

# Customer Gas Connections Capital Plan



|                                                                                                                                                                                                 |                                                                                                   |                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------|
| Type: <input type="checkbox"/> Project <input checked="" type="checkbox"/> Program                                                                                                              | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                            |
| Investment Code: 5230000001, 5230000002, 5230000006, 5230000007                                                                                                                                 | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                            |
| Planning Portfolio: <input checked="" type="checkbox"/> Customer Connections <input type="checkbox"/> Mandated <input type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                                                                                   |                            |
| Annual Program: <input checked="" type="checkbox"/>                                                                                                                                             | Estimated Start Date:                                                                             | Estimated In-Service Date: |
| Status: <input type="checkbox"/> Initiation/Planning <input type="checkbox"/> In-Progress (Projects Only) <input checked="" type="checkbox"/> On-Going (Programs Only)                          |                                                                                                   |                            |
| Sponsor: Klingler, Gerard L                                                                                                                                                                     | Business Contact: Dasani, Priya                                                                   |                            |

## Work Description:

KEDLI'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.

|              |        |
|--------------|--------|
|              | FY28   |
| Services     | 3,105  |
| Main Footage | 89,358 |

## 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. 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 investments:

- Fuel Pricing – oil versus natural gas
- Inventory levels and turnover ratios
- Saturation levels
- NYC local laws restricting use of natural gas in the Rockaways section of Long Island
- Potential changes to regulatory entitlements
- Designs and resources that supports the delivery of capital at efficient pricing.
- Economic Conditions / Building Starts
- Gas system constraints
- LI municipal requirements that increase permitting/restoration costs.

**Conversions.** In both the residential and commercial conversion markets activity is expected to decrease due to market saturation. Conversions are also impacted by relative oil prices. If any changes to existing rules or regulations to the 100-foot entitlement rule and NY Heat Act, new connections activity will decline.

**New Construction.** If the All-Electric Buildings Act is implemented, new connections activity will decline.

**Gas Alternatives.** 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 recently proposed 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 will provide updated forecasts as pilots, including those run by other utilities in New York, 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           | \$ 21,658,261   |
| Customer Connections - Install Services - CAPEX       | \$ 44,580,477   |
| Customer Connections - Customer Contributions – CAPEX | \$ (50,173,520) |
| Customer Connections - Install Meter/Regulator        | \$ 4,767,143    |
| <b>OPEX</b>                                           |                 |
| <b>TOTAL</b>                                          | \$ 20,832,361   |

## 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”)**

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

### 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:** 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

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

<sup>1</sup> 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.

#### **Studies/References That Support the Program:**

| Benefits                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b><u>Reliability Benefits</u></b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Supports growth forecast</li> <li><input type="checkbox"/> Addresses supply/capacity constraint or supply diversity needs</li> <li><input type="checkbox"/> Addresses storm/climate change resiliency</li> </ul> <p><b><u>Other Customer Benefits:</u></b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Improves Customer Satisfaction</li> <li><input type="checkbox"/> Reflects efficiency savings of \$____</li> <li><input type="checkbox"/> Reduction in Billing Errors and Re-Bills</li> <li><input type="checkbox"/> Supports implementation of Gas Business Enablement</li> </ul> <p><b><u>Safety Benefits:</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Enhances response time to Emergency Gas Leaks</li> <li><input type="checkbox"/> Enhances employee safety</li> <li><input type="checkbox"/> Increases automation (reduces human error)</li> <li><input type="checkbox"/> Enhances Public Safety</li> <li><input type="checkbox"/> Reduces Damages potential (<i>i.e., in the case of mapping system</i>)</li> <li><input type="checkbox"/> Addresses specific safety initiative: _____</li> </ul> <p><b><u>Societal Benefits/Externalities:</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Emissions Reduction</li> <li><input checked="" type="checkbox"/> Reduces use of Alt. Fuel</li> <li><input type="checkbox"/> Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)</li> </ul> |

☐ Other: \_\_\_\_\_

## Service Replacement - Reactive - Fittings



|                                                                                                                                                                                                 |                                                                                                   |                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------|
| Type: <input type="checkbox"/> Project <input checked="" type="checkbox"/> Program                                                                                                              | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                            |
| Investment Code: 5230101900                                                                                                                                                                     | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                            |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input checked="" type="checkbox"/> Mandated <input type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                                                                                   |                            |
| Annual Program: <input checked="" type="checkbox"/>                                                                                                                                             | Estimated Start Date:                                                                             | Estimated In-Service Date: |
| Status: <input type="checkbox"/> Initiation/Planning <input type="checkbox"/> In-Progress (Projects Only) <input checked="" type="checkbox"/> On-Going (Programs Only)                          |                                                                                                   |                            |
| Sponsor: Malone, David                                                                                                                                                                          | Business Contact: Malone, David                                                                   |                            |

### Work Description:

This work involves the replacement of gas service fittings associated with residential and small commercial gas service lines. The scope includes removal of existing fittings and installation of new fittings to ensure safe, reliable, and code-compliant gas service connections. Removal of existing service fittings, including meter fits, unions, and connectors, as required for service replacement or upgrade.

### Justification Summary:

When field crews identify corrosion and/or abnormal operating conditions at a customer premise, fitting work is required to maintain system safety and reliability. In these cases, National Grid will rebuild the service header and replace all company-owned piping downstream of the service valve up to the point of connection with customer-owned piping. This work addresses degraded National Grid jurisdictional assets, mitigates leak risk, and ensures continued safe delivery of gas service.

### Customer Benefits:

This program will enhance customer safety and extend the life of the asset by replacing corroded or non-conforming operating conditions on the jurisdictional piping.

## Funding Detail

### Cost Breakdown:

|       | \$000 | FY28         |
|-------|-------|--------------|
| CAPEX |       | \$ 3,483,405 |
| OPEX  |       |              |
| TOTAL |       | \$ 3,483,405 |

## Supplemental Information

### Alternatives

**Alternative 1:** Do Nothing. This alternative is not advisable as the program is designed to replace corroded and non-conforming operating conditions on the jurisdictional 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:** 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)<sup>1</sup>? ☒ 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
- ☐ 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

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<sup>1</sup> 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].”

- ☒ 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b><u>Reliability Benefits</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Supports growth forecast</li> <li><input type="checkbox"/> Addresses supply/capacity constraint or supply diversity needs</li> <li><input type="checkbox"/> Addresses storm/climate change resiliency</li> </ul> <p><b><u>Other Customer Benefits:</u></b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Improves Customer Satisfaction</li> <li><input type="checkbox"/> Reflects efficiency savings of \$____</li> <li><input type="checkbox"/> Reduction in Billing Errors and Re-Bills</li> <li><input type="checkbox"/> Supports implementation of Gas Business Enablement</li> </ul> <p><b><u>Safety Benefits:</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Enhances response time to Emergency Gas Leaks</li> <li><input checked="" type="checkbox"/> Enhances employee safety</li> <li><input type="checkbox"/> Increases automation (reduces human error)</li> <li><input checked="" type="checkbox"/> Enhances Public Safety</li> <li><input type="checkbox"/> Reduces Damages potential (<i>i.e., in the case of mapping system</i>)</li> <li><input type="checkbox"/> Addresses specific safety initiative: _____</li> </ul> <p><b><u>Societal Benefits/Externalities:</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Emissions Reduction</li> <li><input type="checkbox"/> Reduces use of Alt. Fuel</li> <li><input type="checkbox"/> Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)</li> <li><input type="checkbox"/> Other: _____</li> </ul> |

# Gas System Reinforcement

|                                                                                                                                                                                                 |                                                                                                   |                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------|
| Type: <input type="checkbox"/> Project <input checked="" type="checkbox"/> Program                                                                                                              | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                            |
| Investment Code: 5230001161                                                                                                                                                                     | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                            |
| Planning Portfolio: <input checked="" type="checkbox"/> Customer Connections <input type="checkbox"/> Mandated <input type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                                                                                   |                            |
| Annual Program: <input checked="" type="checkbox"/>                                                                                                                                             | Estimated Start Date:                                                                             | Estimated In-Service Date: |
| Status: <input type="checkbox"/> Initiation/Planning <input type="checkbox"/> In-Progress (Projects Only) <input checked="" type="checkbox"/> On-Going (Programs Only)                          |                                                                                                   |                            |
| Sponsor: Metzдорff, Peter                                                                                                                                                                       | Business Contact: Santangelo, Amanda                                                              |                            |

## 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. KEDLI'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 that gas supply to be delivered 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:

By installing these reinforcements, the Company is ensuring that service is maintained to all firm gas customers on the system. Without the reinforcement program, as many as 700 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 \$1.05M (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, of the new pipe installed under the program (10,295 feet), approximately 81% replaces leak prone pipe, approximately 8,380 feet (1.6 miles), during the five-year plan\*.

\*For low pressure (LP) areas, only the first two years of projects are identified. The total replacement number may be higher than this projection.

#### Funding Detail

##### Cost Breakdown:

|       | FY28         |
|-------|--------------|
| CAPEX | \$ 1,188,720 |
| OPEX  |              |
| TOTAL | \$ 1,188,720 |

#### Supplemental Information

##### Alternatives

**Alternative 1: Do Nothing.** This alternative is rejected because up to 700 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 Alternatives (“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 \$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 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)<sup>1</sup>? ☒ 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

<sup>1</sup> 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](#).

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
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| <div><div><b>Reliability Benefits</b></div><div><div><input checked="" type="checkbox"/> Supports growth forecast</div><div><input type="checkbox"/> Addresses supply/capacity constraint or supply diversity needs</div><div><input type="checkbox"/> Addresses storm/climate change resiliency</div></div><div><b>Other Customer Benefits:</b></div><div><div><input checked="" type="checkbox"/> Improves Customer Satisfaction</div><div><input type="checkbox"/> Reflects efficiency savings of \$____</div><div><input type="checkbox"/> Reduction in Billing Errors and Re-Bills</div><div><input type="checkbox"/> Supports implementation of Gas Business Enablement</div></div><div><b>Safety Benefits:</b></div><div><div><input type="checkbox"/> Enhances response time to Emergency Gas Leaks</div><div><input type="checkbox"/> Enhances employee safety</div><div><input type="checkbox"/> Increases automation (reduces human error)</div><div><input checked="" type="checkbox"/> Enhances Public Safety</div><div><input type="checkbox"/> Reduces Damages potential (<i>i.e., in the case of mapping system</i>)</div><div><input type="checkbox"/> Addresses specific safety initiative: _____</div></div><div><b>Societal Benefits/Externalities:</b></div><div><div><input checked="" type="checkbox"/> Emissions Reduction</div><div><input type="checkbox"/> Reduces use of Alt. Fuel</div><div><input checked="" type="checkbox"/> Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)</div><div><input type="checkbox"/> Other: _____</div></div></div> |  |
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# Gas System Reinforcement - LTL12238 – Bellmore - Grand Ave- Transmission Main



|                                                                                                                                                                                                 |  |                                                                                                   |                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------|-------------------------------------|
| Type: <input checked="" type="checkbox"/> Project <input type="checkbox"/> Program                                                                                                              |  | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                                     |
| Investment Code: 5230100568                                                                                                                                                                     |  | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                                     |
| Planning Portfolio: <input checked="" type="checkbox"/> Customer Connections <input type="checkbox"/> Mandated <input type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |  |                                                                                                   |                                     |
| Annual Program: <input type="checkbox"/>                                                                                                                                                        |  | Estimated Start Date: December 2023                                                               | Estimated In-Service Date: May 2028 |
| Status: <input type="checkbox"/> Initiation/Planning <input checked="" type="checkbox"/> In-Progress (Projects Only) <input type="checkbox"/> On-Going (Programs Only)                          |  |                                                                                                   |                                     |
| Sponsor: Metzдорff, Peter                                                                                                                                                                       |  | Business Contact: Santangelo, Amanda                                                              |                                     |

## Work Description:

This project will install 6,200 feet of 16" transmission main on Hewlett Ave from Benson Ln to Sunrise Hwy, on Sunrise Hwy from Hewlett Ave to Newbridge Rd, on Newbridge Rd from Sunrise Hwy to Albemarle Ave, on Albemarle Ave from Newbridge Rd to Johnson Pl, and on Johnson Pl from Albemarle Ave to Wilson Ave to maintain above minimum pressures. The main will be initially operated at 99 psig but will be rated to 350 psig for future use.

