not feasible due to the flowrate required to match Greenpoint’s LNG output.

Alternative 2: Do Nothing. If the LNG Blanket Program investments are not made, there is a risk that the Greenpoint LNG resources will become unavailable during the heating season. This would require the purchase of higher cost city gate supplies (if available) and may result in financial penalties from pipelines if the Company cannot adhere to operational flow orders and other contractual requirements. The lack of LNG Plant availability could lead to customer outages during heating season resulting in a negative customer impact.

Any potential short-term savings of doing nothing are quickly outweighed by increased maintenance, operating and replacement costs. A “Do Nothing” alternative does not address potential reliability and safety risks associated with not replacing obsolete and/or deteriorating equipment, systems and facilities that are reaching the end of their useful life or modifying/enhancing equipment needed to operate facilities safely and reliably. These risks include:

- Deterioration of gas facilities/assets
 - severe reduction in useful service life
 - leaks – safety hazards and increased greenhouse gas emissions
 - unplanned maintenance and repairs
 - operators work around to continue system operations
- Potential loss or danger to customers and public

Alternative 3: Non-Pipes Alternatives (“NPAs”)

Risk of No Action: See Alternative 2.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☐ Yes ☒ No
2. For KEDNY, is the cost of the project less than \$750?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: Project is not suitable for an NPA as it affects the critical reliability of the gas system and mitigates integrity concerns. No NPA, or combination of NPAs, would remove the need for this project at this time.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area?
Project is within National Grid's property. Minimal impacts to the community.
3. Will the project contribute to GHG emission reductions on the Company’s gas network? ☐ Yes ☒ No
4. Please explain the project’s GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☒ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☒ Flare gas instead of venting to atmosphere, where feasible (LNG).

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].” Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☒ Use higher-pressure systems where practical to reduce heater emissions.
- ☒ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☒ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program: N/A

Benefits

Reliability Benefits

- ☐ Supports growth forecast
- ☒ Addresses supply/capacity constraint or supply diversity needs
- ☐ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☐ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☐ Enhances employee safety
- ☐ Increases automation (reduces human error)
- ☐ Enhances Public Safety
- ☐ Reduces Damages potential (*i.e., in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☐ Emissions Reduction
- ☐ Reduces use of Alt. Fuel
- ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)
- ☐ Other: _____

LNG - Auxiliary Power Units

Type: ☒ Project ☐ Program		Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220102132		Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☐ Mandated ☒ Reliability ☐ Non-Infrastructure			
Annual Program: ☐		Estimated Start Date: 11/1/2025	Estimated In-Service Date: 3/31/2029
Status: ☐ Initiation/Planning ☒ In-Progress (Projects Only) ☐ On-Going (Programs Only)			
Sponsor: Leyble, Dennis		Business Contact: Lumokso, Ray	

Work Description:

FDNY has recently required the National Grid Greenpoint LNG Facility to provide a redundant power source for the new Salt Water Pump House and Hydrant & Deluge System Upgrade projects. The plant currently has (3) backup engines that provide backup steam generation and backup power for low pressure vaporization send out. The goal would be to provide backup power to provide capacity for all of these needs. Preliminary studies have approximated a capacity of 6 MW with a natural gas fuelled generator set. The scope of this Auxiliary Power Unit project will be to analyse the most favourable Power Unit location, design and construct a power trench route, procure, install and commission and generator sets with all the necessary transformers & necessary switchgear that will provide backup power to appease the FDNY requirements as well as improve the reliability of the plant's emergency operations. The new Auxiliary Power Units will not be tasked with providing backup steam generation, a new backup boiler for the Boil off Gas Heater Upgrade Project is included in the scope of that project.

Justification Summary:

A letter from the FDNY dated 1/21/2025 is requiring the new Salt Water Pump House (SWPH) and the Hydrant & Deluge System to have an alternate power source to power the pumps in the event of a city-wide power outage. The new Salt Water Pump House will not be able to be commissioned without resolving this request. The plant's existing backup generators do not have the capacity required to meet this request (Existing backup capacity is currently (2) 300kW Generators totaling 600kW, the capacity required for the new SWPH is 6MW). The existing backup generators are severely outdated and becoming very difficult for the Operations team to maintain. Replacement parts have been scarce and seemingly difficult to find. Pursuing this project will fulfill the FDNY request, commission the new SWPH, & resolve the issue of the replacement of the existing outdated backup generators.

Customer Benefits:

Ensuring the Plant has a reliable backup power source in the event of a city-wide power outage further reinforces the Company's commitment to providing safe and reliable gas to our customers. Updating the severely aged generators keeps our community safe and puts the Company in a better position to provide resources to our customers when we get the call to serve.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 12,826,000
OPEX	
TOTAL	\$ 12,826,000

Supplemental Information

Alternatives

Alternative 1: Installation of Diesel Fueled generators: Diesel fueled generators will be of a higher cost (approx. \$1M more for equipment and approx \$300K+ in operational cost) and higher emissions. Higher costs for diesel generators will be contributed by additional environmental permitting & storage permits.

Alternative 2: Do Nothing/Defer Project: This will result in not being able to commission the new Salt Water Pump House. The FDNY has requested National Grid to provide a redundant power source for the new Salt Water Pump House in the event of a City-Wide Black out in order to commission that project. Failing to proceed with the APUs will prohibit National Grid from Commissioning.

Alternative 3: Non-Pipes Alternatives (“NPAs”)

Risk of No Action: Operational risk – Existing backup generators are severely outdated with no contingency unit. A city-wide power outage could be detrimental to the reliable operation of the plant, the safety of the employees & the public, and National Grid as a company.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☒ Yes ☐ No
2. For KEDNY, is the cost of the project less than \$750k?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: Project is not suitable for an NPA as it affects the critical reliability of the gas system and mitigates integrity concerns. No NPA, or combination of NPAs, would remove the need for this project at this time.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? Project is within National Grid's property. Minimal impacts to community.

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].” Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

3. Will the project contribute to GHG emission reductions on the Company's gas network? ☐ Yes ☒ No
4. Please explain the project's GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☒ Dust from demolition of sidewalk / roads
- ☒ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☒ Replace obsolete equipment with high efficiency, low emission technologies (CNG/LNG/PRE).
- ☒ Install methane leak detection equipment (CNG/LNG/PRE).
- ☒ Use higher pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☒ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (e.g., water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:

Benefits
Reliability Benefits ☐ Supports growth forecast ☐ Addresses supply/capacity constraint or supply diversity needs ☒ Addresses storm/climate change resiliency Other Customer Benefits: ☒ Improves Customer Satisfaction ☐ Reflects efficiency savings of \$____ ☐ Reduction in Billing Errors and Re-Bills ☐ Supports implementation of Gas Business Enablement Safety Benefits: ☐ Enhances response time to Emergency Gas Leaks ☒ Enhances employee safety ☐ Increases automation (reduces human error) ☒ Enhances Public Safety ☐ Reduces Damages potential (i.e., in the case of mapping system) ☐ Addresses specific safety initiative: _____ Societal Benefits/Externalities:

	☐ Emissions Reduction ☐ Reduces use of Alt. Fuel ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks) ☐ Other: _____	

LNG - Controls System Upgrade



Type: ☒ Project ☐ Program		Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code:220000354		Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☐ Mandated ☒ Reliability ☐ Non-Infrastructure			
Annual Program: ☐		Estimated Start Date: 7/29/2019	Estimated In-Service Date: 1/13/2029
Status: ☐ Initiation/Planning ☒ In-Progress (Projects Only) ☐ On-Going (Programs Only)			
Sponsor: Leyble, Dennis		Business Contact: Lumokso, Ray	

Work Description:

The plant controls at the Greenpoint LNG Facility consist of various hardware and software platforms that are dispersed throughout the facility. Operators interact with these systems through PC based human machine interfaces (HMIs) or push buttons and annunciators on the main control board or local control panels within the process areas. This project intends to perform upgrades and enhancements to the existing control system and operator interfaces by implementing a new 'balance of plant' (BOP) control system that will perform monitoring, control and alarm functions various process equipment and systems throughout the plant. This BOP system will include, but not be limited to the LNG Tank System, Vaporizers, Boiloff System, Odorant System, Utilities. The liquefier contains a dedicated DCS system to manage controls and will not be upgraded as part of this project.

Justification Summary:

The project will integrate existing independent controllers and interfaces into a modern hardware/software platform that standardizes the system components when practical. This will eliminate or replace obsolete equipment and enhance system performance. These upgrades will increase the plant's reliability and enable more efficient plant operation allowing operators to easily respond to any abnormal conditions, thus increasing plant safety. Standardizing hardware will also increase the plant maintainability and allow for future upgrades to be easily integrated into the new control system. Lastly the project will further improve plant reliability by installing redundant power supplies, power circuits, and fiber optic communications.

Customer Benefits:

The primary customer benefit is the continuous, safe, and reliable supply of natural gas without unplanned outages due to facility shutdowns. Serving as the principal source of "Peak Shaving" for New York City customers, the plant also plays a strategic role in the company's gas supply portfolio. The facility has two (2) LNG storage tanks with a total design capacity of 1.6 BCF of LNG. Greenpoint LNG facility has a design output of 290 MMSCFD of natural gas. LNG peak shaving facilities operate intermittently, supplying natural gas pipelines during periods of peak need as required.

This project will add further benefits by improving employee safety through increasing automation and implementing best design practices for human factors associated with operator interfaces (HMI) and alarm annunciation. This project will also increase the facility's reliability and resiliency through hardware standardization and redundant cabling/fiber runs.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 6,717,000

	OPEX	
	TOTAL	\$ 6,717,000

Supplemental Information

Alternatives

Alternative 1: Upgrade Control Systems, PLC System. This alternative intends to perform upgrades and enhancements to the existing control system and operator interfaces by implementing a new Balance-of-Plant (BOP) PLC system that will perform monitoring, control and alarm functions various process equipment and systems throughout the plant.

Alternative 2: Upgrade Control Systems, PLC-DCS System. This alternative intends to implement a Balance-of-Plant (BOP) with a mixed PLC-DCS system that will perform monitoring, control and alarm functions various process equipment and systems throughout the plant.

Alternative 3: Non-Pipes Alternatives (“NPAs”)

Risk of No Action: If this investment is not made, there is a risk that the Greenpoint LNG resources will become unavailable during the heating season. This would require the purchase of higher cost city gate supplies (if available) and may result in financial penalties from pipelines if the Company cannot adhere to operational flow orders and other contractual requirements. The lack of LNG Plant availability could lead to customer outages during heating season resulting in a negative customer impact.

Any potential short-term savings of doing nothing are quickly outweighed by increased maintenance, operating and replacement costs. A “Do Nothing” alternative does not address potential reliability and safety risks associated with not replacing obsolete and/or deteriorating equipment, systems and facilities that are reaching the end of their useful life or modifying/enhancing equipment needed to operate facilities safely and reliably. These risks include:

- Deterioration of gas facilities/assets
 - o severe reduction in useful service life
 - o leaks – safety hazards and increased greenhouse gas emissions
 - o unplanned maintenance and repairs
 - o operators work around to continue system operations
- Potential loss or danger to customers and public

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?

☐ Yes
 ☒ No
2. For KEDNY, is the cost of the project less than \$750k?

☐ Yes
 ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?

☒ Yes
 ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company's NPA Screening and Suitability Criteria?

☒ Yes

☐ No

Please briefly explain the results: Project is not suitable for an NPA as it affects the critical reliability of the gas system and mitigates integrity concerns. No NPA, or combination of NPAs, would remove the need for this project at this time.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? Project is within National Grid's property. Minimal impacts on the community.
3. Will the project contribute to GHG emission reductions on the Company's gas network? ☐ Yes ☒ No
4. Please explain the project's GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☐ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☒ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☒ Replace obsolete equipment with high efficiency, low emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☐ Use dust suppression measures (e.g., water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:

Benefits

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are "communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law]." Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

Reliability Benefits

- ☐ Supports growth forecast
- ☐ Addresses supply/capacity constraint or supply diversity needs
- ☐ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☐ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$ ____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☒ Enhances employee safety
- ☒ Increases automation (reduces human error)
- ☐ Enhances Public Safety
- ☐ Reduces Damages potential (*i.e., in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☐ Emissions Reduction
- ☐ Reduces use of Alt. Fuel
- ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)
- ☐ Other: _____

LNG - Nitrogen System Refurbishment



Type: ☒ Project ☐ Program		Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220001667		Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☐ Mandated ☒ Reliability ☐ Non-Infrastructure			
Annual Program: ☐	Estimated Start Date: 6/1/2022	Estimated In-Service Date: 5/22/2029	
Status: ☐ Initiation/Planning ☒ In-Progress (Projects Only) ☐ On-Going (Programs Only)			
Sponsor: Leyble, Dennis		Business Contact: Zhen Wu, Nancy	

Work Description:

The existing nitrogen supply system in the Greenpoint LNG plant is reaching the end of its service life as it was built in the late 1960s/early 1970s. The goal of this project is to replace the aging existing nitrogen system with a newer system.

The Greenpoint LNG (Liquefied Natural Gas) Facility has a nitrogen (N₂) supply system located adjacent to truck accessible roadway in the Service Facilities area outside the LNG plant, with an underground supply header that delivers nitrogen to the plant. The Greenpoint plant uses nitrogen in the following ways:

- Maintain dry cryogenic insulation spaces
- Purge flammable gas out of piping and equipment
- Used as an emergency back-up to instrument air system
- Cold blower seal gas
- Liquefier feed gas compressor seal gas
- Tail gas compressor loading valves

The project shall build a new nitrogen supply system within the LNG plant, reducing piping and minimize nitrogen leaks losses. The new Nitrogen Supply system will include foundation, piping, power, instrumentation, and controls systems required for the installation of two vertical liquid nitrogen storage tanks, an ambient air vaporizer, and a forced draft air vaporizer with a downstream in-line electric heater, all designed to provide vaporized nitrogen to the nitrogen piping header serving the Greenpoint LNG plant. Additionally, a truck off-loading station will be incorporated in the design for the delivery of liquid nitrogen into the nitrogen storage tanks.

Justification Summary:

This project proposes a replacement of the existing nitrogen system. Over time, the nitrogen tanks and associated equipment are starting to deteriorate, and leaks are becoming more frequent. The tanks area is also prone to flooding and outside of the LNG main gate putting them at risk to third party damage.

Customer Benefits:

The primary customer benefit is the continuous, safe, and reliable supply of natural gas without unplanned outages due to facility shutdowns. Serving as the principal source of "Peak Shaving" for New York City customers, the plant also plays a strategic role in the company's gas supply portfolio. The facility has two (2) LNG storage tanks with a total design capacity of 1.6 BCF of LNG. Greenpoint LNG facility has a design output of 290 MMSCFD of natural gas. LNG peak shaving facilities operates intermittently, supplying natural gas pipelines during periods of peak need as required. The Nitrogen System Refurbishment will improve plant reliability and safety by replacing obsolete equipment that is prone to leaks and will provide additional automation to the N₂ system.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 8,284,000
OPEX	
TOTAL	\$ 8,284,000

Supplemental Information**Alternatives****Alternative 1: Replace Outdated N2 Supply System and Install New System South of LNG Tanks**

- Design and install a new N2 supply system, new instruments and new piping up to the tie-in points to the LNG plant system. The new N2 supply system would be installed between the LNG tanks, south direction; this location aligns with FDNY's recommended setback distances. Pipe header will be above ground. A new pipe rack/ conduit support system would be designed and installed to support process piping and conduits from the new N2 tanks pad area. Part of the existing support system can be used for the routing.
- Remove the outdated N2 system after the new N2 system is operational
- The installation and operation of the new N2 system would improve plant operability and mitigate process safety risks. As a benefit of a new N2 system installation, it is expected that there will be a decrease in N2 truck delivery

Alternative 2: Replace Outdated N2 Supply System and Install New System North-West of the LNG Tanks

- Design and install a new N2 supply system, new instruments and new piping up to the tie-in points to the LNG plant system. The new N2 supply system would be installed North-West of the LNG tanks; this location aligns with FDNY's recommended setback distances. Pipe header will be above ground. A new pipe rack/ conduit support system would be designed and installed to support process piping and conduits from the new N2 tanks pad area. Part of the existing support system can be used for the routing
- Remove the outdated N2 system after the new N2 system is operational
- The installation and operation of the new N2 system would improve plant operability and mitigate process safety risks. Unlike other options, this option is closest to the public street.

Alternative 3: Replace Outdated N2 Supply System Without Changing Location

- Design and install a new N2 system in the same location to replace the existing N2 system. This location is outside the plant fence line and is still aligned with FDNY's recommended equipment setback distances but make it difficult for LNG check equipment during rounds. A new pipe rack/ conduit support system would be designed and installed to support process piping and conduits from the new N2 tanks pad area.

Alternative 4: Non-Pipes Alternatives ("NPAs")

Risk of No Action: The N2 supply system is from the 1960s/1970s. There are a record of repairs and leaks on the system. As such it is not recommended to do nothing or defer this project.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☐ Yes ☒ No
2. For KEDNY, is the cost of the project less than \$750k? For KEDLI, is the cost of the project less than \$500k?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: Project is not suitable for an NPA as it affects the critical reliability of the gas system and mitigates integrity concerns. No NPA, or combination of NPAs, would remove the need for this project at this time.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? Project is within National Grid's property. Minimal impacts to community.
3. Will the project contribute to GHG emission reductions on the Company’s gas network? ☐ Yes ☒ No
4. Please explain the project’s GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☒ Noise pollution from trucks and equipment
- ☒ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].” Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☐ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:

Benefits
<u>Reliability Benefits</u> ☐ Supports growth forecast ☐ Addresses supply/capacity constraint or supply diversity needs ☐ Addresses storm/climate change resiliency <u>Other Customer Benefits:</u> ☐ Improves Customer Satisfaction ☐ Reflects efficiency savings of \$____ ☐ Reduction in Billing Errors and Re-Bills ☐ Supports implementation of Gas Business Enablement <u>Safety Benefits:</u> ☐ Enhances response time to Emergency Gas Leaks ☒ Enhances employee safety ☒ Increases automation (reduces human error) ☐ Enhances Public Safety ☐ Reduces Damages potential (<i>i.e., in the case of mapping system</i>) ☐ Addresses specific safety initiative: _____ <u>Societal Benefits/Externalities:</u> ☐ Emissions Reduction ☐ Reduces use of Alt. Fuel ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks) ☐ Other: _____

LNG - Pump Upgrade (Tank 1)



Type: ☒ Project ☐ Program	Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220101229	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☐ Mandated ☒ Reliability ☐ Non-Infrastructure		
Annual Program: ☐	Estimated Start Date: 6/14/2025	Estimated In-Service Date: 11/02/2028
Status: ☐ Initiation/Planning ☒ In-Progress (Projects Only) ☐ On-Going (Programs Only)		
Sponsor: Leyble, Dennis	Business Contact: Lumokso, Ray	

Work Description:

This project aims to upgrade the existing LNG Pumps to improve reliability. There are three low pressure LNG pumps located at Tank 1, each rated to supply 50MMSCFD of LNG to the vaporizers. The pumps are original to the plant and has over 50 years of service. An internal pump inspection and replacement will address issues related to these aging pumps. The existing LNG Pumps were manufactured by Bingham Pump Co. and are externally mounted directly to a submerged containment pot (reservoir). The scope of this project is to replace the three existing LNG pumps, pump motors and associated electrical equipment for LNG Tank 1. Safety Relief Valves RV-170 and RV-171 will also be replaced. The scope of work includes installation of (3) new LNG pumps and associated pump cans, 75HP pump motors, and associated supports. Removal of (3) existing LNG pumps and associated pump cans, motors, and supports. Fabrication and installation of an elevated starter rack and extended personnel platform with all associated electrical equipment, conduit to support electrical and control wiring.

Justification Summary:

The primary driver for this project is reliability. The pumps have been in service since the plant was commissioned in 1968. There have been little upgrades to the pumps since commissioning. Replacing the T1 LNG LP Pumps with new ones will decrease the risk of service interruptions.

Customer Benefits:

Replacing the T1 LNG LP pumps with new ones will add a benefit of replacing such old assets (running -even intermittently- for almost 50 years now) with new ones with much less operation problems in addition to higher reliability and efficiency. The project is required to meet the DNY Gas supply scenario planning requirements. Executing this project will result in delivering the expected gas consumption requirements and will avoid deficiencies in satisfying gas customers' needs. The primary customer benefit is the continuous, safe, and reliable supply of natural gas without unplanned outages due to facility shutdowns. Serving as the principal source of "Peak Shaving" for New York City customers, the plant also plays a strategic role in the company's gas supply portfolio. The facility has two (2) LNG storage tanks with a total design capacity of 1.6 BCF of LNG. Greenpoint LNG facility has a design output of 290 MMSCFD of natural gas. LNG peak shaving facilities operates intermittently, supplying natural gas pipelines during periods of peak need as required.

This project will add further benefits by replacing equipment that is prone to operability issues and equipment that has inhibited flow of boiloff to the distribution system. New equipment will provide modern control system, increase the equipment reliability, and remove any bottlenecks in the boiloff system. This will also result in improved plant safety by eliminating potential for gas to steam leaks and reducing maintenance frequency that requires equipment to be isolated and opened.

Funding Detail

Cost Breakdown:

		FY28	
	CAPEX	\$ 5,895,000	
	OPEX		
	TOTAL	\$ 5,895,000	

Supplemental Information

Alternatives

Alternative 1: Dismantling **existing pumps, sending them to manufacturer for refurbishment.** This alternative would be lower cost, however due to the age of the pumps there are concerns regarding rate of success for refurbishment. This would put the plant at risk of being unable to refurbish the equipment and ultimately needing to replace the pumps as a solution.

Alternative 2: Do nothing / Defer project. The Tank 1 LNG pumps has been in service since it was commissioned in 1968. Since the time of its commissioning, there have been little upgrades to the pumps. An overhaul of the pump is necessary to ensure the continuation of reliable service and to achieve future demand targets to meeting customer's needs. No action would increase the risk of an interruption of reliable service - By not completing this project, it would not accomplish either goal. As time progresses, maintenance of these pumps will become increasingly challenging as replacement parts will no longer be manufactured.

Alternative 3: Non-Pipes Alternatives ("NPAs")

Risk of No Action: See Alternative 2.

NPA Suitability Screening

- Is the project construction expected to commence and be completed within 24 months?
☐ Yes ☒ No
- For KEDNY, is the cost of the project less than \$750k? For KEDLI, is the cost of the project less than \$500k?
☐ Yes ☒ No
- Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered "yes," the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company's NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: Project is not suitable for an NPA as it affects the critical reliability of the gas system and mitigates integrity concerns. No NPA, or combination of NPAs, would remove the need for this project at this time.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? Project is within National Grid's property. Minimal impacts to community.
3. Will the project contribute to GHG emission reductions on the Company's gas network? ☐ Yes ☒ No
4. Please explain the project's GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☒ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☒ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☒ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☒ Replace obsolete equipment with high efficiency, low emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☐ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:

Benefits

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are "communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law]." Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

Reliability Benefits

- ☒ Supports growth forecast
- ☒ Addresses supply/capacity constraint or supply diversity needs
- ☐ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☐ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☐ Enhances employee safety
- ☐ Increases automation (reduces human error)
- ☒ Enhances Public Safety
- ☐ Reduces Damages potential (*i.e., in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☐ Emissions Reduction
- ☐ Reduces use of Alt. Fuel
- ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)
- ☐ Other: _____

LNG - Relocate Maintenance Area & New Control Building



Type: ☒ Project ☐ Program		Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220000357		Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☐ Mandated ☒ Reliability ☐ Non-Infrastructure			
Annual Program: ☐	Estimated Start Date: 3/1/2017	Estimated In-Service Date: 8/1/2031	
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☐ On-Going (Programs Only)			
Sponsor: Leyble, Dennis		Business Contact: Lumokso, Ray	

Work Description:

This project proposes to relocate the maintenance facility and control room facility at the Greenpoint LNG plant. The plant will take advantage of this opportunity to consolidate the control room and maintenance facility into a centralize building, in hopes of improving plant-wide communications, increasing operating efficiency, and reducing costs.