## 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. Gas System Reinforcement Projects are identified to maintain service under peak day, peak hour conditions. KEDLI'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 projects are a critical component for enabling that gas supply to be delivered to firm customers.

The south shore 99 psig system feeding 60 psig regulators is out of capacity causing the inlet pressure to NL-19 to drop below the system minimum of 70 psig. This, in turn, is causing the regulator to droop on its outlet, which affects downstream pressures on the 60-psig system. This issue requires gas control to raise the current 99 psig system regulators to their maximum allowable operating pressure (MAOP) under design conditions, creating risk of creating minor pressure excursions over the MAOP and putting customers at risk of seeing below minimum pressure and experiencing outages in this area.

## Customer Benefits:

The project ensures continuous gas service to customers, improves pressures in the areas, obviates the need for the completion of multiple main projects to achieve the same results, and eliminates the need to operate the existing station on bypass to ensure pressures are maintained.

## Funding Detail

### Cost Breakdown:

|       | FY28         |
|-------|--------------|
| CAPEX | \$ 5,500,000 |
| OPEX  |              |

|  |              |              |
|--|--------------|--------------|
|  | <b>TOTAL</b> | \$ 5,500,000 |
|--|--------------|--------------|

### Supplemental Information

#### Alternatives

**Alternative 1:** Install 20,000 feet of 16" transmission main on Hicksville Rd from Bethpage to Clark Ave in Massapequa, crossing both Hempstead Tpke and the Southern State Pkwy, and install a 350/99 psig regulator at Clark Ave with a heater. This project is not recommended as the estimate is over \$100M and does not support affordability.

**Alternative 2:** Do nothing and except the risk that, under design conditions, regulators on the 60-psig downstream system could drop on their outlet and cause below minimum pressures. This project is not recommended because the loss of customers is at stake.

**Alternative 3: Non-Pipes Alternatives ("NPAs")** This option is rejected as the project does not meeting the NPA suitability screening criteria.

**Risk of No Action:** If this project is not constructed, customers on the 60-psig system in the Bellmore area are at risk of experiencing below minimum pressures and outages 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 \$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 began prior to Rate Year and will be completed by FY28. Thus, the project is not applicable as 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)<sup>1</sup>? ☐ Yes ☒ No

<sup>1</sup> 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? 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.
- ☒ Use dust suppression measures (e.g., water during saw cutting) to reduce fugitive emissions.

**Studies/References That Support the Program:** Synergi Modeling

| Benefits                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Reliability Benefits</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Supports growth forecast</li> <li><input checked="" type="checkbox"/> Addresses supply/capacity constraint or supply diversity needs</li> <li><input type="checkbox"/> Addresses storm/climate change resiliency</li> </ul> <p><b>Other Customer Benefits:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Improves Customer Satisfaction</li> <li><input type="checkbox"/> Reflects efficiency savings of \$____</li> <li><input type="checkbox"/> Reduction in Billing Errors and Re-Bills</li> <li><input type="checkbox"/> Supports implementation of Gas Business Enablement</li> </ul> <p><b>Safety Benefits:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Enhances response time to Emergency Gas Leaks</li> <li><input type="checkbox"/> Enhances employee safety</li> </ul> |

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](#).

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <div data-bbox="165 199 971 354"><ul style="list-style-type: none"><li><input type="checkbox"/> Increases automation (reduces human error)</li><li><input checked="" type="checkbox"/> Enhances Public Safety</li><li><input type="checkbox"/> Reduces Damages potential (<i>i.e., in the case of mapping system</i>)</li><li><input checked="" type="checkbox"/> Addresses specific safety initiative: <u>Regulatory compliance</u></li></ul><p><b><u>Societal Benefits/Externalities:</u></b></p><ul style="list-style-type: none"><li><input type="checkbox"/> Emissions Reduction</li><li><input type="checkbox"/> Reduces use of Alt. Fuel</li><li><input type="checkbox"/> Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)</li><li><input type="checkbox"/> Other: _____</li></ul></div> |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

# CSC/Public Works



|                                                                                                                                                                                             |  |                                                                                                          |                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------|-----------------------------------|
| <b>Type:</b> <input type="checkbox"/> Project <input checked="" type="checkbox"/> Program                                                                                                   |  | <b>Category:</b> <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                                   |
| <b>Investment Code:</b> 5230000020                                                                                                                                                          |  | <b>Region:</b> <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                                   |
| <b>Planning Portfolio:</b> <input type="checkbox"/> Customer Connections <input type="checkbox"/> Mandated <input type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |  |                                                                                                          |                                   |
| <b>Annual Program:</b> <input checked="" type="checkbox"/>                                                                                                                                  |  | <b>Estimated Start Date:</b>                                                                             | <b>Estimated In-Service Date:</b> |
| <b>Status:</b> <input type="checkbox"/> Initiation/Planning <input type="checkbox"/> In-Progress (Projects Only) <input checked="" type="checkbox"/> On-Going (Programs Only)               |  |                                                                                                          |                                   |
| <b>Sponsor:</b> Vientos, Victor                                                                                                                                                             |  | <b>Business Contact:</b> Gao, Ross                                                                       |                                   |

## **Work Description:**

The City/State Construction (CSC) program consists of work to accommodate municipal infrastructure projects by various Long Island municipalities, as well as the NYC Department of Design and Construction (NYCDDC) and NYC Department of Transportation (NYCDOT) on the Rockaway Peninsula. The CSC program is reactive in nature and replaces gas infrastructure that will be compromised by third party construction activities.

## **Justification Summary:**

National Grid facilities are in often direct conflict with proposed municipal infrastructure installations/projects or 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 and the Gas Cost Sharing Agreement with New York City (GSA). Per the GSA, relocation costs incurred by National Grid on these projects are eligible for reimbursement by the City of New York based on the age of the main (depreciated book value). Conversely, projects funded by the NYSDOT, NYCDOT, and other municipal entities are not eligible for reimbursement.

National Grid's Government Liaisons work closely with engineers and consultants from the NYCDDC and Long Island municipalities to minimize any direct conflicts to the existing gas infrastructure. Collaborating with municipalities reduces the Company's support and protect (O&M) costs, maximizes remuneration, and reduces risk exposure to the Company's facilities and the general public.

## **Customer Benefits:**

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

Customers can benefit from the program in the following ways:

Synergistic opportunities are realized through the 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 (5th Ward) and Long Island municipalities to minimize impacts to local communities during project execution. This ensures businesses remain open and commerce continues.

National Grid also creates its responsive projects 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 after the work is completed.

## Funding Detail

### Cost Breakdown:

|                                            | FY28          |
|--------------------------------------------|---------------|
| CAPEX- CSC/Public Works - Non-Reimbursable | \$ 12,218,093 |
| OPEX                                       |               |
| TOTAL                                      | \$ 12,218,093 |

## Supplemental Information

### 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

- 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:** Public Works and CSC activities are reactive to municipal works projects scale and scheduling. The Company is required to complete the work to continue serving existing customers, and there is often not enough time, space, or customer receptivity to install alternative energy options. Additionally, in the 5th Ward of the City of

New York, National Grid is mandated pursuant to Sections § 19-143 and § 24-521 of the New York City administrative code, 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)<sup>1</sup>? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? Work is temporary in nature and reactive to Long Island municipal and City of New York projects; any routing determinations are the result of infrastructure interference as part of the associated projects. The Company works to minimize the impact on surrounding communities, 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.

\* 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 KEDLI's legal obligations under New York State code (including 16 NYCRR Part 255.755, Part 255.756, and Part 255.757), New York State law (including NYS General Obligations Law Section 11-102, 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 and GSA, which require replacement and/or support and protection of gas facilities during third-party construction.

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<sup>1</sup> 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](#).

## 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: \_\_\_\_\_

# Integrity – Meter Pit



|                                                                                                                                                                                                 |                                                                                                   |                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------|
| Type: <input type="checkbox"/> Project <input checked="" type="checkbox"/> Program                                                                                                              | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                            |
| Investment Code: 5230001671                                                                                                                                                                     | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                            |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input checked="" type="checkbox"/> Mandated <input type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                                                                                   |                            |
| Annual Program: <input checked="" type="checkbox"/>                                                                                                                                             | Estimated Start Date:                                                                             | Estimated In-Service Date: |
| Status: <input type="checkbox"/> Initiation/Planning <input type="checkbox"/> In-Progress (Projects Only) <input checked="" type="checkbox"/> On-Going (Programs Only)                          |                                                                                                   |                            |
| Sponsor: Khan, Saadat                                                                                                                                                                           | Business Contact: Tambda, Muhammad                                                                |                            |

## Work Description:

The Meter Pitts Refurbishment program repairs and gas piping components, regulators, and meters exposed to atmospheric corrosion. Components inside meter pitts are vulnerable to water intrusion and stagnant water accumulation caused by external weather conditions over time. KEDLI's service region contains 254-meter pitts. Currently, the corrosion inspection program inspects one-third of the population annually. The meter pitt's population inventory and condition of the piping and appurtenances are provided through the corrosion inspection program. The objective is to address and remediate meter pitts in the region, as necessary, which will be prioritized and ranked by risk.

## Justification Summary:

The objective of this program is to remediate below-grade meter pitts that have water intrusion issues. This proactive initiative aims to prevent both current and future risks of atmospheric corrosion and flooding within meter pitts. If left unaddressed, corrosion can lead to service disruptions and potentially escalate into safety hazards. Additionally, the program will enable timely, criteria-based decision-making for project execution, improving customer satisfaction while ensuring system safety and reliability.

## Customer Benefits:

Successful execution of this program will enhance the safety and reliability of gas assets while driving both current and future improvements. Customer satisfaction will be improved by eliminating unplanned gas service disruptions, reducing inconvenience associated with the relight process, and minimizing potential customer costs for remedy or repair of customer-owned equipment. The recommended program will also prevent recurring service disruptions for customers on low-pressure systems.

## Funding Detail

## Cost Breakdown:

|       | FY28         |
|-------|--------------|
| CAPEX | \$ 2,286,590 |
| OPEX  |              |
| TOTAL | \$ 2,286,590 |

### Alternatives

**Alternative 1: Minor Repairs.** This option represents the minimum capital investment and operating effort required to implement temporary or non-permanent fixes for identified water intrusion issues in meter pits. However, it excludes addressing newly identified issues in the future. As a result, this approach limits flexibility to respond promptly to urgent systems, which could lead to customer outages. Additional emergent issues arising during the year would need to be managed on a case-by-case basis, requiring reallocation of funds from other programs.

**Alternative 2: Do Nothing:** The 'Do Nothing' option means taking no action to address water intrusion, atmospheric corrosion, or flooded meter pit issues. Under this approach, no permanent resolution would be implemented through the budget planning process. If a substandard condition or severe corrosion requiring immediate attention is discovered, corrective action would occur reactively. This reactive approach disrupts planned work portfolios, as issues emerge unplanned during annual inspections. Repairs would need to be managed individually and funded by reallocating resources from other programs. The inability to properly plan and apply uniform criteria significantly increases operational and safety risks to the Company, including hazards from flooding and corrosion of meter assets that could compromise system integrity and customer safety. Additional consequences include potential service outages, customer inconvenience during emergency repairs and relight processes, and recurring failures on low-pressure systems.