The new site is located at the northwest portion of the site near Varick Ave and Lombardy St of the Greenpoint LNG property. The two-story building will include additional office space, conference rooms, common area, shower/locker facility, maintenance area and workshops. Located at a higher elevation, the buildings natural overlook will also allow operators to monitor processes, increase security and oversee construction activities.

A later project will install a new control center within the building to bring a more advance control system and to better protect operations personnel on site.

Justification Summary:

Consolidation of the control room and the maintenance building will ensure a more cohesive work environment and improve communication between the operations and maintenance teams.

The new building will increase safety of plant personnel by relocating operations staff from an old control building that is located near process areas to a safer location within the plant. The new location is also at a higher elevation allowing the operators to easily monitor the process areas, ensure security at the site and oversee construction activities.

Customer Benefits:

The primary customer benefit is the continuous, safe, and reliable supply of natural gas without unplanned outages due to facility shutdowns. Serving as the principal source of "Peak Shaving" for New York City customers, the plant also plays a strategic role in the company's gas supply portfolio. The facility has two (2) LNG storage tanks with a total design capacity of 1.6 BCF of LNG. Greenpoint LNG facility has a design output of 290 MMSCFD of natural gas. LNG peak shaving facilities operates intermittently, supplying natural gas pipelines during periods of peak need as required. This project will improve operational efficiency and reliability at the facility ensuring that services are maintained to Gas clients.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 3,640,000

	OPEX	
	TOTAL	\$ 3,640,000

Supplemental Information

Alternatives

Alternative 1: Do nothing / Defer. Without this investment, there maintenance and operations teams will continue to be separated. A centralized building will improve plant-wide communications, increase operating efficiency, and reduce costs.

Alternative 2: Non-Pipes Alternatives (“NPAs”)

Risk of No Action

Continued separation of Maintenance and Operations teams, leading to risk of miscommunication, inefficiency, and potential interruptions to our gas system.

NPA Suitability Screening

- Is the project construction expected to commence and be completed within 24 months?
☐ Yes ☒ No
- For KEDNY, is the cost of the project less than \$750k? For KEDLI, is the cost of the project less than \$500k?
☐ Yes ☒ No
- Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☒ No

Please briefly explain the results:

Project is not suitable for an NPA as it affects the critical reliability of the gas system and mitigates integrity concerns. No NPA, or combination of NPAs, would remove the need for this project at this time.

CLCPA/GHG Analysis

- Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
- If so, explain how was the routing determined and how will the project impact the surrounding area? Project is within National Grid's property. Minimal impacts to community

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].” Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

3. Will the project contribute to GHG emission reductions on the Company's gas network? ☐ Yes ☒ No
4. Please explain the project's GHG impact. Direct - Quantifiable. This project is required for reliability. The project is expected to result in increased energy consumption for the new structure of approximately 88,320 kWh/year and 739 mmBTU/year, which would result in incremental emissions of 78.44 MT CO₂e.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☒ Dust from demolition of sidewalk / roads
- ☒ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☒ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (e.g., water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:

Benefits	
<u>Reliability Benefits</u>	
☐	Supports growth forecast
☐	Addresses supply/capacity constraint or supply diversity needs
☐	Addresses storm/climate change resiliency
<u>Other Customer Benefits:</u>	
☐	Improves Customer Satisfaction
☐	Reflects efficiency savings of \$____
☐	Reduction in Billing Errors and Re-Bills
☐	Supports implementation of Gas Business Enablement
<u>Safety Benefits:</u>	
☐	Enhances response time to Emergency Gas Leaks
☒	Enhances employee safety
☐	Increases automation (reduces human error)
☒	Enhances Public Safety

☒ Reduces Damages potential (<i>i.e., in the case of mapping system</i>) ☐ Addresses specific safety initiative: _____ <u>Societal Benefits/Externalities:</u> ☐ Emissions Reduction ☐ Reduces use of Alt. Fuel ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks) ☐ Other: _____	

LNG - Tail Gas Compressor Upgrade



Type: ☒ Project ☐ Program		Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220001132		Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☐ Mandated ☒ Reliability ☐ Non-Infrastructure			
Annual Program: ☐		Estimated Start Date: 6/1/2022	Estimated In-Service Date: 8/21/2029
Status: ☒ Initiation/Planning ☐ In-Progress (Projects Only) ☐ On-Going (Programs Only)			
Sponsor: Leyble, Dennis		Business Contact: Zhen Wu, Nancy	

Work Description:

Greenpoint LNG plant uses the Tail Gas Compressor (TGC) to compress boil-off gas (BOG) from the storage tanks and the low-pressure (LP) flash gas from the liquefaction unit into a 15-psig distribution system.

The existing TGC was installed in the late 1960/early 1970s. This project will replace and modernize this specific piece of old gas processing equipment, along with its auxiliary equipment. After the new compressor is commissioned, the existing TGC will be decommissioned and removed.

In addition, this project will upgrade two manual 30" underground valves, V-95 and V-141, used to direct flow between the 15 psig and 60 psig plant outlet lines. New gearboxes will be installed to bring the manual operator above grade, and position switches will be installed such that the open/closed status can be remotely monitored.

Justification Summary:

The tail gas compressor has seen a significant increase in maintenance costs and a significant decrease in reliability. The project is to replace the aging tail gas compressor with a new compressor to handle simultaneous flow from LP Flash Gas and Boiloff Gas.

Customer Benefits:

The primary customer benefit is the continuous, safe, and reliable supply of natural gas without unplanned outages due to facility shutdowns. Serving as the principal source of "Peak Shaving" for New York City customers, the plant also plays a strategic role in the company's gas supply portfolio. The facility has two (2) LNG storage tanks with a total design capacity of 1.6 BCF of LNG. Greenpoint LNG facility has a design output of 290 MMSCFD of natural gas. LNG peak shaving facilities operate intermittently, supplying natural gas pipelines during periods of peak need as required.

The Tail Gas Compressor will improve plant safety, reliability, and contribute to the storm hardening effort by replacing obsolete equipment, increasing plant automation, and adding resiliency to the boiloff system in case the plant's jet compressors are flooded.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 14,760,000
OPEX	

	TOTAL	\$ 14,760,000

Supplemental Information

Alternatives

Alternative 1: Replace Outdated Compressor and Upgrade V-95 and V-141

- New compressor was designed to compress low pressure gas to 15 psig distribution network. Compressor is sized to handle simultaneous flow from LP Flash gas and Boiloff Gas
- In addition, refurbish V-95 and V-141 to improve the operability and add positioning feedback to Operations

Alternative 2: Replace Outdated Compressor

- New compressor designed to compress low pressure gas to 60 psig distribution network. Compressor is sized to handle simultaneous flow from the following sources:
 - LP Flash gas
 - Boiloff Gas
 - Tail Gas

Alternative 3: Non-Pipes Alternatives (“NPAs”)

Risk of No Action: There is a record of repairs and leaks on the system. As such it is not recommended to do nothing or defer this project.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☐ Yes ☒ No
2. For KEDNY, is the cost of the project less than \$750k? For KEDLI, is the cost of the project less than \$500k?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: Project is not suitable for an NPA as it affects the critical reliability of the gas system and mitigates integrity concerns. No NPA, or combination of NPAs, would remove the need for this project at this time.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? Project is within National Grid's property. Minimal impacts to community.
3. Will the project contribute to GHG emission reductions on the Company's gas network? ☐ Yes ☒ No
4. Please explain the project's GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☒ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☐ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:

Benefits

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are "communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law]." Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

Reliability Benefits

- ☐ Supports growth forecast
- ☐ Addresses supply/capacity constraint or supply diversity needs
- ☐ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☐ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☒ Enhances employee safety
- ☒ Increases automation (reduces human error)
- ☐ Enhances Public Safety
- ☐ Reduces Damages potential (*i.e., in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☐ Emissions Reduction
- ☐ Reduces use of Alt. Fuel
- ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)
- ☐ Other: _____

LNG - Tank 2 Foundation Heaters

Type: ☒ Project ☐ Program		Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220101204		Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☐ Mandated ☒ Reliability ☐ Non-Infrastructure			
Annual Program: ☐	Estimated Start Date: 3/1/2020	Estimated In-Service Date: 5/26/2027	
Status: ☐ Initiation/Planning ☒ In-Progress (Projects Only) ☐ On-Going (Programs Only)			
Sponsor: Leyble, Dennis		Business Contact: Lumokso, Ray	

Work Description:

The Greenpoint LNG Facility's Tank 2 has a hot wire loop foundation heating system that was installed in the 1970's and is no longer operating at its original design capacity. Tank 2 is an Liquefied Natural Gas (LNG) storage tank that operates at cryogenic temperatures (-260 °F). The foundation heating system prevents the ground from freezing due to these cold temperatures. Several attempts have been made to repair the system by pulling the heating elements and reusing the existing conduits to limited success. Many of the conduits collapsed or frozen preventing the elements from being replaced. As such the system has continued degrading and requires a long-term solution. This project is to upgrade the tank's existing foundation heating system, restoring it to its original capacity and modernizing the controls.

Justification Summary:

A failure to the foundation heating system could leave the storage tank highly susceptible to frost heaving due to the cryogenic temperatures they are being exposed to. The cryogenic temperatures inside the tank can seep through onto the surface and can cause ice to amass on the ground. Frost heaving can also create cracks in the structure and foundation of the cryogenic tanks which might lead to LNG leaking.

Customer Benefits:

The primary customer benefit is the continuous, safe, and reliable supply of natural gas without unplanned outages due to facility shutdowns. Serving as the principal source of "Peak Shaving" for New York City customers, the plant also plays a strategic role in the company's gas supply portfolio. The facility has two (2) LNG storage tanks with a total design capacity of 1.6 BCF of LNG. Greenpoint LNG facility has a design output of 290 MMSCFD of natural gas. LNG peak shaving facilities operates intermittently, supplying natural gas pipelines during periods of peak need as required.

This project will improve the reliability and safety of the Greenpoint LNG Facility by providing a new tank foundation heating system with modern controls while mitigating the risk of foundation damage or LNG leaks due to frost heave.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 4,000,000
OPEX	
TOTAL	\$ 4,000,000

Supplemental Information

Alternatives

Alternative 1: Bore new heating conduits under tank. Modern boring technology allows for accurate installation of straight conduits beneath existing structures. This option is to install new conduits and a new electric heating system under Tank 2.

Alternative 2: Complete replacement of under tank heating conduit. Replace the existing foundation heating conduits with a modern equivalent. Tank 2 must be taken out of service, emptied, and purged with fresh air to make safe for entry. The tank floor will be removed, and conduits replaced.

Alternative 3: Do nothing / Defer. The condition of the heater has been deteriorating over time. If this issue is not addressed, or the project deferred the performance of the heating system will continue to decline.

Alternative 4: Non-Pipes Alternatives (“NPAs”)

Risk of No Action: See Alternative 3.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☐ Yes ☒ No
2. For KEDNY, is the cost of the project less than \$750k?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☒ No

Please briefly explain the results: Project is not suitable for an NPA as it affects the critical reliability of the gas system and mitigates integrity concerns. No NPA, or combination of NPAs, would remove the need for this project at this time.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].” Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

2. If so, explain how was the routing determined and how will the project impact the surrounding area? Project is within National Grid's property. Minimal impacts on the community.
3. Will the project contribute to GHG emission reductions on the Company's gas network? ☐ Yes ☒ No
4. Please explain the project's GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☒ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☐ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (e.g., water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:

Benefits	
<u>Reliability Benefits</u>	
☐	Supports growth forecast
☐	Addresses supply/capacity constraint or supply diversity needs
☐	Addresses storm/climate change resiliency
<u>Other Customer Benefits:</u>	
☐	Improves Customer Satisfaction
☐	Reflects efficiency savings of \$____
☐	Reduction in Billing Errors and Re-Bills
☐	Supports implementation of Gas Business Enablement
<u>Safety Benefits:</u>	
☐	Enhances response time to Emergency Gas Leaks
☒	Enhances employee safety
☒	Increases automation (reduces human error)
☒	Enhances Public Safety

☒ Reduces Damages potential (<i>i.e., in the case of mapping system</i>) ☐ Addresses specific safety initiative: _____ <u>Societal Benefits/Externalities:</u> ☐ Emissions Reduction ☐ Reduces use of Alt. Fuel ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks) ☐ Other: _____	

Main Protection - Storm Hardening - Smart Meters

Type: ☐ Project ☒ Program	Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220000339	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☐ Mandated ☒ Reliability ☐ Non-Infrastructure		
Annual Program: ☒	Estimated Start Date:	Estimated In-Service Date:
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☒ On-Going (Programs Only)		
Sponsor: Khan, Saadat	Business Contact: Tambra, Muhammad	

Work Description:

This program provides funding for storm-hardening measures designed to mitigate public safety risks caused by flood damage to gas equipment and service regulators within KEDNY's operating territory. Key initiatives include installing remotely operated smart gas meters equipped with integrated safety shut-off valves in flood-prone service areas. These enhancements will improve system resilience, enable rapid isolation of impacted services, and reduce the risk of water intrusion during severe weather events.

Additionally, the program incorporates IT integration of smart meters into the Company's existing operational platforms, enabling real-time monitoring, automated alerts, and streamlined emergency response. This integration ensures seamless communication between field devices and control systems, further enhancing reliability and safety during storm events.

	FY28
Gas Meter Install	3,500

Justification Summary:

During Superstorm Sandy, National Grid was forced to shut down large service districts due to a lack of service level control. Widespread water intrusion and flooding severely impacted gas infrastructure, compromising system integrity. Inaccurate identification of customers affected by flooding, combined with the inability to isolate and remotely disconnect impacted services, resulted in prolonged service outages. These conditions significantly reduced the safety and reliability of the gas system. Approximately 10% of KEDNY's services reside within the Federal Emergency Management Agency's (FEMA) 500-year flood zone, totalling 58,000 customers.

Customer Benefits:

Implementing these storm-hardening measures will enhance the safety and reliability of gas service for customers in flood-prone areas while improving overall service delivery. This program specifically addresses gas service reliability during storm surges, which pose significant risks to infrastructure. Customer satisfaction is often negatively impacted by service disruptions, inconvenience, and the high costs associated with the relight process. By enabling targeted service interruptions, the program will minimize customer impact and prevent water intrusion into mains—a condition that can cause long-term damage to the system. These measures will also mitigate recurring disruptions caused by service freeze-ups during winter, strengthen emergency planning and incident management, and improve public safety.

Funding Detail

Cost Breakdown:

		FY28	
	CAPEX	\$ 5,443,851	
	OPEX		
	TOTAL	\$ 5,443,851	

Supplemental Information

Alternatives

Alternative 1: Flood Zone Only. This option represents the minimum capital investment and operating expense required to install smart gas meters exclusively within the 100-year flood zone. However, this limited approach introduces significant risks. Customers outside the designated zone who may still be affected by flooding are excluded, resulting in inconsistent and unsystematic emergency management. Furthermore, maintaining two distinct customer groups—one with remote shut-off capability and one without—will require separate emergency response strategies during flooding events. This dual approach increases operational complexity, slows response times, prolongs outages, and elevates overall system risk.

Alternative 2: Do Nothing. This option leaves customers within the flood zone vulnerable to storm-related impacts. The issues outlined in this proposal will persist, exposing customers to prolonged service outages and increased safety risks. Flooding of gas services compromises system reliability, elevates public safety concerns, and drives higher operating costs, while negatively impacting customer satisfaction. Additionally, the inability to fully storm-harden high-risk customers and apply uniform emergency response protocols increases both public risk and restoration costs during flooding events.

This approach also fails to align with the NYC Storm Hardening Collaborative’s objectives to enhance resiliency, planning, and climate risk mitigation. National Grid has committed to partnering with the City of New York to strengthen the gas utility grid against severe weather and climate change impacts. Not implementing this solution jeopardizes that partnership, undermines resiliency efforts, and leaves critical infrastructure exposed to rising sea levels and extreme weather. Continued collaboration with the New York City is essential to protect customers, stakeholders, and assets—failure to act would be detrimental to both public safety and the Company’s long-term strategic goals.

Alternative 3: Non-Pipes Alternatives (“NPAs”)

Risk of No Action: See Alternative 2.

NPA Suitability Screening

- Is the project construction expected to commence and be completed within 24 months?
☐ Yes ☐ No
- For KEDNY, is the cost of the project less than \$750k?
☐ Yes ☐ No
- Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☐ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company's NPA Screening and Suitability Criteria?

☐ Yes

☒ No

Please briefly explain the results: NPA analysis is not applicable because the proposal does not include installation or replacement of gas pipe.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? This program aims to enhance customer safety by increasing storm hardening measures for homes within the flood zone and may fall within a DAC.
3. Will the project contribute to GHG emission reductions on the Company's gas network? ☒ Yes ☐ No
4. Please explain the project's GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission. impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☐ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☐ Noise pollution from trucks and equipment
- ☒ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☐ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☐ Use dust suppression measures (e.g., water during saw cutting) to reduce fugitive emissions.
- ☒ N/A

Studies/References That Support the Program: N/A

Benefits

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are "communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law]." Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

Reliability Benefits

- ☐ Supports growth forecast
- ☐ Addresses supply/capacity constraint or supply diversity needs
- ☒ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☐ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$ ____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☒ Enhances employee safety
- ☒ Increases automation (reduces human error)
- ☒ Enhances Public Safety
- ☐ Reduces Damages potential (*i.e., in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☒ Emissions Reduction
- ☐ Reduces use of Alt. Fuel
- ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)
- ☐ Other: _____

Proactive Regulator Stations - Proactive

Type: ☐ Project ☒ Program		Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220000317		Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☐ Mandated ☒ Reliability ☐ Non-Infrastructure			
Annual Program: ☒		Estimated Start Date:	Estimated In-Service Date:
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☒ On-Going (Programs Only)			
Sponsor: Leyble, Dennis		Business Contact: Adesina, Risikat	

Work Description:

This program is an annual capital improvement initiative focused on enhancing the reliability and safety of pressure regulating stations across NYC. Every three years, all stations undergo full risk inspection and risk ranking. The work plan is developed using data from annual Performance Testing (PT), Cathodic Protection (CP) testing, risk assessments, and on-site inspections. Key factors include pipeline and equipment integrity, operating pressure, regulator performance, and corrosion indicators. These assessments, combined with potential customer impact from station outages, guide project prioritization within the Capital Improvement Program.

The scope includes:

- Replacement of obsolete equipment and pressure control valves
- Mitigation of corrosion issues and structural vault deficiencies
- Correction of inadequate bypass designs
- Installation of a third layer of over-pressure protection on all stations, whether new or refurbished

Justification Summary:

The proactive regulator program is critical to ensuring continuous, reliable gas service for customers. By installing new stations, refurbishing existing ones, replacing outdated equipment, and storm-hardening facilities in flood-prone areas, the program significantly reduces the risk of service interruptions. These improvements strengthen system integrity, enhance operational performance, and mitigate potential safety hazards, aligning with long-term reliability and resiliency objectives.

Customer Benefits:

A robust capital improvement program that delivers significant benefits to customers by strengthening system reliability and safety. By proactively addressing asset conditions and resolving open reliability concerns, the program reduces the risk of equipment failure and service disruptions. These enhancements help mitigate potential safety hazards, improve operational resilience, and ensure consistent, uninterrupted gas service. Ultimately, customers benefit from a safer, more reliable network that supports long-term service continuity.

Funding Detail

Cost Breakdown:

		FY28
CAPEX	\$	1,535,134
OPEX		
TOTAL	\$	1,535,134

Supplemental Information

Alternatives

Alternative 1: Do Nothing/Defer Project. Doing nothing or deferring this program does not meet our obligation to provide safe and reliable gas service, nor the longer-term objective of improving the operation and performance of the pressure regulating stations. The consequences of not completing the work scheduled will result in increased risks associated with the failure of station equipment, and/or the stations associated piping. Specifically, failure to complete identified work would reduce the integrity of the system and potentially result in significant customer outages. (Not Recommended)

Alternative 2: Non-Pipes Alternatives (“NPAs”)

NPA Suitability Screening

- Is the project construction expected to commence and be completed within 24 months?
☒ Yes ☐ No
- For KEDNY, is the cost of the project less than \$750k?
☐ Yes ☒ No
- Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☐ Yes ☒ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: This project does not qualify for replacement with an NPA as it is projected to be completed within 24 months and involves in-service assets serving existing customers.

CLCPA/GHG Analysis

- Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess

2. If so, explain how was the routing determined and how will the project impact the surrounding area? This program is dependent on existing asset location and may fall within a DAC.
3. Will the project contribute to GHG emission reductions on the Company's gas network? ☐ Yes ☒ No
4. Please explain the project's GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact

Checklist of impacts:

- ☐ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☒ Dust from demolition of sidewalk / roads
- ☒ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☒ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☒ Install methane leak detection equipment (CNG/LNG/PRE).
- ☒ Use higher-pressure systems where practical to reduce heater emissions.
- ☒ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☒ Use construction technologies that do not require venting.
- ☐ Use dust suppression measures (e.g., water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program: N/A

Benefits

certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law]." Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

Reliability Benefits

- ☐ Supports growth forecast
- ☐ Addresses supply/capacity constraint or supply diversity needs
- ☒ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☐ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$ ____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

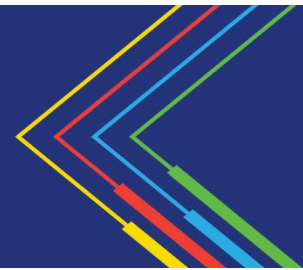
Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☒ Enhances employee safety
- ☒ Increases automation (reduces human error)
- ☒ Enhances Public Safety
- ☐ Reduces Damages potential (*i.e., in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☐ Emissions Reduction
- ☐ Reduces use of Alt. Fuel
- ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)
- ☐ Other: _____

Proactive Regulator Stations - GOV-111



Type: ☒ Project ☐ Program		Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220101951		Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☐ Mandated ☒ Reliability ☐ Non-Infrastructure			
Annual Program: ☐		Estimated Start Date: 04/01/2023	Estimated In-Service Date: 03/31/2027
Status: ☐ Initiation/Planning ☒ In-Progress (Projects Only) ☐ On-Going (Programs Only)			
Sponsor: Leyble, Dennis		Business Contact: Adesina, Risikat	

Work Description:

The scope of this project is to construct a new 15 psig - LP regulating station with 3 layers of overpressure protection within the sidewalk of Hemlock St & Fulton St, Brooklyn and retire the existing GOV-111 station once the new asset is placed into service. The new station will be called GOV-601. The scope of work to be performed at this station will include the construction of:

- A single run station with a high-pressure / low-pressure connection near the station
- All piping and components within the new station shall operate below 20% SMYS at the inlet MAOP
- A strainer / filter device upstream of the over pressurization protection device to clean upstream gas
- Vaults
- Telemetry and control equipment
- Retire old GOV-111 station

Justification Summary:

To establish a proactive asset management strategy, all NYC pressure regulating stations undergo inspection and risk ranking on a three-year cycle. Data from annual Performance Testing (PT), Cathodic Protection (CP) surveys, formal risk assessments, and detailed on-site evaluations are analysed to assess each station's condition. Key factors include pipeline and equipment integrity, operating pressure, regulator performance, and corrosion indicators.