**Alternative 3: Non-Pipes Alternatives ("NPAs")- N/A**

**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 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)<sup>1</sup>?** ☒ 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.
- ☐ 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**

<sup>1</sup> 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]."

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

# Large Diameter Pipe Rehabilitation



|                                                                                                                                                                                                        |  |                                                                                                          |                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------|-----------------------------------|
| <b>Type:</b> <input type="checkbox"/> Project <input checked="" type="checkbox"/> Program                                                                                                              |  | <b>Category:</b> <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                                   |
| <b>Investment Code:</b> 5230000033                                                                                                                                                                     |  | <b>Region:</b> <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                                   |
| <b>Planning Portfolio:</b> <input type="checkbox"/> Customer Connections <input checked="" type="checkbox"/> Mandated <input type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |  |                                                                                                          |                                   |
| <b>Annual Program:</b> <input checked="" type="checkbox"/>                                                                                                                                             |  | <b>Estimated Start Date:</b>                                                                             | <b>Estimated In-Service Date:</b> |
| <b>Status:</b> <input checked="" type="checkbox"/> Initiation/Planning <input type="checkbox"/> In-Progress (Projects Only) <input checked="" type="checkbox"/> On-Going (Programs Only)               |  |                                                                                                          |                                   |
| <b>Sponsor:</b> Khan, Saadat                                                                                                                                                                           |  | <b>Business Contact:</b> Peters, Kevin                                                                   |                                   |

## Work Description:

The Company utilizes several different types of mains: cast iron, steel, and plastic. Cast iron mains are constructed with bell and spigot joints and are prone to leaks after a long service period. Unprotected steel mains are prone to leaks due to corrosion.

The Company proposes to continue a program that leverages new technology to cost-effectively address leaks on large diameter leak-prone pipes, specifically greater than 12" in diameter, by rehabilitating them with the installation of an internal cured-in-place (CIP) liner, which can extend the life of the pipe by more than 50 years. Other programs are proposed to continue addressing leaks on small(er) diameter mains (e.g., those with a diameter of 12" or less).

While replacement is often a cost-effective method of addressing leaks on small-diameter mains (and other Company programs are proposed to address those facilities), replacement of large-diameter mains costs more due to the location and excavation depth required to access the pipe. The large diameter mains in the company's service area are typically located in urban settings, have many customer services, and operate at a low pressure (LP) level. Streets can be congested with other utilities, making it difficult to install a new large-diameter main in advance to keep LP customers in service before the old main is retired. Internal CIP lining is a cost-effective way to rehabilitate these existing mains for leak elimination, while minimizing surface disruptions for the public.

If it is impractical to utilize this technology, replacing the large-diameter pipe while maintaining LP system reliability may be the only option to eliminate leaks. However, replacement will be more difficult and costly. If a replacement is selected, the program mileage may be less than the target per year.

In some situations, replacement of small diameter mains adjacent to large diameter pipes are planned via other programs, and they are concurrently upgraded to medium pressure (MP) service. If the LP service of the large-diameter pipe can also be upgraded to MP without affecting the reliability of any part of the remaining LP system, this program can fund the large-diameter replacement with a small-diameter MP pipe in lieu of rehabilitation.

## Justification Summary:

The current LPP replacement program only addresses mains 12" and less in diameter, whereas this program seeks to treat the remaining large-diameter pipe. Installing the lining is the most cost-effective way to rehabilitate an existing main for leak elimination while minimizing surface disruptions to the public.

The Company's lining program is also supported by the Company's recently developed Distribution Integrity Management Plan (DIMP), which specifies that the Company should:

1. Know its distribution piping system.
2. Understand the threats to the system.
3. Evaluate the risks and prepare replacement programs for its leak-prone mains and services inventory to help mitigate those risks.

The following are the key benefits of the Large Diameter Pipe Rehabilitation 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; and
- 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         |
|--------------|--------------|
| <b>CAPEX</b> | \$ 6,203,461 |
| <b>OPEX</b>  |              |
| <b>TOTAL</b> | \$ 6,203,461 |

#### **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 the more traditional repair methods 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:** See Alternative 2.

#### 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: 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)<sup>1</sup>? ☒ 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:

<sup>1</sup> 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].”

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: \_\_\_\_\_

# Main Replacement - Low Pressure Pocket Elimination



|                                                                                                                                                                                                 |                                                                                                   |                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------|
| Type: <input type="checkbox"/> Project <input checked="" type="checkbox"/> Program                                                                                                              | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                            |
| Investment Code: 5230101236                                                                                                                                                                     | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                            |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input type="checkbox"/> Mandated <input checked="" type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                                                                                   |                            |
| Annual Program: <input checked="" type="checkbox"/>                                                                                                                                             | Estimated Start Date:                                                                             | Estimated In-Service Date: |
| Status: <input checked="" type="checkbox"/> Initiation/Planning <input type="checkbox"/> In-Progress (Projects Only) <input type="checkbox"/> 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 KEDLI territory and convert customers to high-pressure (HP) systems. In FY2028 the program will install approximately 4.8 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 | \$ 6,288,539 |
| OPEX  |              |
| TOTAL | \$ 6,288,539 |

**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)<sup>1</sup>? ☒ 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**

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<sup>1</sup> 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



|                                                                                                                                                                                                        |  |                                                                                                          |                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------|-----------------------------------|
| <b>Type:</b> <input type="checkbox"/> Project <input checked="" type="checkbox"/> Program                                                                                                              |  | <b>Category:</b> <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                                   |
| <b>Investment Code:</b> 5230000029                                                                                                                                                                     |  | <b>Region:</b> <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                                   |
| <b>Planning Portfolio:</b> <input type="checkbox"/> Customer Connections <input checked="" type="checkbox"/> Mandated <input type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |  |                                                                                                          |                                   |
| <b>Annual Program:</b> <input checked="" type="checkbox"/>                                                                                                                                             |  | <b>Estimated Start Date:</b>                                                                             | <b>Estimated In-Service Date:</b> |
| <b>Status:</b> <input type="checkbox"/> Initiation/Planning <input type="checkbox"/> In-Progress (Projects Only) <input checked="" type="checkbox"/> On-Going (Programs Only)                          |  |                                                                                                          |                                   |
| <b>Sponsor:</b> Khan, Saadat                                                                                                                                                                           |  | <b>Business Contact:</b> 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, pre-1985 vintage Aldyl-A plastic pipe, vintage HDPE and copper services (associated services).

KEDLI's existing rate plan (Case 23-G-0226) requires the Company to replace 379 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.

| Calendar Year                 | CY27 |
|-------------------------------|------|
| Proactive LPP, miles          | 121  |
| Total LPP Replacement*, miles | 123  |

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

## Justification Summary:

The December 31, 2025, inventory of LPP of 12 inch and smaller pipe is 2,683 miles (2,210 miles of unprotected steel, 355 miles of ALDYL-A and 118 miles of cast iron/wrought iron), which represents approximately 31 percent of the distribution system in KEDLI's territory. The current leak rate for all distribution piping on the KEDLI system is 0.07 leaks per mile excluding leaks due to damages, decreased from 0.15 leaks per mile in 2016. The current leak rate for LPP is 0.21 leaks per mile reduced from 0.29 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 31 percent of the KEDLI distribution main inventory yet accounts for 81 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 | \$ 356,388,017 |
| OPEX  | \$ 0           |
| TOTAL | \$ 356,388,017 |

**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 put the Company in violation of its federally regulated DIMP.

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

**Risk of No Action:** Failure to replace leak-prone mains will lead to a continued increase in leak frequency and severity, elevating risks to public safety. Inaction will also result in non-compliance with regulatory requirements, including federally mandated Distribution Integrity Management Program (DIMP) obligations, exposing the Company to potential enforcement actions and penalties. Additionally, the Company will face escalating maintenance and emergency repair costs and increased liability exposure. Operationally, more frequent service interruptions and emergency responses will strain resources and impact

reliability metrics. Furthermore, unrepaired leaks contribute to higher methane emissions, conflicting with state and federal climate goals and potentially subjecting the Company to environmental penalties and reputational scrutiny.

#### **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:** 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)<sup>1</sup>? ☒ 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:

<sup>1</sup> 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].”

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:** Joint Proposal in Case 19-G-0310

**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: <input type="checkbox"/> Project <input checked="" type="checkbox"/> Program                                                                                                              | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                            |
| Investment Code: 5230000034                                                                                                                                                                     | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                            |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input checked="" type="checkbox"/> Mandated <input type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                                                                                   |                            |
| Annual Program: <input checked="" type="checkbox"/>                                                                                                                                             | Estimated Start Date:                                                                             | Estimated In-Service Date: |
| Status: <input type="checkbox"/> Initiation/Planning <input type="checkbox"/> In-Progress (Projects Only) <input checked="" type="checkbox"/> 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:

This program aims to quickly replace the small sections of actively corroded mains and reduce the risk associated with leak-prone pipe in KEDLI's distribution system. The replacement of LPP and associated services are 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 | \$ 3,858,193 |
| OPEX  |              |
| TOTAL | \$ 3,858,193 |

## Supplemental Information

## Alternatives

**Alternative 1: Reduce or 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 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.

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

**Risk of No Action:** Failure to replace leak-prone mains and associated services will lead to a continued increase in leak frequency and severity, elevating risks to public and employee safety. Inaction will also result in non-compliance with regulatory requirements, including federally mandated Distribution Integrity Management Program (DIMP) obligations, exposing the Company to potential enforcement actions and penalties. Additionally, the Company will face escalating maintenance and emergency repair costs and increased liability exposure. Operationally, more frequent service interruptions and emergency responses will strain resources and negatively impact reliability metrics. Furthermore, unrepaired leaks contribute to higher methane emissions, conflicting with state and federal climate goals and potentially subjecting the Company to environmental penalties and reputational scrutiny.

### **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 they are 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)<sup>1</sup>? ☒ Yes ☐ No

<sup>1</sup> 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 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
- ☒ 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

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <div><div><input type="checkbox"/> Reduces Damages potential (<i>i.e., in the case of mapping system</i>)</div><div><input type="checkbox"/> Addresses specific safety initiative: _____</div><div><b><u>Societal Benefits/Externalities:</u></b></div><div><input checked="" type="checkbox"/> Emissions Reduction</div><div><input type="checkbox"/> Reduces use of Alt. Fuel</div><div><input checked="" type="checkbox"/> Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)</div><div><input type="checkbox"/> Other: _____</div></div> |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |

# Meter Work - Meter Changes



|                                                                                                                                                                                                 |                                                                                                   |                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------|
| Type: <input type="checkbox"/> Project <input checked="" type="checkbox"/> Program                                                                                                              | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                            |
| Investment Code: 5230000036                                                                                                                                                                     | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                            |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input checked="" type="checkbox"/> Mandated <input type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                                                                                   |                            |
| Annual Program: <input checked="" type="checkbox"/>                                                                                                                                             | Estimated Start Date:                                                                             | Estimated In-Service Date: |
| Status: <input type="checkbox"/> Initiation/Planning <input type="checkbox"/> In-Progress (Projects Only) <input checked="" type="checkbox"/> On-Going (Programs Only)                          |                                                                                                   |                            |
| Sponsor: Malone, David                                                                                                                                                                          | Business Contact: Anderson, Raymond                                                               |                            |

## Work Description:

The KEDLI 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. KEDLI 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 | \$ 5,162,932 |
| OPEX  |              |
| TOTAL | \$ 5,162,932 |

## 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? 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)<sup>1</sup>? ☒ 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. No material impact on 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:

<sup>1</sup> 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].”