This technical assessment is combined with outage impact modelling to evaluate potential customer disruption. Based on this integrated risk and consequence analysis, the replacement of GOV-111 was prioritized and scheduled. Rebuilding the station ensures that the highest-risk assets are addressed first, reducing system vulnerability and lowering overall operational risk.

Customer Benefits:

- Improve the asset condition by addressing any open reliability concerns
- Increased reliability and safety by adding an additional layer of overpressure protection.
- Decrease in operational risk.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 1,500,000
OPEX	

	TOTAL	\$ 1,500,000	
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Supplemental Information

Alternatives

Alternative 1: Rebuild the station in place / refurbish the existing station

- Re-use the same location to rebuild the station
- Upgrade station components to meet current concerns

Not selected due to safety concerns of the operation team due to the high traffic area

Alternative 2: Retirement of the existing station. Take the existing station out-of-service without building a replacement, either in place or at a new location.

This alternative was not selected because the absence of a pressure regulating station would eliminate downstream pressure control, resulting in a complete loss of gas supply to the affected distribution network

Alternative 3: Non-Pipes Alternatives (“NPAs”)

Risk of No Action:

If the project is not implemented, the asset will continue to operate with elevated integrity and reliability risks, increasing the probability of degradation-related failures and unmitigated hazards within the system. Over time, this could result in heightened exposure to environmental impacts, unplanned outages, safety incidents, and increased remediation costs as asset conditions deteriorate.

- The existing station presents operational concerns due to the location
- The existing station presents a safety risk as it does not have three layers of overpressure protection
- The existing station is one of the highest risk stations in our portfolio and leaving as is may cause loss of supply to our downstream customer.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?

☒ Yes ☐ No

2. For KEDNY, is the cost of the project less than \$750k?

☐ Yes ☒ No

3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?

☒ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: The project is not eligible for an NPA solution because it impacts the critical reliability of the local gas system, and it will be completed within 24 months of the construction start date.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? The route was determined by looking for an area that would limit disruption to the surrounding area. Local businesses and residences were considered, and a route was selected that would limit impacts. Existing utilities and community enhancements such as DEP rain gardens were also considered in the planning of the routing. After construction, restoration work will be conducted to restore the site to its original condition.
3. Will the project contribute to GHG emission reductions on the Company's gas network? ☐ Yes ☒ No
4. Please explain the project's GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☐ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☒ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☒ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☒ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☒ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☒ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:

Benefits

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are "communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law]." Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

Reliability Benefits

- ☐ Supports growth forecast
- ☐ Addresses supply/capacity constraint or supply diversity needs
- ☐ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☐ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☒ Enhances employee safety
- ☒ Increases automation (reduces human error)
- ☒ Enhances Public Safety
- ☒ Reduces Damages potential (*i.e., in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☐ Emissions Reduction
- ☐ Reduces use of Alt. Fuel
- ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)
- ☐ Other: _____

Proactive Regulator Stations - GOV-70

Type: ☒ Project ☐ Program		Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220101993		Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☐ Mandated ☒ Reliability ☐ Non-Infrastructure			
Annual Program: ☐		Estimated Start Date: 04/01/2024	Estimated In-Service Date: 03/31/2028
Status: ☐ Initiation/Planning ☒ In-Progress (Projects Only) ☐ On-Going (Programs Only)			
Sponsor: Leyble, Dennis		Business Contact: Adesina, Risikat	

Work Description:

Gov-70 (BQ0070) is a 1955 vintage station located near the intersection of Cross Bay Boulevard and 157th Avenue in Howard Beach, Queens, NY. The station is a singular run without bypasses with an inlet pressure of 15 psig and a low-pressure outlet (6-9" w.c.). This project includes the construction of a new regulator station in a different location to replace the vintage station. The scope of work to be completed at this station includes the construction of new:

- Inlet and outlet piping which tie into the existing systems
- Single run station with stage bypasses
- Vaults
- Layers of over pressurization protection
- Telemetry and control equipment
- Removal of equipment as needed and abandonment of the existing station in place.
- Removal of existing 4" low-pressure main and replacement with 12" low-pressure main
- Removal of existing high-pressure / low-pressure valve
- Repairment and possible replacement of 12/16" 15 psig main as needed
- Restoration work as needed

Justification Summary:

To establish a proactive asset management strategy, all NYC pressure regulating stations undergo inspection and risk ranking on a three-year cycle. Data from annual Performance Testing (PT), Cathodic Protection (CP) surveys, formal risk assessments, and detailed on-site evaluations are analysed to assess each station's condition. Key factors include pipeline and equipment integrity, operating pressure, regulator performance, and corrosion indicators.

This technical assessment is combined with outage impact modelling to evaluate potential customer disruption. Based on this integrated risk and consequence analysis, the replacement of GOV-70 was prioritized and scheduled. Rebuilding the station ensures that the highest-risk assets are addressed first, reducing system vulnerability and lowering overall operational risk.

During an inspection of the current station, several concerning characteristics were noticed including:

- Severe wall loss on 12" piping in primary vault – approximately 65% wall loss
- Obsolete regulators in both stages
- Single run station without bypasses – HPLP valve functions as full station bypass
- Hazardous location – located within travel lane of Cross Bay Boulevard
- Vaults are in poor condition
- No third layer of over pressurization protection
- Significant atmospheric corrosion on flanges & bolts
- No seals at wall penetrations

The new station installed as part of this project will improve these characteristics and improve system reliability and safety. The location selected presents optimal qualities such as:

- Requires installation of minimal 15# inlet piping (less than 50ft)
- Area is free of utilities
- Optimal outlet tie-in is located on north side of 156th Ave.

Customer Benefits:

This project will enhance the integrity & reliability of the local gas system, leading to improved safety for customers. The new station will be located within a less busy thoroughfare, resulting in reduced roadway disruptions.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 4,000,000
OPEX	
TOTAL	\$ 4,000,000

Supplemental Information

Alternatives

Alternative 1: Relocation Option No. 2 – 95th St.

- Requires installation of approximately 500ft of 15# inlet piping
- 12ft sidewalk on 30ft wide roadway with one-way traffic
- Outlet piping must wrap back to tie-in on 156th Ave.
- 12" DEP force main located at 156th Ave./95th St. intersection
- No concern with adjacent structures
- Mature trees present on west side walk

This alternative was not selected due to higher cost and more complex construction caused by the need for approximately 500 ft of 15 psig inlet piping and the presence of a 12" DEP force main within the construction zone.

Alternative 2: Retirement of the existing station. Take the existing station out-of-service without building a replacement, either in place or at a new location.

This alternative was not selected because the absence of a pressure regulating station would eliminate downstream pressure control, resulting in a complete loss of gas supply to the affected distribution network

Alternative 3: Non-Pipes Alternatives ("NPAs")

Risk of No Action: This station poses a reliability and safety issue due to the deteriorated conditions of the station and the lack of a third layer of over pressurization protection. The station is also inconveniently located within the travel lane of a major thoroughfare. If the project is not implemented, the asset will continue to operate with elevated integrity and reliability risks,

increasing the probability of degradation-related failures and unmitigated hazards within the system. Over time, this could result in heightened exposure to environmental impacts, unplanned outages, safety incidents, and increased remediation costs as asset conditions deteriorate.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☒ Yes ☐ No
2. For KEDNY, is the cost of the project less than \$750k?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: The project is not eligible for an NPA solution because it impacts the critical reliability of the local gas system, and it will be completed within 24 months of the construction start date.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☐ Yes ☒ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? N/A
3. Will the project contribute to GHG emission reductions on the Company’s gas network? ☐ Yes ☒ No
4. Please explain the project’s GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☐ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☒ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].” Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☒ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☒ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☒ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:

Benefits
<u>Reliability Benefits</u> ☐ Supports growth forecast ☐ Addresses supply/capacity constraint or supply diversity needs ☐ Addresses storm/climate change resiliency <u>Other Customer Benefits:</u> ☐ Improves Customer Satisfaction ☐ Reflects efficiency savings of \$____ ☐ Reduction in Billing Errors and Re-Bills ☐ Supports implementation of Gas Business Enablement <u>Safety Benefits:</u> ☐ Enhances response time to Emergency Gas Leaks ☒ Enhances employee safety ☒ Increases automation (reduces human error) ☒ Enhances Public Safety ☒ Reduces Damages potential (<i>i.e., in the case of mapping system</i>) ☐ Addresses specific safety initiative: _____ <u>Societal Benefits/Externalities:</u> ☒ Emissions Reduction ☐ Reduces use of Alt. Fuel ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks) ☐ Other: _____

Proactive Regulator Stations - IF-02



Type: ☒ Project ☐ Program	Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220101621	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☐ Mandated ☒ Reliability ☐ Non-Infrastructure		
Annual Program: ☐	Estimated Start Date: 04/01/2021	Estimated In-Service Date: 04/30/2028
Status: ☐ Initiation/Planning ☒ In-Progress (Projects Only) ☐ On-Going (Programs Only)		
Sponsor: Leyble, Dennis	Business Contact: Adesina, Risikat	

Work Description:

IF-02 is a 1973 vintage station located in Brooklyn, NY consisting of an inlet valve vault, safety and district regulator vaults, 30" ball valve vault and bypass regulator vault. Inlet pressure to the station is 60 psig and outlet pressure of the station is 15 psig. Max flow through the station is 1941.8 MCFH. The station consists of 20" Fisher 298 TB in the safety vault, 20" Fisher 298 TB in the secondary vault with 12" FISHER 298 TKB bypass regulator.

The station was identified as a station in need of major updates by National Grid's annual capital improvement program. To improve the condition of the station, a full station rebuild will be performed. The scope of work will result in improved asset condition, enhanced safety of the asset, and address any open reliability concerns. A third layer of overpressure protection will be added. The station will be designed per National Grid engineering standards, and the completion of this project will ensure continuous gas service to customers. The rebuilding process will include:

- Replacement of existing piping, vaults will be reused
- Installation of OPP and strainer
- Installation of seals at all through-wall penetrations
- Replacement of primary and secondary regulators
- Installation of bypass around each vault
- Replacement of all control lines
- Replacement of manholes, ladders, and vent poles
- Upgrade of all mechanical RTU equipment

Justification Summary:

To establish a proactive asset management strategy, all NYC pressure regulating stations undergo inspection and risk ranking on a three-year cycle. Data from annual Performance Testing (PT), Cathodic Protection (CP) surveys, formal risk assessments, and detailed on-site evaluations are analysed to assess each station's condition. Key factors include pipeline and equipment integrity, operating pressure, regulator performance, and corrosion indicators.

This technical assessment is combined with outage impact modelling to evaluate potential customer disruption. Based on this integrated risk and consequence analysis, the replacement of IF-02 was prioritized and scheduled. Rebuilding the station ensures that the highest-risk assets are addressed first, reducing system vulnerability and lowering overall operational risk.

Current Station Conditions:

- Station is in the industrial area in the sidewalk. Morgan Avenue is a busy street with concrete plant in the vicinity of the station.

- Inlet valve (BQ5098) is in a dedicated vault with two manholes opening. Inlet valve and components are corroded. Pipes are embedded in steel sleeve and link seals. Strong odor of sewage was present in the inlet valve vault.
- Main in the safety and district vaults are embedded in corroded sleeves and/or link seals with exposed sections of the pipes.
- Regulators in both safety and district vaults are unconventional and difficult to operate/maintain for I&R crew. Regulators and components show signs of corrosion.
- Couplings are present in both safety and district vault.
- Bypass valve (BQ5113) is in the dedicated vault. All components and main in the bypass vault show signs of corrosion.
- Transmitters are in the vault.
- No third layer of protection is installed.
- Main and control lines are protected.
- Temperature restriction for this station is 20 degrees. When taken out of service with IF-03, temperature restriction is 25 degrees.
- Current Fisher 298 regulators are obsolete
- Outdated Remote Terminal Unit (RTU) equipment

Customer Benefits:

The rebuild of IF-02 will improve the asset condition of this regulating station and address any open reliability concerns. The installation of over pressurization protection will better protect the asset in case of an emergency resulting in enhanced customer safety.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 14,800,000
OPEX	
TOTAL	\$ 14,800,000

Supplemental Information

Alternatives

Alternative 1: Build new station and retire old station. Complete rebuild of the station in a new location, install new station piping, install new vaults, access doors, install new telemetry cabinets, new vent poles, strainer and add OPP.