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reliability Benefits</b> <ul style="list-style-type: none"><li><input type="checkbox"/> Supports growth forecast</li><li><input type="checkbox"/> Addresses supply/capacity constraint or supply diversity needs</li><li><input type="checkbox"/> Addresses storm/climate change resiliency</li></ul>                                                                                                                                                                                                                          |
| <b>Other Customer Benefits:</b> <ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Improves Customer Satisfaction</li><li><input type="checkbox"/> Reflects efficiency savings of \$____</li><li><input type="checkbox"/> Reduction in Billing Errors and Re-Bills</li><li><input type="checkbox"/> Supports implementation of Gas Business Enablement</li></ul>                                                                                                                                           |
| <b>Safety Benefits:</b> <ul style="list-style-type: none"><li><input type="checkbox"/> Enhances response time to Emergency Gas Leaks</li><li><input type="checkbox"/> Enhances employee safety</li><li><input type="checkbox"/> Increases automation (reduces human error)</li><li><input type="checkbox"/> Enhances Public Safety</li><li><input type="checkbox"/> Reduces Damages potential (<i>i.e., in the case of mapping system</i>)</li><li><input type="checkbox"/> Addresses specific safety initiative: _____</li></ul> |
| <b>Societal Benefits/Externalities:</b> <ul style="list-style-type: none"><li><input type="checkbox"/> Emissions Reduction</li><li><input type="checkbox"/> Reduces use of Alt. Fuel</li><li><input type="checkbox"/> Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)</li><li><input type="checkbox"/> Other: <u>Meets regulatory obligations</u> _____</li></ul>                                                                                                                                                          |

# Meter Work – ERT Replacements



|                                                                                                                                                                                                 |                                                                                                   |                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------|
| Type: <input checked="" type="checkbox"/> Project <input type="checkbox"/> Program                                                                                                              | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                            |
| Investment Code: 5230101998                                                                                                                                                                     | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                            |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input checked="" type="checkbox"/> Mandated <input type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                                                                                   |                            |
| Annual Program: <input checked="" type="checkbox"/>                                                                                                                                             | Estimated Start Date:                                                                             | Estimated In-Service Date: |
| Status: <input type="checkbox"/> Initiation/Planning <input type="checkbox"/> In-Progress (Projects Only) <input checked="" type="checkbox"/> 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 | 31,500 |

## 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 | \$ 5,006,771 |
| OPEX  |              |

|  |              |              |
|--|--------------|--------------|
|  |              |              |
|  | <b>TOTAL</b> | \$ 5,006,771 |

## Supplemental Information

### Alternatives

**Alternative 1: Do Nothing.** If no action is taken, meter readings and customer billing will become increasingly inaccurate. By 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

- 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: 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)<sup>1</sup>? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? This program is designed to relocate meters from inside the premise to outside. The locations for the work being conducted are selected solely on the location of the meter and may be located in 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.
- ☒ N/A

Studies/References That Support the Program: N/A

#### Benefits

<sup>1</sup> 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: \_\_\_\_\_

# Meter Work - Purchase Meters (New/Replacements)



|                                                                                                                                                                                                 |                                                                                                   |                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------|
| Type: <input type="checkbox"/> Project <input checked="" type="checkbox"/> Program                                                                                                              | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                            |
| Investment Code: 5230000042                                                                                                                                                                     | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                            |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input checked="" type="checkbox"/> Mandated <input type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                                                                                   |                            |
| Annual Program: <input checked="" type="checkbox"/>                                                                                                                                             | Estimated Start Date:                                                                             | Estimated In-Service Date: |
| Status: <input type="checkbox"/> Initiation/Planning <input type="checkbox"/> In-Progress (Projects Only) <input checked="" type="checkbox"/> 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 as follows:

|             |        |
|-------------|--------|
| Meters      | FY28   |
| Total units | 13,540 |

|             |        |
|-------------|--------|
| ERTs        | FY28   |
| Total units | 12,512 |

*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 | \$ 18,491,099 |
| OPEX  |               |
| TOTAL | \$ 18,491,099 |

**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”)**

**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 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 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)<sup>1</sup>?** ☐ 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.
- ☐ 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**

<sup>1</sup> 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]."

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

# Pipeline Integrity - IMP - Barrett Power GM 30 – Barnums Channel Repair

|                                                                                                                                                                                                 |                                                                                                   |                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------|
| Type: <input checked="" type="checkbox"/> Project <input type="checkbox"/> Program                                                                                                              | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                                       |
| Investment Code: 5230102181                                                                                                                                                                     | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                                       |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input checked="" type="checkbox"/> Mandated <input type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                                                                                   |                                       |
| Annual Program: <input type="checkbox"/>                                                                                                                                                        | Estimated Start Date: 4/2026                                                                      | Estimated In-Service Date: 03/31/2028 |
| Status: <input type="checkbox"/> Initiation/Planning <input checked="" type="checkbox"/> In-Progress (Projects Only) <input type="checkbox"/> On-Going (Programs Only)                          |                                                                                                   |                                       |
| Sponsor: Kern, Michael                                                                                                                                                                          | Business Contact: Conklin, Kevin                                                                  |                                       |

## Work Description:

The pipeline feed for Barrett Power Generation currently crosses Barnums Channel on a truss style utility bridge. This project is to extend the life of the bridge. The complete replacement of the bridge will be addressed under a future independent project. This project will inspect structural components of the bridge, will repair, rehabilitate, and replace components as required. Components of the bridge include structural steel bridge members, concrete supports and bridge abutments, pipe supports and spring can supports. After completion of the structural work the bridge will be coated to protect it from the corrosive environment.

## Justification Summary:

The utility bridge carries the GM 30 across Barnums Channel, GM 30 delivers the fuel for E. F. Barrett Power Generation plant without this repair, rehabilitation and replacement the bridge is at risk of failure and collapsing into the Barnums Channel.

## Customer Benefits:

The customer benefit of this project is the continuous delivery of the natural gas fuel to the EF Barrett Generation facility. Additionally, the existing utility bridge is in danger of failing and causing the pipeline on that bridge to rupture creating a large uncontrolled release of natural gas.

## Funding Detail

## Cost Breakdown:

|       | FY28         |
|-------|--------------|
| CAPEX | \$ 5,574,206 |
| OPEX  |              |
| TOTAL | \$ 5,574,206 |

## Supplemental Information

## Alternatives

**Alternative 1: Do Nothing:** This is not an acceptable alternative due to condition of the utility pipe bridge.

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

**Risk of No Action** If no action is taken, there is a significant risk that the utility pipe bridge will fail, causing GM-30 to fall into Barnums Channel. Loss of the pipeline would eliminate the fuel supply to the Barrett Power Generation Plant.

### 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 to repair, rehabilitate and replace the structural components of the utility bridge there is no NPA.

### CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)<sup>1</sup>? ☐ Yes ☒ No
2. If so, explain how was the routing determined and how will the project impact the surrounding 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
- ☐ 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

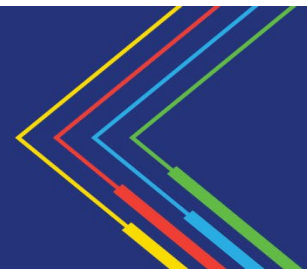
<sup>1</sup> As defined in Environmental Conservation Law Section 75-0101(5), disadvantaged communities are “communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b><u>Reliability Benefits</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Supports growth forecast</li> <li><input type="checkbox"/> Addresses supply/capacity constraint or supply diversity needs</li> <li><input type="checkbox"/> Addresses storm/climate change resiliency</li> </ul> <p><b><u>Other Customer Benefits:</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Improves Customer Satisfaction</li> <li><input type="checkbox"/> Reflects efficiency savings of \$____</li> <li><input type="checkbox"/> Reduction in Billing Errors and Re-Bills</li> <li><input type="checkbox"/> Supports implementation of Gas Business Enablement</li> </ul> <p><b><u>Safety Benefits:</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Enhances response time to Emergency Gas Leaks</li> <li><input type="checkbox"/> Enhances employee safety</li> <li><input type="checkbox"/> Increases automation (reduces human error)</li> <li><input type="checkbox"/> Enhances Public Safety</li> <li><input type="checkbox"/> Reduces Damages potential (<i>i.e., in the case of mapping system</i>)</li> <li><input type="checkbox"/> Addresses specific safety initiative: _____</li> </ul> <p><b><u>Societal Benefits/Externalities:</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Emissions Reduction</li> <li><input type="checkbox"/> Reduces use of Alt. Fuel</li> <li><input type="checkbox"/> Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)</li> <li><input type="checkbox"/> Other: _____</li> </ul> |

# Pipeline Integrity - IMP - GM 2 -ILI enablement from NWN to Stewart Ave



|                                                                                                                                                                                                 |                                                                                                   |                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------|
| Type: <input checked="" type="checkbox"/> Project <input type="checkbox"/> Program                                                                                                              | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                                       |
| Investment Code: 5230101749                                                                                                                                                                     | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                                       |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input checked="" type="checkbox"/> Mandated <input type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                                                                                   |                                       |
| Annual Program: <input type="checkbox"/>                                                                                                                                                        | Estimated Start Date: April 2023                                                                  | Estimated In-Service Date: March 2028 |
| Status: <input type="checkbox"/> Initiation/Planning <input checked="" type="checkbox"/> In-Progress (Projects Only) <input type="checkbox"/> On-Going (Programs Only)                          |                                                                                                   |                                       |
| Sponsor: Kern, Mike                                                                                                                                                                             | Business Contact: Conklin, Kevin                                                                  |                                       |

## Work Description:

Pipeline Integrity - IMP - GM 2 -ILI enablement from the tie-in to the Northwest Nassau (NWN) Pipeline Replacement to Stewart Ave Gas Regulation Station. This project will remove and replace a pipeline valve which will prevent the passage of a free-swimming ILI, install approximately 600 feet of to connect the new equipment and install an ILI launcher/receiver at Stewart Ave.

## Justification Summary:

Mandated project to make existing pipeline ILI enabled. As a result of the San Bruno incident the NTSB and PHMSA have issued guidance that all operators make as much of their gas transmission systems ILI enabled as possible. This was reinforced with the language contained in the PHMSA MEGA Rule in RIN1.

## Customer Benefits:

ILI enablement will allow for the enhanced operational safety of the Company's transmission system. Through ILI enablement, the Company is able to 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.

## Funding Detail

### Cost Breakdown:

|       | FY28          |
|-------|---------------|
| CAPEX | \$ 17,870,000 |
| OPEX  |               |
| TOTAL | \$ 17,870,000 |

## Supplemental Information

## Alternatives

**Alternative 1: Do not complete project.** This will result in the inability to inline inspect part of GM2 and the Northwest Nassau pipelines. This does not comply with PHMSA recommendations and National Grid's strategy for ILI enablement.

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

**Risk of No Action:** Does not comply with PHMSA recommendations.

## 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)<sup>1</sup>? ☐ 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

<sup>1</sup> 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.**

**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)

|                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <div><div><input type="checkbox"/> Addresses specific safety initiative:</div><div><b><u>Societal Benefits/Externalities:</u></b><div><div><input type="checkbox"/> Emissions Reduction</div><div><input type="checkbox"/> Reduces use of Alt. Fuel</div><div><input type="checkbox"/> Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)</div><div><input checked="" type="checkbox"/> Other: Regulatory compliance</div></div></div></div> |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |

# Pipeline Integrity - IVP GM-22 & GM-26 Part-R LI Ave



|                                                                                                                                                                                      |                                  |                                                                                                   |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------|--|
| Type: <input checked="" type="checkbox"/> Project <input type="checkbox"/> Program                                                                                                   |                                  | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |  |
| Investment Code: 5230101530                                                                                                                                                          |                                  | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |  |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input type="checkbox"/> Mandated <input type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                  |                                                                                                   |  |
| Annual Program: <input type="checkbox"/>                                                                                                                                             | Estimated Start Date: April 2025 | Estimated In-Service Date: March 2028                                                             |  |
| Status: <input type="checkbox"/> Initiation/Planning <input type="checkbox"/> In-Progress (Projects Only) <input type="checkbox"/> On-Going (Programs Only)                          |                                  |                                                                                                   |  |
| Sponsor: Kern, Mike                                                                                                                                                                  |                                  | Business Contact: Conklin, Kevin                                                                  |  |

## Work Description:

This project will replace 10 feet of 16-inch pipe on Long Island Avenue interconnecting GM-22 to GM-26.