This alternative was not selected as the primary option because the existing location of the station is adequate. (Not recommended)

Alternative 2: Retirement of the existing station. Take the existing station out-of-service without building a replacement, either in place or at a new location.

This alternative was not selected because the absence of a pressure regulating station would eliminate downstream pressure control, resulting in a complete loss of gas supply to the affected distribution network

Alternative 3: Non-Pipes Alternatives (“NPAs”)

Risk of No Action: If the project is not implemented, the asset will continue to operate with elevated integrity and reliability risks, increasing the probability of degradation-related failures and unmitigated hazards within the system. Over time, this could result in heightened exposure to environmental impacts, unplanned outages, safety incidents, and increased remediation costs as asset conditions deteriorate.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☒ Yes ☐ No
2. For KEDNY, is the cost of the project less than \$750k?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☒ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: The project is not eligible for an NPA solution because it impacts the critical reliability of the local gas system, and it will be completed within 24 months of the construction start date.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? This project is dependent on existing asset location and falls within a DAC should have minimal impact.
3. Will the project contribute to GHG emission reductions on the Company’s gas network? ☐ Yes ☒ No
4. Please explain the project’s GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☐ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].” Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

- ☒ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☒ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☒ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☒ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☒ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:

Benefits
<u>Reliability Benefits</u> ☐ Supports growth forecast ☐ Addresses supply/capacity constraint or supply diversity needs ☐ Addresses storm/climate change resiliency <u>Other Customer Benefits:</u> ☐ Improves Customer Satisfaction ☐ Reflects efficiency savings of \$____ ☐ Reduction in Billing Errors and Re-Bills ☐ Supports implementation of Gas Business Enablement <u>Safety Benefits:</u> ☐ Enhances response time to Emergency Gas Leaks ☒ Enhances employee safety ☒ Increases automation (reduces human error) ☒ Enhances Public Safety ☒ Reduces Damages potential (<i>i.e., in the case of mapping system</i>) ☐ Addresses specific safety initiative: _____ <u>Societal Benefits/Externalities:</u> ☐ Emissions Reduction ☐ Reduces use of Alt. Fuel ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks) ☐ Other: _____

Proactive Regulator Stations - IF-03



Type: ☒ Project ☐ Program	Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220101622	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☐ Mandated ☒ Reliability ☐ Non-Infrastructure		
Annual Program: ☐	Estimated Start Date: 4/1/2026	Estimated In-Service Date: 11/1/2026
Status: ☐ Initiation/Planning ☒ In-Progress (Projects Only) ☐ On-Going (Programs Only)		
Sponsor: Leyble, Dennis	Business Contact: Adesina, Risikat	

Work Description:

IF-03 is a 1973 vintage station located in Brooklyn, NY. The station consists of an inlet valve vault which contains the 20" inlet valve, and safety and district vaults that each contain one (1) 16" Fisher "T" butterfly valve. There is also an outlet valve vault that contains the 30" outlet valve. Inlet pressure to the station is 60 psig and outlet pressure of the station is 15 psig. Max flow through the station is 4314 MCFH. The current conditions of this station call for a station relocation and rebuild consisting of:

- Retirement and removal of existing station equipment
- Installation of new main to connect the new station to the gas system
- Installation of new safety and district vaults
- Installation of station piping
- Installation of new regulators, OPP, and strainer
- Replacement of control lines
- Installation new manholes, vent poles, ladders, pipe supports
- Installation of Roxtec seals at all through wall penetrations
- Upgrade of all mechanical RTU equipment

Justification Summary:

To determine the work plan, all the regulating stations in NYC are inspected and risk ranked once every three (3) years. Using data from the annual Performance Testing (PT), Cathodic Protection (CP) testing, risk assessments, and on-site inspections; technical assessments were made for each pressure regulating station considering pipe and equipment condition, operating pressure, regulator performance, and corrosion data. This information combined with the potential customer impact resulting from a station outage was used to prioritize and schedule project improvement for IF-03.

Current Station Conditions

- Station is in the industrial area in the sidewalk.
- Inlet valve (BQ5095) is in a dedicated vault with two manholes opening. Inlet valve and components are corroded and there is an active leak. Pipes are embedded in steel sleeve and link seals.
- Main in the safety and district vaults are embedded in steel sleeves and/or link seals.
- Butterfly regulators in both safety and district vaults are unconventional and difficult to operate/maintain for I&R crew. Regulators and components were recently painted but show signs of corrosion.
- Couplings are present in both safety and district vault.
- Bypass valve (BQ-5131) and components were retired, main blanked off and vault was backfilled.
- Transmitters are in the vault.

- No third layer of protection is installed.
- Main and control lines are protected.
- Temperature restriction for this station is 20 degrees. When taken out of service with IF-03, temperature restriction is 25 degrees.

Customer Benefits:

The relocation of the regulating station will improve the asset condition address any open reliability concerns. A third layer of over pressure protection will be added to protect the station in an emergency. The investment is expected to result in savings associated with robust vetting of project details to meet Asset Management needs. Project Development creates a Risk Register to identify and quantify project risk. The output of development stage is a risk-assessed, detailed estimate used for individual project sanctioning.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 2,300,000
OPEX	
TOTAL	\$ 2,300,000

Supplemental Information

Alternatives

Alternative 1: Rebuild the station and add OPP. Complete rebuild of the station in place, install new vaults, access doors, replace and relocate telemetry cabinets, new vent poles, strainer and add OPP. This alternative was not selected as the primary option due to the inadequate existing location of the station. (Not recommended)

Alternative 2: Do Nothing/Deferral. The consequences of not completing the work could ultimately result in loss of service to customers in the neighbouring areas of Brooklyn. (Not Recommended)

Alternative 3: Non-Pipes Alternatives (“NPAs”)

Risk of No Action: If the project is not implemented, the asset will continue to operate with elevated integrity and reliability risks, increasing the probability of degradation-related failures and unmitigated hazards within the system. Over time, this could result in heightened exposure to environmental impacts, unplanned outages, safety incidents, and increased remediation costs as asset conditions deteriorate.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?

☒ Yes

☐ No

2. For KEDLI or NMPC, is the cost of the project less than \$500k? For KEDNY, is the cost of the project less than \$750k?

☐ Yes

☒ No

3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?

☒ Yes

☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes

☐ No

Please briefly explain the results: This project does not qualify for replacement with an NPA as it is projected to be completed within 24 months.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? This project is dependent on existing asset location and falls within a DAC should have minimal impact.
3. Will the project contribute to GHG emission reductions on the Company’s gas network? ☐ Yes ☒ No
4. Please explain the project’s GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☐ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☒ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☒ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☒ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☒ Use decompression during shutdowns, where practical, to reduce gas venting.

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].”

- ☒ Use construction technologies that do not require venting.
- ☒ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:

Benefits

Reliability Benefits

- ☐ Supports growth forecast
- ☐ Addresses supply/capacity constraint or supply diversity needs
- ☐ Addresses storm/climate change resiliency

Other Customer Benefits:

- ☐ Improves Customer Satisfaction
- ☐ Reflects efficiency savings of \$____
- ☐ Reduction in Billing Errors and Re-Bills
- ☐ Supports implementation of Gas Business Enablement

Safety Benefits:

- ☐ Enhances response time to Emergency Gas Leaks
- ☒ Enhances employee safety
- ☒ Increases automation (reduces human error)
- ☒ Enhances Public Safety
- ☒ Reduces Damages potential (*i.e.*, *in the case of mapping system*)
- ☐ Addresses specific safety initiative: _____

Societal Benefits/Externalities:

- ☐ Emissions Reduction
- ☐ Reduces use of Alt. Fuel
- ☐ Provides access to less expensive fuel:
- ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)
- ☐ Other: _____

RMD - Residential Methane Detector



Type: ☐ Project ☒ Program	Category: ☐ Capital ☒ Both Capital & O&M	
Investment Code: 5220100846	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☐ Mandated ☐ Reliability ☐ Non-Infrastructure		
Annual Program: ☒	Estimated Start Date:	Estimated In-Service Date:
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☒ On-Going (Programs Only)		
Sponsor: Khan, Saadat	Business Contact: Costanzo, Nicholas	

Work Description:

Remote Methane Detectors (RMDs) are natural gas detectors installed inside customer premises as close to the gas service point of entry (POE) into the building to detect the presence of gas. Upon detecting a specified threshold of methane, the Company receives an alert from a customer RMD, allowing National Grid to send personnel to the customer's location to investigate the alert. These detectors utilize the latest technologies tested by the Company's Gas Materials Lab and approved through UL standards.

This program builds upon the cellular-connected solution developed and deployed between FY24 and FY27. These Remote Methane Detectors (RMDs) utilize cellular connectivity to provide real-time notifications of any device event, including gas alarms. The development of the program's applications, cellular network, and supporting infrastructure was completed through FY24 and FY25, followed by a small-scale pilot in FY26 to validate performance. Over the next four years, the aim is to significantly increase installations to Customers.

To date, all developments have been carried out without integration into the Company's core systems. However, beginning in FY28, this program will align with NMPC RMD Program initiatives to enable system integration, improving data collection and response efficiency.

The following outlines the proposed RMD installation schedule for FY28.

Year	FY28
Cellular RMDs	18,000

The unit, installation, maintenance, and cellular cost the RMDs will be CAPEX (capital, long-term expenses) due to the higher cost and the plan to prepay the cellular cost of each RMD. The cellular support and device battery unit cost will be OPEX (operating, day-to-day expenses) due to the lower unit cost.

Justification Summary:

The primary driver for continuing and accelerating RMD installations is the enhanced safety of our customers. This program provides the Company with a real-time feedback loop on potential gas presence at the installation site, enabling a faster response to leaks without requiring customer intervention. In addition to alerting customers through an audible alarm, the RMD leverages the dedicated cellular network to transmit data through the head-end system directly to National Grid.

RMDs play a critical role in the future ecosystem of connected gas devices, strengthening safety and reliability for the Company's gas customers.

Customer Benefits:

Increasing RMD installations will allow National Grid to enhance customer safety by delivering near real-time alerts of potential gas leaks. This capability enables faster response to leaks on customer premises than the current gas network infrastructure allows, adding an extra layer of protection to reduce the risk of incidents becoming life-threatening. Unlike traditional detection methods that rely on odorant, RMDs trigger based on methane presence in the air; a critical advantage since, in some past incidents, odorant was stripped from the gas due to varying soil conditions.

Funding Detail**Cost Breakdown:**

	FY28
CAPEX	\$8,515,079
OPEX	\$50,904
TOTAL	\$8,565,983

Supplemental Information**Alternatives**

Alternative 1: Do Nothing. This option does not increase safety or reliability for the customers.

Alternative 2: Deploy non-connected residential methane detectors only. This option does not provide real-time feedback of potential gas-leaks. This method would require customer's to manually call the company and therefore increases the chance of the natural gas leak in becoming hazardous.

Risk of No Action: Failing to increase RMD installations leaves customers exposed to a greater risk of undetected gas leaks. Without real-time monitoring and alerts, response times are extended, allowing minor leaks to escalate into potentially hazardous conditions. This constraint also undermines the Company's ability to enhance system safety and reliability, creating gaps that increase the likelihood of emergencies and drive higher long-term costs.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☐ Yes ☐ No
2. For KEDNY, is the cost of the project less than \$750k?
☐ Yes ☐ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☐ Yes ☐ No

If questions are answered "yes," the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company's NPA Screening and Suitability Criteria?

☐ Yes

☒ No

Please briefly explain the results: NPA analysis is not applicable because the proposal does not include installation or replacement of gas pipe.