## Justification Summary:

The recent PHMSA rulemaking (CFR 192.624) has directed operators to address pipelines that do not have adequate or missing records such as pressure test charts, material reports and weld records. 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 and must be replaced. All projects on the transmission system must be coordinated to maintain supply to customers. A yearly outage plan is established, and each project is given a window during which the project must be executed.

## 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.

## Funding Detail

## Cost Breakdown:

|       | FY28         |
|-------|--------------|
| CAPEX | \$ 5,260,000 |
| OPEX  |              |
| TOTAL | \$ 5,260,000 |

## 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:** Pipeline would be out of compliance with PHMSA regulation 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)<sup>1</sup>? ☐ 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:

<sup>1</sup> 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].”

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 recent PHMSA MEGA rule RIN1 (49 CFR 192.624 ) requires operators to have or make complete record sets that substantiate the MAOP requirements of 192.619.

**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: Meets regulatory requirements

# Pipeline Integrity - Northwest Nassau - Transmission Main & Control Valve - Phase 3

|                                                                                                                                                                                                 |                                                                                                   |                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|------------------------------------|
| Type: <input checked="" type="checkbox"/> Project <input type="checkbox"/> Program                                                                                                              | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                                    |
| Investment Code: 5230001601                                                                                                                                                                     | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                                    |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input checked="" type="checkbox"/> Mandated <input type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                                                                                   |                                    |
| Annual Program: <input type="checkbox"/>                                                                                                                                                        | Estimated Start Date: 04/2022                                                                     | Estimated In-Service Date: 03/2028 |
| Status: <input type="checkbox"/> Initiation/Planning <input checked="" type="checkbox"/> In-Progress (Projects Only) <input type="checkbox"/> On-Going (Programs Only)                          |                                                                                                   |                                    |
| Sponsor: Kern, Mike                                                                                                                                                                             | Business Contact: Conklin, Kevin                                                                  |                                    |

## Work Description:

This project addresses three aging natural gas transmission lines in northwestern Nassau County. The project would continue the replacement of 8.8 miles of transmission main, install 5.6 miles of new pipe, down rate 9.1 miles of pipe, and construct two new regulator stations in response to gaps in records and concerns regarding the materials originally used to construct existing mains 1, 8 and 16. The project is planned in three phases:

### **Phase One (FY 2017-19): Complete**

### **Phase Two (FY 2019-24): Complete**

- Install approximately 3.9 miles of 24" 350 psig main. Route on Clinton Avenue/Glen Cove Road from Stewart Ave to the Long Island Expressway (LIE).
- Downrate the existing 16" main from 350 psig and operate at 60 psig, tie into the local distribution system and certify as a 124/60 main.

### **Phase Three (FY 2021-24):**

- Relay approximately 4.8 miles of Gas Main 1 along the LIE From Lake Success to Roslyn Heights with 24" 350 psig main. Downrate and operate the existing 16" main at 60 psig and certify as a 124/60 main.
- Some additional 60 psig distribution system reinforcements will not be required as a result of the down rating to 124/60.

## Justification Summary:

In response to the events of San Bruno and PHMSA's integrity verification program (IVP) recommendations, the Company has undertaken a review of historical records to substantiate the maximum allowable operating pressure, system reliability and comply with the recently enacted PHMSA code requirements 49 CFR 192.607 & 192. The results of this review indicated the replacement and down rating of Gas Mains 1, 8, and 16 will address compliance of these pipelines, will mitigate system risks and increase system reliability.

## Customer Benefits:

The program seeks to further reduce the risk of operating the gas transmission system, which will improve public safety and the reliability of the gas delivery system. By downrating existing pipelines where possible, to reinforce the distribution system rather than replacing these transmission pipelines, this project also results in avoiding future replacement work.

## Funding Detail

**Cost Breakdown:**

|       | FY28         |
|-------|--------------|
| CAPEX | \$ 1,500,000 |
| OPEX  |              |
| TOTAL | \$ 1,500,000 |

**Supplemental Information**

**Alternatives**

**Alternative 1: Re-test each pipeline segment.** As an alternative, KEDLI could establish properties and re-hydro test each pipeline segment. This alternative would leave in place pipe that is over 50 years old operating at a stress level of 20 percent and greater. This option is rejected because it does not achieve the Company's risk reduction goals.

**Alternative 2: Do Nothing.** This alternative is rejected because new regulations require establishment of complete records and MAOP reconfirmation. Additionally, the Company's review indicates that existing facilities in this area may not be sufficient to meet forecasted peak demand in future years and may require an additional reinforcement project if this project is not in-service.

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

**Risk of No Action:** The risk of no action puts the Company at the risk of regulatory non-compliance.

**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)<sup>1</sup>? ☐ 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.
- ☐ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

**Studies/References That Support the Program:** The recent PHMSA MEGA rule RIN1 (192.624 ) requires operators to have or make complete record sets that substantiate the MAOP requirements of 192.619.

### Benefits

<sup>1</sup> 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: Regulatory Mandate

# Replace Pipe on Bridges



|                                                                                                                                                                                                 |                                                                                                   |                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------|
| Type: <input type="checkbox"/> Project <input checked="" type="checkbox"/> Program                                                                                                              | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                            |
| Investment Code: 5230101510                                                                                                                                                                     | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                            |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input checked="" type="checkbox"/> Mandated <input type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                                                                                   |                            |
| Annual Program: <input checked="" type="checkbox"/>                                                                                                                                             | Estimated Start Date:                                                                             | Estimated In-Service Date: |
| Status: <input type="checkbox"/> Initiation/Planning <input type="checkbox"/> In-Progress (Projects Only) <input checked="" type="checkbox"/> 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.

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.

**Customer Benefits:**

This program and its individual projects will enhance safety and reliability of gas infrastructure.

**Funding Detail**

**Cost Breakdown:**

|       | FY28         |
|-------|--------------|
| CAPEX | \$ 1,984,019 |
| OPEX  |              |
| TOTAL | \$ 1,984,019 |

**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 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: 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)<sup>1</sup>? ☒ 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).

<sup>1</sup> 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 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 - Inactive Service Retirement



|                                                                                                                                                                                                 |                                                                                                   |                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------|
| Type: <input type="checkbox"/> Project <input checked="" type="checkbox"/> Program                                                                                                              | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                            |
| Investment Code: 5230102188                                                                                                                                                                     | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                            |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input checked="" type="checkbox"/> Mandated <input type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                                                                                   |                            |
| Annual Program: <input checked="" type="checkbox"/>                                                                                                                                             | Estimated Start Date:                                                                             | Estimated In-Service Date: |
| Status: <input checked="" type="checkbox"/> Initiation/Planning <input type="checkbox"/> In-Progress (Projects Only) <input type="checkbox"/> 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 | \$ 3,627,292 |
| OPEX  |              |
| TOTAL | \$ 3,627,292 |

**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)<sup>1</sup>? ☒ Yes ☐ No

<sup>1</sup> 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                               |                                                                |
|----------------------------------------|----------------------------------------------------------------|
| <b><u>Reliability Benefits</u></b>     |                                                                |
| <input type="checkbox"/>               | Supports growth forecast                                       |
| <input type="checkbox"/>               | Addresses supply/capacity constraint or supply diversity needs |
| <input type="checkbox"/>               | Addresses storm/climate change resiliency                      |
| <b><u>Other Customer Benefits:</u></b> |                                                                |
| <input checked="" type="checkbox"/>    | Improves Customer Satisfaction                                 |
| <input type="checkbox"/>               | Reflects efficiency savings of \$____                          |
| <input type="checkbox"/>               | Reduction in Billing Errors and Re-Bills                       |
| <input type="checkbox"/>               | Supports implementation of Gas Business Enablement             |
| <b><u>Safety Benefits:</u></b>         |                                                                |
| <input type="checkbox"/>               | Enhances response time to Emergency Gas Leaks                  |
| <input type="checkbox"/>               | Enhances employee safety                                       |
| <input type="checkbox"/>               | Increases automation (reduces human error)                     |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <div><div><input checked="" type="checkbox"/> Enhances Public Safety</div><div><input type="checkbox"/> Reduces Damages potential (<i>i.e., in the case of mapping system</i>)</div><div><input type="checkbox"/> Addresses specific safety initiative: _____</div><div><b><u>Societal Benefits/Externalities:</u></b></div><div><input checked="" type="checkbox"/> Emissions Reduction</div><div><input type="checkbox"/> Reduces use of Alt. Fuel</div><div><input type="checkbox"/> Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)</div><div><input type="checkbox"/> Other: _____</div></div> |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |

# Service Replacement - Reactive - Leaks



|                                                                                                                                                                                                 |                                                                                                   |                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------|
| Type: <input type="checkbox"/> Project <input checked="" type="checkbox"/> Program                                                                                                              | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                            |
| Investment Code: 5230000025                                                                                                                                                                     | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                            |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input checked="" type="checkbox"/> Mandated <input type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                                                                                   |                            |
| Annual Program: <input checked="" type="checkbox"/>                                                                                                                                             | Estimated Start Date:                                                                             | Estimated In-Service Date: |
| Status: <input type="checkbox"/> Initiation/Planning <input type="checkbox"/> In-Progress (Projects Only) <input checked="" type="checkbox"/> 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 | \$ 3,891,527 |
| OPEX  |              |
| TOTAL | \$ 3,891,527 |

## 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:** 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)<sup>1</sup>? ☒ 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.

<sup>1</sup> 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].”

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

**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: <input type="checkbox"/> Project <input checked="" type="checkbox"/> Program                                                                                                              | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                            |
| Investment Code: 5230000026                                                                                                                                                                     | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                            |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input checked="" type="checkbox"/> Mandated <input type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                                                                                   |                            |
| Annual Program: <input checked="" type="checkbox"/>                                                                                                                                             | Estimated Start Date:                                                                             | Estimated In-Service Date: |
| Status: <input type="checkbox"/> Initiation/Planning <input type="checkbox"/> In-Progress (Projects Only) <input checked="" type="checkbox"/> 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 remaining services.

Starting FY28, the program will also fund 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 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 in this investment.

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 | \$ 3,179,898 |
| OPEX  |              |
| TOTAL | \$ 3,179,898 |

## 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 Alternative (“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 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)<sup>1</sup>? ☒ 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.

<sup>1</sup> 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].”

**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****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

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <div><div><input type="checkbox"/> Reduces Damages potential (<i>i.e., in the case of mapping system</i>)</div><div><input type="checkbox"/> Addresses specific safety initiative: _____</div><div><b><u>Societal Benefits/Externalities:</u></b></div><div><input checked="" type="checkbox"/> Emissions Reduction</div><div><input type="checkbox"/> Reduces use of Alt. Fuel</div><div><input type="checkbox"/> Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)</div><div><input type="checkbox"/> Other: _____</div></div> |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |

# CNG - Hose Safety System

|                                                                                                                                                                                                 |                                                                                                   |                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------|
| Type: <input checked="" type="checkbox"/> Project <input type="checkbox"/> Program                                                                                                              | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                                       |
| Investment Code: 5230102173                                                                                                                                                                     | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                                       |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input type="checkbox"/> Mandated <input checked="" type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                                                                                   |                                       |
| Annual Program: <input type="checkbox"/>                                                                                                                                                        | Estimated Start Date: April 2027                                                                  | Estimated In-Service Date: April 2027 |
| Status: <input checked="" type="checkbox"/> Initiation/Planning <input type="checkbox"/> In-Progress (Projects Only) <input type="checkbox"/> On-Going (Programs Only)                          |                                                                                                   |                                       |
| Sponsor: Leyble, Dennis                                                                                                                                                                         | Business Contact: Paley, Ronald                                                                   |                                       |

## Work Description:

The primary focus of this project is to enhance safety measures at CNG injection sites through the installation of safety hoses, which are specifically engineered to prevent the release of gas from trailers or headers in the event of hose failure, such as a rupture. The implementation of these hoses is critical in mitigating risks associated with gas leaks, particularly in scenarios where a truck may inadvertently pull away from the header, potentially leading to hazardous situations.

## Justification Summary:

The safety hoses are designed to prevent the release of gas from trailers or headers in the event of hose failure. These systems are engineered to contain gas leaks, thereby protecting workers, the public, and the environment.

## Customer Benefits:

The installation of safety hoses at CNG injection sites provides significant benefits to customers by enhancing safety and reliability. These hoses prevent gas release from trailers or headers in the event of hose failure, reducing the risk of hazardous incidents. This approach protects workers and the public.

## Funding Detail

## Cost Breakdown:

|       | FY28         |
|-------|--------------|
| CAPEX | \$ 1,599,515 |
| OPEX  |              |
| TOTAL | \$ 1,599,515 |

## Supplemental Information

## Alternatives

### Alternative 1: No Safety System Installation

No safety devices are installed. Without the installation of safety devices, the risk of hazardous incidents, such as explosions or environmental contamination, will be heightened. National Grid seeks to minimize the risk of hazardous incidents.

### Alternative 2: Safety System Installation at Select Sites

The risk of installing safety hoses only at select CNG injection sites is significant and can lead to inconsistencies in safety measures across the network, leaving unprotected sites vulnerable to gas leaks and hazardous incidents. National Grid seeks to minimize the risk of hazardous incidents.

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

**Risk of No Action:** The risk of no action regarding the installation of safety hoses at CNG injection sites is significant. Without these safety measures, the likelihood of gas leaks increases, which can lead to hazardous incidents. Such events pose serious safety risks to personnel working at the sites and the surrounding community.

### 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)<sup>1</sup>? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? The Inwood site is in a DAC. The site was completed in 2020. The installation of hose safety systems will protect the public and the environment.
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.

<sup>1</sup> 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: This project is designed to prevent the release of gas from trailers or headers in the event of hose failure. While the Hose Safety System helps to contain a potential gas leak, the amount of GHG reduction is uncertain and therefore 0 net emission change was assumed.

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: <input type="checkbox"/> Project <input checked="" type="checkbox"/> Program                                                                                                              | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                            |
| Investment Code: 5230000048                                                                                                                                                                     | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                            |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input type="checkbox"/> Mandated <input checked="" type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                                                                                   |                            |
| Annual Program: <input checked="" type="checkbox"/>                                                                                                                                             | Estimated Start Date:                                                                             | Estimated In-Service Date: |
| Status: <input type="checkbox"/> Initiation/Planning <input type="checkbox"/> In-Progress (Projects Only) <input checked="" type="checkbox"/> 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 | \$ 1,550,198 |
| OPEX  |              |
| TOTAL | \$ 1,550,198 |

## Supplemental Information

## Alternatives

**Alternative 1: Do Nothing/Deferral.** 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 Alternatives (“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? 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 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)<sup>1</sup>? ☒ 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 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.

<sup>1</sup> 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: 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

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

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <div><div><input type="checkbox"/> Reduces Damages potential (<i>i.e., in the case of mapping system</i>)</div><div><input type="checkbox"/> Addresses specific safety initiative: _____</div><div><b><u>Societal Benefits/Externalities:</u></b></div><div><input checked="" type="checkbox"/> Emissions Reduction</div><div><input type="checkbox"/> Reduces use of Alt. Fuel</div><div><input checked="" type="checkbox"/> Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)</div><div><input type="checkbox"/> Other: _____</div></div> |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |

# Heater Installation Program - South Commack

## Heater #3 & #4



|                                                                                                                                                                                                 |                                                                                                   |                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------|
| Type: <input checked="" type="checkbox"/> Project <input type="checkbox"/> Program                                                                                                              | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                                       |
| Investment Code: 5230101672                                                                                                                                                                     | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                                       |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input type="checkbox"/> Mandated <input checked="" type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                                                                                   |                                       |
| Annual Program: <input type="checkbox"/>                                                                                                                                                        | Estimated Start Date: 04/01/2023                                                                  | Estimated In-Service Date: 04/30/2029 |
| Status: <input type="checkbox"/> Initiation/Planning <input checked="" type="checkbox"/> In-Progress (Projects Only) <input type="checkbox"/> On-Going (Programs Only)                          |                                                                                                   |                                       |
| Sponsor: Leyble, Dennis                                                                                                                                                                         | Business Contact: Adesina, Risikat                                                                |                                       |

### Work Description:

Heater #3 at the South Commack station is a QB Johnson water bath heater with 12 million BTU output installed in 2004. This heater is reaching its 25-year life expectancy. In addition to replacement of the heater, the burner management system will be upgraded to ensure compliance with all process safety requirements and the pedestal will be replaced.

### Justification Summary:

The heater has been earmarked for full replacement as it is reaching the end of their service life. Natural gas heaters are made from carbon steel. They contain a glycol-water mixture, similar to the antifreeze in an automobile radiator. These heaters have a life expectancy of approximately 25 years, which can be extended or diminished according to maintenance practices. However, at some point, the integrity of the steel tubes within the heater can become compromised at which time a leak will develop. Since all of these heaters are connected to transmission piping, they are subject to higher pressures and the impact of a leak or tube failure can be catastrophic.

Heaters are used in the gas system where the pressure drop through a regulating station is greater than 200psig. Since natural gas temperature will decrease approximately 14 degrees given a 200 psig pressure drop, the temperature of the gas leaving a pressure regulating station can fall below freezing if heat is not added. On a cold day, flowing gas temperatures may average 40 degrees or less. After a 200 psig pressure reduction, the gas will be flowing at 26 degrees or less. Frost heave can occur as ice forms below 32 degrees and piping can begin to lose strength (become more brittle) as temperature falls below 20 degrees.

### Customer Benefits:

Replacement will improve safety and reliability of the gas system by reducing the risk of pipeline failure and subsequent outages, damages, and/or incidents. This project will enhance the reliability of the heaters by installing a new heater, and upgrading and replacing obsolete equipment. This program will also aid in the reduction of emissions from the heaters through the installation of more efficient equipment.

### Funding Detail

#### Cost Breakdown:

|       | FY28         |
|-------|--------------|
| CAPEX | \$ 6,500,000 |
| OPEX  |              |

|              |              |
|--------------|--------------|
| <b>TOTAL</b> | \$ 6,500,000 |
|--------------|--------------|

### Supplemental Information

#### Alternatives

**Alternative 1: Refurbish Heaters.** This alternative includes leaving a majority of the existing heater components in place and individually replacing the most at risk components. This alternative is not cost-efficient and will result in some heater components being used beyond their life expectancy.

**Alternative 2: Do Nothing.** Under the alternative the existing heaters and corresponding equipment would be left in place and no restorative work would be performed. This alternative is not recommended because the reliability of the heaters and equipment will decrease over time.

#### **Alternative 3: Non-Pipes Alternative (“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 reliability of the heaters and equipment will continue to decrease over time.

##### 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 an NPA as it replaces or repairs in-service assets serving customers.

##### **CLCPA/GHG Analysis**

1. Is the project/program located in an area designated as a disadvantaged community (DAC)<sup>1</sup>? ☐ 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.
- ☒ Use dust suppression measures (*e.g.*, water during saw cutting) to reduce fugitive emissions.

**Studies/References That Support the Program:** N/A

**Benefits**

<sup>1</sup> 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: \_\_\_\_\_

# I&R – Reactive



|                                                                                                                                                                                                 |                                                                                                   |                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------|
| Type: <input type="checkbox"/> Project <input checked="" type="checkbox"/> Program                                                                                                              | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                            |
| Investment Code: 5230000106                                                                                                                                                                     | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                            |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input type="checkbox"/> Mandated <input checked="" type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                                                                                   |                            |
| Annual Program: <input checked="" type="checkbox"/>                                                                                                                                             | Estimated Start Date:                                                                             | Estimated In-Service Date: |
| Status: <input type="checkbox"/> Initiation/Planning <input type="checkbox"/> In-Progress (Projects Only) <input checked="" type="checkbox"/> On-Going (Programs Only)                          |                                                                                                   |                            |
| Sponsor: Buczek, Jason                                                                                                                                                                          | Business Contact: McCarthy, Kenneth                                                               |                            |

## 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 | \$1,600,833 |
| OPEX  |             |
| TOTAL | \$1,600,833 |

## 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 situation. Possible results include loss of service to customers, uncontained emissions to atmosphere, or serious injury to field workers.

## Alternative 2: Non-Pipes Alternative (“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

- 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: NPAs are not suitable for this program as it is reactive to address repairs for on-system assets.

## CLCPA/GHG Analysis

- Is the project/program located in an area designated as a disadvantaged community (DAC)<sup>1</sup>? ☒ Yes ☐ No
- 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.
- Will the project contribute to GHG emission reductions on the Company’s gas network? ☐ Yes ☒ No
- 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

<sup>1</sup> 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].”

- ☐ 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b><u>Reliability Benefits</u></b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Supports growth forecast</li> <li><input checked="" type="checkbox"/> Addresses supply / capacity constraint or supply diversity needs</li> <li><input checked="" type="checkbox"/> Addresses storm / climate change resiliency</li> </ul> <p><b><u>Other Customer Benefits:</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Improves Customer Satisfaction</li> <li><input type="checkbox"/> Reflects efficiency savings of \$____</li> <li><input type="checkbox"/> Reduction in Billing Errors and Re-Bills</li> <li><input type="checkbox"/> Supports implementation of Gas Business Enablement</li> </ul> <p><b><u>Safety Benefits:</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Enhances response time to Emergency Gas Leaks</li> <li><input checked="" type="checkbox"/> Enhances employee safety</li> <li><input checked="" type="checkbox"/> Increases automation (reduces human error)</li> <li><input checked="" type="checkbox"/> Enhances Public Safety</li> <li><input type="checkbox"/> Reduces Damages potential</li> <li><input type="checkbox"/> Addresses specific safety initiative: _____</li> </ul> <p><b><u>Societal Benefits/Externalities:</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Emissions Reduction</li> <li><input type="checkbox"/> Reduces use of Alt. Fuel</li> <li><input type="checkbox"/> Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)</li> <li><input type="checkbox"/> Other: _____</li> </ul> |



# I&R - Training and Test Lab



|                                                                                                                                                                                                                          |                                                                                                   |                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-----------------------------------|
| Type: <input checked="" type="checkbox"/> Project <input type="checkbox"/> Program                                                                                                                                       | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                                   |
| Investment Code: 5230020370                                                                                                                                                                                              | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                                   |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input type="checkbox"/> Mandated <input checked="" type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure <input type="checkbox"/> |                                                                                                   |                                   |
| Annual Program: <input type="checkbox"/>                                                                                                                                                                                 | Estimated Start Date: 5/1/27                                                                      | Estimated In-Service Date: 2/1/29 |
| Status: <input type="checkbox"/> Initiation/Planning <input checked="" type="checkbox"/> In-Progress (Projects Only) <input type="checkbox"/> On-Going (Programs Only)                                                   |                                                                                                   |                                   |
| Sponsor: Buczek, Jason                                                                                                                                                                                                   | Business Contact: Buczek, Jason                                                                   |                                   |

## Work Description:

This program is for the building of an I&R training facility. The facility is designed specifically for I&R employees to learn the necessary tasks required to maintain and operate a gas regulating station but also allows for other disciplines such as Engineering to test new equipment and designs. The training lab simulates realistic scenarios found in the field without the risk of using natural gas. The facility uses compressed air in lieu of natural gas; thus, making it safe for I&R employees to experiment, learn, and try things they would be unable to do in the field.