CLCPA/GHG Analysis

1. **Is the project/program located in an area designated as a disadvantaged community (DAC)¹?** ☒ Yes ☐ No
2. **If so, explain how was the routing determined and how will the project impact the surrounding area?** RMD installations will be made across the service territory and prioritized, where possible, in DACs to improve public safety.
3. **Will the project contribute to GHG emission reductions on the Company's gas network?** ☒ Yes ☐ No
4. **Please explain the project's GHG impact.** Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☐ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☐ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other: Installation of methane detectors enabling quick leak detection and response

If other is checked, identify source:

Other Emissions Control Considerations

- ☐ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☐ Use dust suppression measures (e.g., water during saw cutting) to reduce fugitive emissions.
- ☒ N/A

Studies/References That Support the Program: N/A

Benefits

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are "communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law]." Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

Reliability Benefits ☐ Supports growth forecast ☐ Addresses supply/capacity constraint or supply diversity needs ☒ Addresses storm/climate change resiliency Other Customer Benefits: ☒ Improves Customer Satisfaction ☒ Reflects efficiency savings (see above) ☐ Reduction in Billing Errors and Re-Bills ☐ Supports implementation of Gas Business Enablement Safety Benefits: ☒ Enhances response time to Emergency Gas Leaks ☒ Enhances employee safety ☒ Increases automation (reduces human error) ☒ Enhances Public Safety ☐ Reduces Damages potential (<i>i.e., in the case of mapping system</i>) ☐ Addresses specific safety initiative: _____ Societal Benefits/Externalities: ☐ Emissions Reduction ☐ Reduces use of Alt. Fuel ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks) ☐ Other: _____	
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Smart Gas Meter (RMD - Smart Meter Program)

Type: ☐ Project ☒ Program	Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220101754	Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☐ Mandated ☒ Reliability ☐ Non-Infrastructure		
Annual Program: ☒	Estimated Start Date:	Estimated In-Service Date:
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☒ On-Going (Programs Only)		
Sponsor: Khan, Saadat	Business Contact: Tambra, Muhammad	

Work Description:

This program allocates funding for the procurement, testing, processing, and proactive replacement of traditional diaphragm gas meters with advanced smart gas meters in the low-pressure areas of KEDNY's service territory.

KEDNY's low-pressure zones currently contain approximately 800,000 diaphragm meters. This initiative will proactively replace these meters with smart gas meters to enhance system safety, reliability and modernization.

The estimated number of smart meter replacements for FY28:

	FY28
Total Units	3,395

Traditional diaphragm meters regardless of low-pressure zones will also be replaced with smart meters gradually and systematically through other KEDNY investment programs, including Meter Purchase Replacements, Storm Hardening Initiatives, Leak-Prone Pipe Replacement Projects (such as conversions from low-pressure to high-pressure mains).

Justification Summary:

Existing residential gas meters in KEDNY's service territory cannot fully meet evolving safety standards designed to prevent catastrophic incidents such as the 2018 Merrimack Valley gas explosions, which were caused by over-pressurization in a low-pressure system and resulted in fatalities, injuries, and widespread property damage.

Smart gas meters provide an additional layer of protection by detecting potentially hazardous conditions—such as open fuel lines (high flow), excessive pressure, or fire—and automatically shutting off gas supply to prevent escalation. When integrated with a Communication Network type network solution, these meters enable near-real-time alerts to the Company, allowing for rapid emergency response and improved customer safety.

Additionally, the Company will leverage advanced smart meter capabilities in conjunction with Remote Methane Detection (RMD) initiative. For example, if an RMD device detects gas inside a customer's premises, the smart meter can remotely stop gas flow at the meter, preventing further leakage and reducing risk to life and property.

Beyond safety, smart gas meters improve service quality by delivering more accurate and timely consumption data. When paired with a Communication Network, customers gain access to granular energy usage information, empowering better energy management and enhancing overall customer experience.

Customer Benefits:

- Smart gas meters will significantly enhance customer safety, improve service quality, and increase distribution system reliability and efficiency. Specifically, these meters will:
- Add an extra layer of over-pressurization protection for low-pressure customers without regulators.
- Improve metering and billing accuracy through advanced gas meter measurement technology (no moving parts, reducing wear and tear).
- Prevent dangerous high-flow or high-pressure incidents by detecting abnormal conditions and automatically shutting off gas supply.
- Reduce unplanned service interruptions by enabling proactive monitoring and rapid response.
- Provide built-in safety features such as excess flow, high temperature, and high-pressure cut-offs to prevent hazardous situations.
- Enable remote emergency shutoff from a safe distance during fires, leaks, or other emergencies.
- Allow immediate gas shutoff from the office in response to odor calls or detected leaks.
- Integrate with Communication Network to eliminate AMR vehicle meter reading costs and associated emissions.
- Replace traditional meter/ERT setups with a built-in communication module for streamlined operations.
- Detect theft and tampering to protect revenue and system integrity.
- Lightweight and compact design for easy installation in tight spaces, reducing employee injury risk.
- Support advanced analytics and predictive maintenance by providing real-time data for system health monitoring.
- Enhance customer experience by offering granular usage data and enabling energy management tools.
- Improve disaster response by enabling rapid isolation of affected areas during storms or emergencies.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 2,752,533
OPEX	
TOTAL	\$ 2,752,533

Supplemental Information

Alternatives

Alternative 1: Do Nothing. This option is not viable because: Traditional meters are expected to be phased out in the near future, making them unavailable for procurement. Failure to transition to smart meters would result in non-compliance with regulatory requirements, exposing the Company to potential penalties. Lack of readiness for smart meter adoption would adversely impact customer satisfaction and limit the Company's ability to support new customer connections, ultimately affecting service reliability and growth.

Alternate 2: Install smart gas meters only as part of existing meter replacement programs over time. While this approach introduces smart meters, it is insufficient for timely risk mitigation because: Low-pressure customers remain exposed to safety risks for an extended period, including over-pressurization and high-flow incidents. Delayed implementation fails to provide the proactive safety enhancements needed to prevent catastrophic events like Merrimack Valley. The Company would miss opportunities to leverage operational efficiencies and customer benefits sooner.

Alternate 3: Non-Pipes Alternatives (“NPAs”)

Risk of No Action: See Alternative 1.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☐ Yes ☐ No
2. For KEDNY, is the cost of the project less than \$750k?
☐ Yes ☐ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☐ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☐ Yes ☒ No

Please briefly explain the results: Installation of smart meters is not a typical gas infrastructure investment that can be avoided with an NPA solution.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? Some of the projects in this program may be in DAC regions. Project routing is determined based on distribution system need, constructability of below ground infrastructure, and cost. The impact on the surrounding area will be consistent with standard utility infrastructure work, which is temporary in nature. The Company will minimize the construction impact on the community, where possible.
3. Will the project contribute to GHG emission reductions on the Company’s gas network? ☒ Yes ☐ No
4. Please explain the project’s GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

☒ Vehicle emissions from truck rolls

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].” Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

- ☐ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☐ Noise pollution from trucks and equipment
- ☒ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☐ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☐ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.
- ☒ N/A

Studies/References That Support the Program:

Benefits	
<u>Reliability Benefits</u>	
☒	Supports growth forecast
☐	Addresses supply/capacity constraint or supply diversity needs
☐	Addresses storm/climate change resiliency
<u>Other Customer Benefits:</u>	
☒	Improves Customer Satisfaction
☐	Reflects efficiency savings of \$ ____
☒	Reduction in Billing Errors and Re-Bills
☐	Supports implementation of Gas Business Enablement
<u>Safety Benefits:</u>	
☒	Enhances response time to Emergency Gas Leaks
☒	Enhances employee safety
☒	Increases automation (reduces human error)
☒	Enhances Public Safety
☐	Reduces Damages potential (<i>i.e.</i> , <i>in the case of mapping system</i>)
☐	Addresses specific safety initiative: _____
<u>Societal Benefits/Externalities:</u>	
☒	Emissions Reduction
☐	Reduces use of Alt. Fuel

	☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks) ☐ Other: _____	

Tools & Equipment – Field Operations & Construction



Type: ☐ Project ☒ Program		Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220101120, 5220000383		Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☐ Mandated ☐ Reliability ☒ Non-Infrastructure			
Annual Program: ☒	Estimated Start Date:		Estimated In-Service Date:
Status: ☐ Initiation/Planning ☐ In-Progress (Projects Only) ☒ On-Going (Programs Only)			
Sponsor: Rodriguez, Philip		Business Contact: Rodriguez, Philip	

Work Description:

KEDNY's Purchase of Miscellaneous Capital Tools and Equipment budget is for purchases that are not used for specific projects. These items support the safety of our employees, our customers, and the general public. The items provide cost efficiencies across multiple mandated programs, commitments to customer needs and expectations, and will allow the potential increase of productivity for on-going day-to-day operations of the gas business unit.

This budget item is typically used to support process-related initiatives and ensure subsequent goals are achieved within the entire Gas organization. These items relate to safety (*i.e.* mechanized maintenance of traffic devices, worker safety enhancements etc.), climate change (*i.e.* apparatus to minimize emissions through natural gas drawdown operations), support of new, emerging, and on-going technologies (*i.e.* capital spares and parts for trenchless and keyhole technologies), and the initiation of innovative applications that will lead to improved operations.

Justification Summary:

Current Company policy capitalizes general tool and/or equipment purchases subject to predetermined minimal dollar thresholds (\$500 for KEDNY). Such general equipment includes tooling (hand, power, pneumatic, hydraulic, etc.), specialty equipment, PPE, office machines, electronic data processing equipment and software applications, shop and garage equipment and communications. The Purchase Miscellaneous Capital Tools and Equipment line item captures the above-mentioned items that are not used for specific projects but rather support the safe, efficient, and on-going day-to-day operations of the gas business unit. Purchase of Miscellaneous Capital Tools and Equipment utilize project numbers that are budgeted based on historical funding due to the inability to associate this equipment with any one specific project.

Customer Benefits:

- Improved public safety due to mechanized maintenance of traffic devices and public safety enhancements.
- Noise reduction enhancements with new technology tooling.
- Productivity increases and potential unit cost reductions.
- Compliance with federal and state code requirements including new US Department of Transportation (USDOT).

Funding Detail

Cost Breakdown:

	FY28
CAPEX – Field Ops	\$ 1,781,472
CAPEX – Construction	\$ 3,313,549

	OPEX	\$ 0
	TOTAL	\$5,095,021

Supplemental Information

Alternatives

Alternative 1: Reduce Request. Reducing the budget line item is not recommended because the tools purchased through this program drive process changes that support new initiatives and productivity improvements throughout the Gas distribution organization. Reduced funding for this program could drive a downturn in safety for the company, employees, customers, and general public.

Alternative 2: Do Nothing. Removal of this program would require spending for required tools to be allocated to specific projects and mandated programs resulting in inconsistent unit costs, excessive tool ordering (lack of controls) and could jeopardize safety for the company, employees, customers, and general public.

Alternative 3: Non-Pipes Alternatives (“NPAs”) – N/A

Risk of No Action: This program is necessary to procure the tools and equipment needed to perform work safely and efficiently.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☐ Yes ☐ No
2. For KEDLI or NMPC, is the cost of the project less than \$500k? For KEDNY, is the cost of the project less than \$750k?
☐ Yes ☐ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☐ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☐ Yes ☒ No

Please briefly explain the results: NPA analysis is not applicable because the proposal is a tools and equipment investment.
 CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☐ Yes ☒ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? N/A
3. Will the project contribute to GHG emission reductions on the Company's gas network? ☐ Yes ☒ No
4. Please explain the project's GHG impact. No Material Impact. This is non-infrastructure tools and equipment budget and will not have an impact on GHG emissions.