The project will be designed and built with sustainability in mind; allowing for plug and play of various design considerations, layouts, and types of equipment including meters, pressure regulators, filters, valves, telemetry, and overpressure protection equipment. This Facility will simulate field examples of normal operation, over pressure protection, and other abnormal conditions using equipment identical to that found in actual operating pressure reducing stations. Because the training facility is fully operational, employees will be able to practice diagnosing and controlling simulated emergencies and abnormal operating conditions in a safe and controlled manner. It will provide simulation of the activities associated with performing routine maintenance on various components, examine issues that need to be considered when retrofitting or making alterations to current operating practices, and allow for testing future designs and new technologies. This facility will enhance knowledge and understanding of station operations for field workers, design engineers, safety professionals and others by facilitating hands-on operational experience under controlled conditions.

**Justification Summary:**

Proper training of employees is critical to operating and maintaining a gas distribution system. It is the foundation for safety and affordability. Without proper training employees could be jeopardizing their own safety as well as public safety.

I&R operates and maintains some of the most complex equipment within the gas distribution systems. Currently, most all training comes from working on-the-job. Though experience is critical for development of National Grid employees, without the fundamentals of gas, on the job training can prove to be dangerous. Employees need a foundation before going to the field.

There will be a diverse workforce that will benefit from this lab environment. It will assist and support field employees who operate and maintain the regulation facilities and components on a day to day basis, employees who design or influence the design of regulation facilities and component selection, and Field Management who need to have a fundamental knowledge of how pressure regulating facilities function to maintain the integrity and safety of the system.

By adding this multi-use, hands-on field lab, it further develops the workforce beyond traditional methods. Employees will be trained with actual hands-on samples enhancing their development and complementing 'on the job training' and classroom modules. Employees will feel more engaged and confident about designing, supervising, and/or performing the work safely and efficiently. This year-round facility provides the ability to learn the equipment, to recognize and diagnose malfunctions and abnormal conditions, and to teach proper response methods in a controlled manner using a safe medium.

National Grid will benefit from having a centrally located in-house pressure regulation facility for use of training and testing, which results in gained knowledge for future design of capital projects. This methodology has proved successful in other companies as well as within National Grid in Upstate NY.

**Customer Benefits:**

The primary customer benefit is the continuous, safe, and reliable supply of natural gas and ability to efficiently design, construct, and maintain pressure regulation facilities. Additional benefits include enhanced ability to respond to and manage emergency situations and equipment malfunctions, enhanced employee safety, and the ability to evaluate new technologies and equipment in a functioning test environment.

**Funding Detail****Cost Breakdown:**

|       | FY28         |
|-------|--------------|
| CAPEX | \$ 1,000,000 |
| OPEX  | \$ 0         |
| TOTAL | \$ 1,000,000 |

**Supplemental Information**

## Alternatives

**Alternative 1: Do Nothing.** There is an option to continue using on-the-job-training (OJT) however, as technology increases and the systems become ever more complex, OJT becomes a much riskier method of training. Training on live gas systems could jeopardized personal and public safety.

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

**Risk of No Action** – Not building these assets jeopardize the ability of the Company to properly train their employees on some of the most critical types of assets in the gas distribution system. On-the-job training creates public safety risks and does not allow for a thorough training platform.

## 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 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)<sup>1</sup>? ☐ 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)

<sup>1</sup> 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].”

☐ 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**

**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: <input type="checkbox"/> Project <input checked="" type="checkbox"/> Program                                                                                                              | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                            |
| Investment Code: 5230000084                                                                                                                                                                     | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                            |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input type="checkbox"/> Mandated <input checked="" type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                                                                                   |                            |
| Annual Program: <input checked="" type="checkbox"/>                                                                                                                                             | Estimated Start Date:                                                                             | Estimated In-Service Date: |
| Status: <input type="checkbox"/> Initiation/Planning <input type="checkbox"/> In-Progress (Projects Only) <input checked="" type="checkbox"/> On-Going (Programs Only)                          |                                                                                                   |                            |
| Sponsor: Leyble, Dennis                                                                                                                                                                         | Business Contact: Smith, Daniel                                                                   |                            |

## Work Description:

KEDLI's Liquefied Natural Gas ("LNG") Blanket Program provides for the safe, reliable, and compliant operation of the Holtsville 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 projects are identified based on the age and condition of the equipment through various risk assessments conducted annually and are executed according to priority and budget.

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

## Justification Summary:

The LNG Blanket Program provides funding for near-term and emergent capital projects needed to maintain safety and reliability at the Holtsville 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 customers, the plant also plays a strategic role in the Company's gas supply portfolio. The facility has an LNG storage tank with a total design capacity of 600 MMSCF. Holtsville LNG facility has a design output of 100 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 the facility meets 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 | \$ 2,543,041 |
| OPEX  |              |
| TOTAL | \$ 2,543,041 |

#### 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 not recommended because replacing LNG with portable CNG is not feasible due to the flowrate required to match Holtsville’s LNG output.

**Alternative 2: Do Nothing.** If the LNG Blanket Program investments are not made, there is a risk that the Holtsville 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 the 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 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:** 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)<sup>1</sup>? ☐ 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.
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.

<sup>1</sup> 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].”

- ☒ 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: \_\_\_\_\_

# LNG - Control Room Upgrade



|                                                                                                                                                                                                 |                                                                                                   |                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--------------------------------------|
| Type: <input checked="" type="checkbox"/> Project <input type="checkbox"/> Program                                                                                                              | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                                      |
| Investment Code: 5230101172                                                                                                                                                                     | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                                      |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input type="checkbox"/> Mandated <input checked="" type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                                                                                   |                                      |
| Annual Program: <input type="checkbox"/>                                                                                                                                                        | Estimated Start Date: 4/1/2025                                                                    | Estimated In-Service Date: 9/30/2028 |
| Status: <input type="checkbox"/> Initiation/Planning <input checked="" type="checkbox"/> In-Progress (Projects Only) <input type="checkbox"/> On-Going (Programs Only)                          |                                                                                                   |                                      |
| Sponsor: Leyble, Dennis                                                                                                                                                                         | Business Contact: Smith, Daniel                                                                   |                                      |

## Work Description:

The project scope of work is to upgrade the control building at the Holtsville LNG facility by performing the following upgrades:

- Install fire suppression in the control room around electrical control board. The fire suppression should not cause asphyxiation for the plant staff or corrosion of electrical and electronic components.
- Address all mold issues which would include replacing the walls, insulation, and floors in the control room and supervisor offices where water damage occurred.
  - All flooring throughout the control room is made of linoleum and should be tested for Asbestos. Proper abatement protocols with air monitoring will be required if traces of Asbestos or other contaminants are present.
  - Replace existing flooring with industrial grade rubber/anti slip material
- Replace all control room windows with blast-proof windows that are tinted to protect against fire radiation ingress.
- Install new HVAC split unit systems for heating and cooling in the control building to replace all through the wall PTAC units.
- Install a new heat pump hot water unit with an 85-gallon storage tank capacity
- Install French drain, new dry well, and replace seal around the building to prevent water intrusion during heavy rainfall and the testing of the cooling spray circuit.
- Replace rusted door jambs and all doors, including hardware throughout the building with full casing doors with all applicable hardware.
- Remove and replace exterior aluminium siding where heavily corroded or breached. Remove all mold and asbestos if found
- Recoat the exterior Aluminum siding of the control building to protect against corrosion.
- Repair roof and replace ceiling tiles that have water damage.
- Replace Emergency Lighting system
- Replace all gutters and down piping

## Justification Summary:

The control room is in proximity of process equipment and is not currently equipped with shatter-proof windows to protect the plant operators or plant controls. Installing new fire suppression equipment in the control room will increase the safety of operators as well as protect electrical equipment from fire damage. Refurbishing the exterior and interior of the control room would increase the safety and reliability of operations at the plant.

## 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 customers, the plant also plays a strategic role in the Company's gas supply portfolio. The facility has an LNG storage tank with a total design capacity of 600 MMSCF.

Holtsville LNG facility has a design output of 100 MMSCFD of natural gas. LNG peak shaving facilities operates intermittently, supplying natural gas pipelines during periods of peak need as required.

#### Funding Detail

#### Cost Breakdown:

|       | FY28         |
|-------|--------------|
| CAPEX | \$ 1,407,000 |
| OPEX  |              |
| TOTAL | \$ 1,470,000 |

#### Supplemental Information

#### Alternatives

**Alternative 1: Exclude Tinted Blast-Proof Windows and Walls.** This option proposes upgrading the control room building and includes all activities except replacing all the windows and walls facing the process area with tinted blast-proofing material. This option is not recommended because it would not increase the operators and plant personnel's sense of safety.

**Alternative 2: Do Nothing / Defer.** This option proposes to not complete the project and would not address the degrading condition of the control room, water damage and would not increase the safety and reliability at the Holtsville LNG plant. This option is not recommended.

#### **Alternative 3: Non-Pipes Alternative ("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 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:** 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)<sup>1</sup>? ☐ 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.
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

<sup>1</sup> 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 - Holtsville Plant Modernization



|                                                                                                                                                                                                        |                                       |                                                                                                          |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|----------------------------------------------------------------------------------------------------------|--|
| <b>Type:</b> <input checked="" type="checkbox"/> Project <input type="checkbox"/> Program                                                                                                              |                                       | <b>Category:</b> <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |  |
| <b>Investment Code:</b> 5230001063                                                                                                                                                                     |                                       | <b>Region:</b> <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |  |
| <b>Planning Portfolio:</b> <input type="checkbox"/> Customer Connections <input type="checkbox"/> Mandated <input checked="" type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                       |                                                                                                          |  |
| <b>Annual Program:</b> <input type="checkbox"/>                                                                                                                                                        | <b>Estimated Start Date:</b> 4/1/2020 | <b>Estimated In-Service Date:</b> 05/21/2028                                                             |  |
| <b>Status:</b> <input type="checkbox"/> Initiation/Planning <input checked="" type="checkbox"/> In-Progress (Projects Only) <input type="checkbox"/> On-Going (Programs Only)                          |                                       |                                                                                                          |  |
| <b>Sponsor:</b> Leyble, Dennis                                                                                                                                                                         |                                       | <b>Business Contact:</b> Smith, Daniel                                                                   |  |

## Work Description:

The scope of the plant modernization is to evaluate the condition of the existing LNG tank and associated systems as well as perform the necessary upgrades or repairs. Specifically, performance of the necessary upgrades and repairs will:

- **LNG Tank Stairs/Handrails** – The LNG tank stairs and handrails are not in compliance with current OSHA, ANSI/ASSP or NFPA standards and regulations. Fabricate a new LNG tank stair tower that complies with current standards and regulations and ties back into the existing LNG tank platform.
- **LNG Tank Foundation Heater** – Replace the existing heater cables with constant wattage heater cables and replace the existing control panel with an SCR based heater control panel.
- **Boiloff Compressor System** - Remove the cold blowers (C3A, C3B & C3C) and boiloff compressors (C4A, C4B & C4C) and replace with new screw compressors, install new heaters, install a new cooling system, replace the boiloff piping to the compressors, install new telemetry and automation, replace the double block and bleed valve, and install a dedicated boiloff meter. This will remove three pieces of rotating equipment from the dike that are aged and prone to failure. Reliability and maintainability will be increased by decreasing the amount of equipment capable of failure and requiring maintenance. Removing the cold blowers also increases overall plant safety as fewer operations and maintenance activities would be required within the dike area. Removal of this equipment benefits operability as there are fewer pieces of equipment to operate and fewer variables to adjust
- **Power Center Upgrade** - Install new 480V arc-resistant switchgear busses, new 480V arc-resistant Motor Control Centers (MCCs) that are standalone and equipped with a main and reserve breaker, new valve regulated lead acid battery bank, charger and DC panel and new electrical temperature-controlled Power Distribution Center with a separate battery room. Install new dry-temp transformers for Fire Pump 21A and 21B and SST1, SST2, SST3.
- **Outer LNG Tank Stiffeners** - The outer LNG tank shell stiffening does not meet current API 620 requirements. Additional reinforcement will prevent shell buckling.
- **LNG Tank & Nitrogen Breather Tank Grounding** - NFPA 780 requires tank ground connections every 100 feet. Tank ground connections are needed until the requirement is satisfied.
- **LNG Tank Lighting** – Upgrade the existing incandescent light fixtures to LED-type fixtures to reduce energy usage and improve the life span of the fixtures.
- **LNG Tank Pressure Protection** - To provide redundancy for the outer LNG tank overpressure protection, a second relief valve will be added to the existing penetration. Manual valves related to the pressure protection of the inner and outer tank are normally not able to be serviced while the tank is in operation. The valves will be replaced while the tank is out of service.
- **LNG Tank Liquid Isolation Valve** - V401 is the main LNG tank isolation valve that is external to the tank and has a history of repairs. Replace this valve while the tank is out of service as it is normally not able to be serviced while the tank is in operation.