Checklist of impacts:

- ☐ Vehicle emissions from truck rolls
- ☐ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☐ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☐ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☐ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.
- ☒ N/A

Studies/References That Support the Program: N/A

Benefits

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are "communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law]." Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

Reliability Benefits ☐ Supports growth forecast ☐ Addresses supply/capacity constraint or supply diversity needs ☐ Addresses storm/climate change resiliency Other Customer Benefits: ☐ Improves Customer Satisfaction ☐ Reflects efficiency savings of \$ ____ ☐ Reduction in Billing Errors and Re-Bills ☐ Supports implementation of Gas Business Enablement Safety Benefits: ☐ Enhances response time to Emergency Gas Leaks ☒ Enhances employee safety ☐ Increases automation (reduces human error) ☒ Enhances Public Safety ☐ Reduces Damages potential (<i>i.e., in the case of mapping system</i>) ☐ Addresses specific safety initiative: _____ Societal Benefits/Externalities: ☐ Emissions Reduction ☐ Reduces use of Alt. Fuel ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks) ☐ Other: _____	
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GIS Mapping – Enhancing GIS Data for the Future

Type: ☒ Project ☐ Program		Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220102202		Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☐ Mandated ☐ Reliability ☒ Non-Infrastructure			
Annual Program: ☐		Estimated Start Date: 4/1/2027	Estimated In-Service Date: 3/31/2031
Status: ☐ Initiation/Planning ☒ In-Progress (Projects Only) ☐ On-Going (Programs Only)			
Sponsor: Dayton, James		Business Contact: Donovan, Thomas/Raia, Vincent	

Work Description:

The project aims to consolidate the Geographic Information System (GIS) data for gas assets in New York City, which is currently fragmented across separate sheet drawings known as Intersection Drawings (IDs). The transition to the ESRI ArcPro application has highlighted the inefficiencies of the existing data management practices. By creating a unified data set for the NYC region, this project will enhance the usability of GIS data, facilitating improved operational capabilities and decision-making processes.

Justification Summary:

The current practice of maintaining gas asset details in separate sheet drawings is no longer sustainable within the context of the new GIS environment provided by ESRI ArcPro. The fragmentation of data hinders efficient access and analysis, which are critical for timely reporting and operational planning. This project is justified as it will streamline data management, allowing for a more integrated approach to GIS data usage. By consolidating the data into a single contiguous set, we will leverage the full potential of ArcPro, thereby improving our ability to respond to regulatory requirements, plan for system enhancements, and manage outages effectively.

Customer Benefits:

The successful completion of this project will yield several significant benefits, including:

Enhanced Data Accessibility: A unified data set will provide easier access to critical information, reducing the time spent searching for and compiling data from multiple sources.

Improved Reporting Capabilities: The project will facilitate timely and efficient reporting to the Department of Transportation (DOT), ensuring compliance with regulatory requirements.

Optimized System Planning: With consolidated data, planning for system upgrades and expansions will be more accurate and informed, leading to better resource allocation and project execution.

Effective Outage Management: A comprehensive view of gas assets will enable quicker response times during outages, improving service reliability and customer satisfaction.

Cost Efficiency: By eliminating the need for additional tools or applications, the project will be cost-effective, utilizing existing resources to achieve the desired outcomes.

This project not only aligns with the strategic goals of enhancing operational efficiency but also positions the organization to better meet future challenges in gas asset management.

Funding Detail

Cost Breakdown:

		FY28	
	CAPEX	\$ 1,219,610	
	OPEX		
	TOTAL	\$ 1,219,610	

Supplemental Information

Alternatives

Alternative 1: Do Nothing/Defer. If the project to consolidate the GIS data for gas assets in New York City is not completed, several negative impacts are likely to arise:

Continued Data Fragmentation: The existing practice of maintaining gas asset information in separate sheet drawings will persist, leading to ongoing inefficiencies in data access and management. This fragmentation will hinder the ability to obtain a comprehensive view of gas assets, complicating operational decision-making.

Inefficient Reporting: The inability to streamline data into a unified set will result in delays and inaccuracies in reporting to the Department of Transportation (DOT). This could lead to compliance issues, potential fines, and damage to the organization's reputation.

Suboptimal System Planning: Without a consolidated data set, planning for system upgrades and expansions will remain reactive rather than proactive. This could result in misallocation of resources, increased costs, and missed opportunities for improvement.

Increased Outage Response Times: The lack of a comprehensive view of gas assets will impede effective outage management, leading to longer response times during incidents. This could negatively impact service reliability and customer satisfaction, ultimately affecting the organization's credibility and customer trust.

Higher Operational Costs: The inefficiencies associated with managing fragmented data may lead to increased operational costs over time. Resources will be wasted on redundant data retrieval processes, and the organization may incur additional costs related to compliance failures and emergency responses.

Stagnation in Technological Advancement: Failing to leverage the capabilities of the ESRI ArcPro application will prevent the organization from fully realizing the benefits of modern GIS technology. This stagnation could hinder innovation and the ability to adapt to future challenges in gas asset management.

In summary, not completing this project would perpetuate inefficiencies, increase operational risks, and limit the organization's ability to effectively manage its gas assets, ultimately undermining its strategic objectives and service commitments.

Alternative 2: Non-Pipes Alternatives ("NPAs")

Risk of No Action: See Alternative 1.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?

☐ Yes

☐ No

2. For KEDNY, is the cost of the project less than \$750k? For KEDLI, is the cost of the project less than \$500k?

☐ Yes ☐ No

3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?

☐ Yes ☐ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☐ Yes ☒ No

Please briefly explain the results: NPA analysis is not applicable because the proposal does not include installation or replacement of gas pipe.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☐ Yes ☒ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? N/A
3. Will the project contribute to GHG emission reductions on the Company’s gas network? ☐ Yes ☒ No
4. Please explain the project’s GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact.

Checklist of impacts:

- ☐ Vehicle emissions from truck rolls
- ☐ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads
- ☐ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:
- ☒ N/A

If other is checked, identify source:

Other Emissions Control Considerations

- ☐ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].” Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

- ☐ Use construction technologies that do not require venting.
- ☐ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.
- ☒ N/A

Studies/References That Support the Program:

Benefits
<u>Reliability Benefits</u> ☒ Supports growth forecast ☒ Addresses supply/capacity constraint or supply diversity needs ☒ Addresses storm/climate change resiliency <u>Other Customer Benefits:</u> ☒ Improves Customer Satisfaction ☐ Reflects efficiency savings of \$____ ☐ Reduction in Billing Errors and Re-Bills ☒ Supports implementation of Gas Business Enablement <u>Safety Benefits:</u> ☒ Enhances response time to Emergency Gas Leaks ☒ Enhances employee safety ☒ Increases automation (reduces human error) ☒ Enhances Public Safety ☒ Reduces Damages potential (<i>i.e., in the case of mapping system</i>) ☐ Addresses specific safety initiative: _____ <u>Societal Benefits/Externalities:</u> ☐ Emissions Reduction ☐ Reduces use of Alt. Fuel ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks) ☐ Other: _____

Future of Heat - Newtown Creek



Type: ☒ Project ☐ Program		Category: ☒ Capital ☐ Both Capital & O&M	
Investment Code: 5220000315		Region: ☒ KEDNY ☐ KEDLI	
Planning Portfolio: ☐ Customer Connections ☐ Mandated ☒ Reliability ☐ Non-Infrastructure			
Annual Program: ☐	Estimated Start Date:		Estimated In-Service Date: 10/2026
Status: ☐ Initiation/Planning ☒ In-Progress (Projects Only) ☐ On-Going (Programs Only)			
Sponsor: Leyble, Dennis		Business Contact: Zhen Wu, Nancy	

Work Description:

The Newtown Creek conditioning system processes excess digester gas and upgrades it to pipeline gas. The system includes pressure regulation equipment that regulates pressure down and allows connection to the 60-psig distribution system. The remaining scope before closeout includes,

- Installation relief valve. The installation requires piping modification of the existing outlet to add a leg for the overpressure protection device, the device which will be installed after the mercaptan injection but before the facility's remote shutoff valve
- Reinforcement of motor's mounts on the feed compressor skid and addition a junction box dampener support

Justification Summary:

The installation of this PRV provides a tertiary independent safety layer in an over-pressure event and protects downstream gas distribution system. The addition of this redundant safety layer enhances system reliability and decreases the risk of an over-pressurization event from occurring.

When operating above 1600 rpm, there is some elevated vibration on the feed compressor skid. Reinforcing the compressor's motor mounts provides stiffness and dampens the vibration on the skid. The addition of a dampener support on the junction box also helps reduce the vibration the equipment can experience.

Customer Benefits:

RNG facility takes excess digester gas from the DEP's Wastewater Resource Recovery Facility (WRRF) and converts the digester gas to usable pipeline gas that otherwise would have been flared by the wastewater facility.

The additional overpressure protection layer and reinforcement improve overall safety, enhances system integrity and lowers operational risk.

Funding Detail

Cost Breakdown:

	FY28
CAPEX	\$ 1,247,000
OPEX	
TOTAL	\$ 1,247,000

Supplemental Information

Alternatives

Alternative 1: Do Nothing/Defer. If the work is not implemented, it does not decrease the risk of potential damage to equipment and piping

Alternative 2: Non-Pipes Alternatives (“NPAs”)

Risk of No Action: See Alternative 1.

NPA Suitability Screening

1. Is the project construction expected to commence and be completed within 24 months?
☒ Yes ☐ No
2. For KEDNY, is the cost of the project less than \$750k? For KEDLI, is the cost of the project less than \$500k?
☐ Yes ☒ No
3. Does the pipes investment affect the critical reliability of the local or broader gas system or respond to a regulatory mandate?
☐ Yes ☒ No

If questions are answered “yes,” the project does not qualify for an NPA.

NPA Evaluation

Has this project been reviewed against the Company’s NPA Screening and Suitability Criteria?

☒ Yes ☐ No

Please briefly explain the results: Project is not suitable for an NPA as the remaining work mitigates integrity concerns.

CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)¹? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? Project is within the WRRF’s property, minimal impacts to community.
3. Will the project contribute to GHG emission reductions on the Company’s gas network? ☒ Yes ☐ No
4. Please explain the project’s GHG impact. Please see Exhibit (GIOP-6) for the project's GHG emission impact

Checklist of impacts:

- ☒ Vehicle emissions from truck rolls
- ☒ Diesel combustion emissions from construction equipment
- ☐ Diesel combustion from generators
- ☐ Dust from demolition of sidewalk / roads

¹ As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households, as identified pursuant to [section 75-0111](#) of the [Environmental Conservation Law].” Project locations were determined to be in a Disadvantaged Community (DAC) utilizing the map from [NYSERDA](#).

- ☒ Noise pollution from trucks and equipment
- ☐ Increased vehicle emissions from increased traffic (indirect)
- ☐ Other:

If other is checked, identify source:

Other Emissions Control Considerations

- ☒ Coordinate work, where practical, to reduce repeat excavations, asphalt and concrete emissions, truck rolls, etc.
- ☐ Flare gas instead of venting to atmosphere, where feasible (LNG).
- ☐ Replace obsolete equipment with high-efficiency, low-emission technologies (CNG/LNG/PRE).
- ☐ Install methane leak detection equipment (CNG/LNG/PRE).
- ☐ Use higher-pressure systems where practical to reduce heater emissions.
- ☐ Use decompression during shutdowns, where practical, to reduce gas venting.
- ☐ Use construction technologies that do not require venting.
- ☐ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

Studies/References That Support the Program:

Benefits
<u>Reliability Benefits</u> ☐ Supports growth forecast ☐ Addresses supply/capacity constraint or supply diversity needs ☐ Addresses storm/climate change resiliency <u>Other Customer Benefits:</u> ☐ Improves Customer Satisfaction ☐ Reflects efficiency savings of \$____ ☐ Reduction in Billing Errors and Re-Bills ☐ Supports implementation of Gas Business Enablement <u>Safety Benefits:</u> ☐ Enhances response time to Emergency Gas Leaks ☐ Enhances employee safety ☐ Increases automation (reduces human error) ☒ Enhances Public Safety ☒ Reduces Damages potential (<i>i.e., in the case of mapping system</i>) ☐ Addresses specific safety initiative: _____ <u>Societal Benefits/Externalities:</u> ☐ Emissions Reduction ☐ Reduces use of Alt. Fuel ☐ Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks) ☐ Other: _____