- **LNG Tank Internal Tank Valve** – Add an internal tank valve (ITV) to the LNG tank to isolate the LNG tank contents from the downstream external isolation valve.
- **Nitrogen Tank Bladder** – As preventative maintenance since the life expectancy of the bladder is unknown, replace the bladder while the tank is out of service.
- **LNG Tank Internal Weld Inspection** – Perform a tank entry to inspect the condition of the internal welds and determine the necessary repairs to be made based on inspection findings.
- **Tank Instruments** – Bring the instrumentation up to current NFPA 59A standards.
- **LNG Tank Secondary Emergency Egress** - A “Second Exit Route” is required for employees at the top of the tank in the event of an emergency and the primary route stairs are not passable. This secondary exit route is typically in the form of an “Emergency Escape Ladder” located on the opposite end of the primary access stair location. Install a secondary emergency escape ladder on the North side of the LNG tank opposite the existing stairs that will be connected to the existing platform on the top of the LNG tank.
- **LNG Tank Tie-off Anchor Points** - Tie-offs are required by OSHA whenever an employee is subject to a fall hazard or not protected by an acceptable guardrail. Tie-offs may be required to facilitate access for inspection and maintenance (painting) of the LNG tank outer shell when employees intend to be outside the protection of acceptable guardrail. Tie-offs would be advantageous for the fire department and emergency access/egress from the top of the LNG tank for emergency response situations. Install tie-off/anchor points, spaced appropriately around the perimeter of the top of the LNG tank, just outside the limits of the existing circular guardrail.
- **Dry Chemical Extinguisher for relief valves on top of tank** – Install new dry chemical fire extinguishing system for the new relief valves on top of the LNG tank. This includes the removal of the old system and installation of the new system.

#### **Justification Summary:**

The Holtsville LNG facility has been in service for approximately fifty-five years and upgrades are required to ensure the continued provision of safe and reliable service from this facility. Since initial construction, there have been changes in LNG storage facility design practices, code requirements, and operations that necessitate updates to the facility. Additionally, an overhaul of various tank related systems and a detailed inspection of the tank is necessary to ensure the continuation of service from this critical energy facility. Specifically, the upgrades that must be performed are the LNG Tank Upgrade, Tank Stair Replacement, Tank Foundation Heating System Upgrade, Boiloff Compressor System, and Power Center Upgrade. Further details on these upgrades are provided below.

- **LNG Tank Upgrade** - A tank entry must be performed to determine the condition of the internal welds. An internal shutoff valve must be installed per code requirements and the liquid isolation valve needs to be replaced. The relief valves also need to be resized to be effective in a rollover event.
- **Tank Stair Replacement** - The LNG tank stairs and handrails must be updated for compliance with OSHA, ANSI/ASSP or NFPA standards and regulations. A secondary emergency egress and tie-offs for Personal Fall Arrest Systems (“PFAS”) also must be installed.
- **Tank Foundation Heating System Upgrade**- The LNG tank foundation heating system controls are original to the plant and past their design life. The controls utilize dated technology, and it is beginning to become difficult to find spares. The current LNG tank foundation heating system is inefficient and only allows for the heaters to either be in the “on” or “off” position. Further, the constant cycling of turning the heater cables “on” and “off” can significantly decrease the lifespan of the heater cables.
- **Boiloff Compressor System** – The Cold Blowers (C3A/C3B) and Boiloff Compressors (C4A/C4B) are original to the plant and past their design life.
- **Power Center Upgrade** - The existing 480V Switchgear and Motor Control Centers (“MCCs”) are non-arc resistant and close coupled through tiebreakers. The location of the existing battery bank and accessibility to the batteries present potential safety concerns. The existing plant switchgear building needs to be updated to current codes

and standards and potentially replaced based on existing condition. The existing equipment is original to the plant and past its design life.

#### **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 customers, the plant also plays a strategic role in the Company’s gas supply portfolio. The facility has an LNG storage tank with a total design capacity of 600 MMSCF. Holtsville LNG facility has a design output of 100 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 overhauling and modernizing this fifty-year-old facility to ensure continued energy supply to the Downstate New York region. The plant modernization will increase reliability and mitigate safety concerns that the existing equipment presents. Upgrading the facility also enables the facility to incorporate design practices for modern LNG tanks. Additionally, the benefits are improved process safety and reliability at the plant, improved plant operability and maintainability, improved accessibility to equipment, enhanced compliance with the updated codes and standards, and reduced future operating costs.

#### **Funding Detail**

#### **Cost Breakdown:**

|       | FY28          |
|-------|---------------|
| CAPEX | \$ 73,416,000 |
| OPEX  |               |
| TOTAL | \$ 73,416,000 |

#### **Supplemental Information**

#### **Alternatives**

**Alternative 1: Do Nothing/Defer Project.** By not completing this project, it would not accomplish the goal of increasing the safety and reliability of the plant, improving LNG Plant operability and maintainability, reducing operating costs or complying with the latest codes and standards.

#### **Alternative 2: Upgrade the LNG Tank and Associated Systems (Full Scope)**

This option is not recommended as per the Conceptual Study performed by Matrix PDM. The removal of perlite is not recommended, because it would require about twenty cuts to the outer tank, removal of the existing perlite, returning the tank cutouts and replacement of the perlite, which would take much longer than the four-month construction window. Supplemental lightning protection is not recommended, because the construction of the LNG tank meets the requirement of a structure that has inherent lightning protection per NFPA 780. Upgrading the LNG pumps to an In-Tank style is not recommended, because there are no issues with the current setup and it would require configuring the existing tank and would take much longer than the four-month construction window. Additional deluge fire protection on top of the tank is not recommended, because the current design is assumed to be adequate to meet the demands of the vapor suppression system.

**Alternative 3: Retire the LNG Tank.** This option is not feasible as LNG is a substantial component of the peak day supply in this region.

**Alternative 4: Non-Pipes Alternative (“NPAs”)**

There are no non-pipe alternatives.

**Risk of No Action:** The tank will remain out of compliance with the NYS regulatory current code requirements along with no increased process safety and reliability improvements to the tank to improve plant operability.

**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:** 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)<sup>1</sup>? ☐ 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.
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

<sup>1</sup> 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].”

- ☐ 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b><u>Reliability Benefits</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Supports growth forecast</li> <li><input checked="" type="checkbox"/> Addresses supply/capacity constraint or supply diversity needs</li> <li><input type="checkbox"/> Addresses storm/climate change resiliency</li> </ul> <p><b><u>Other Customer Benefits:</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Improves Customer Satisfaction</li> <li><input type="checkbox"/> Reflects efficiency savings of \$____</li> <li><input type="checkbox"/> Reduction in Billing Errors and Re-Bills</li> <li><input type="checkbox"/> Supports implementation of Gas Business Enablement</li> </ul> <p><b><u>Safety Benefits:</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Enhances response time to Emergency Gas Leaks</li> <li><input checked="" type="checkbox"/> Enhances employee safety</li> <li><input checked="" type="checkbox"/> Increases automation (reduces human error)</li> <li><input checked="" type="checkbox"/> Enhances Public Safety</li> <li><input type="checkbox"/> Reduces Damages potential (<i>i.e., in the case of mapping system</i>)</li> <li><input type="checkbox"/> Addresses specific safety initiative: _____</li> </ul> <p><b><u>Societal Benefits/Externalities:</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Emissions Reduction</li> <li><input type="checkbox"/> Reduces use of Alt. Fuel</li> <li><input type="checkbox"/> Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)</li> <li><input type="checkbox"/> Other: _____</li> </ul> |

# LNG - Hydrant System Piping Refurbishment



|                                                                                                                                                                                                        |  |                                                                                                          |                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------|--------------------------------------------|
| <b>Type:</b> <input checked="" type="checkbox"/> Project <input type="checkbox"/> Program                                                                                                              |  | <b>Category:</b> <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                                            |
| <b>Investment Code:</b> 5230001639                                                                                                                                                                     |  | <b>Region:</b> <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                                            |
| <b>Planning Portfolio:</b> <input type="checkbox"/> Customer Connections <input type="checkbox"/> Mandated <input checked="" type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |  |                                                                                                          |                                            |
| <b>Annual Program:</b> <input type="checkbox"/>                                                                                                                                                        |  | <b>Estimated Start Date:</b> 4/1/2020                                                                    | <b>Estimated In-Service Date:</b> 7/1/2033 |
| <b>Status:</b> <input type="checkbox"/> Initiation/Planning <input checked="" type="checkbox"/> In-Progress (Projects Only) <input type="checkbox"/> On-Going (Programs Only)                          |  |                                                                                                          |                                            |
| <b>Sponsor:</b> Leyble, Dennis                                                                                                                                                                         |  | <b>Business Contact:</b> Smith, Daniel                                                                   |                                            |

## Work Description:

This project is to upgrade and separate the zoning of the warming and cooling spray systems along with upgrading the hydrant system piping and fire pumps at the Holtsville LNG plant. The scope will include the following:

- Replace all hydrant fire protection water loop concrete lined cast iron piping (4,300 ft) and warming spray concrete lined cast iron piping (2,300 ft) with new HDPE piping.
- Replace 11 fire hydrants
- Close the warming spray system loop on the West side of the LNG tank by installing a new HDPE piping header (800ft), installing a new line of warming spray nozzles, and separately zoning the warming spray system from the cooling spray system to allow operators to activate each system independently. This will include changing the warming and cooling spray system control logic.
- Replace 6 Motor Operated Valves (MOVs) and extending the rotor torque operator, clutch mechanism, and handwheels above grade to allow for manual operation of the valves from above grade upon motor failure.
- Manual valves to have their handwheels extended upward to allow their manual operation from above grade.
- Upsizing and re-routing the cooling spray piping.
  - Upsize the 2.5-inch and 3-inch mains that supply the control and service buildings to a 4-inch main.
  - Upsize the 6-inch main to the cold box up to 8-inch.
  - Upsize the 4-inch main after the cold box to 6-inch.
  - Use a 4-inch main to separately supply each of the buildings.
- Decommission the hydropneumatics underground storage tank and install a jockey pump and supply well (P8) that connects to a new, 5,000-gallon aboveground tank and heated enclosure.
  - Replacement of the existing service well pump (P-8) with a new pump of equal capacity.
- Upgrade the fire pumps (P20, P21A and P21B) to meet the new demand of 4,000 gpm in accordance with NFPA 20 and ensure they are UL-Listed.
  - In Wells P21A and P21B replace the well's pumps, piping, electrical controls, with 2,000 gallon per minute motors, pumps and control systems.
  - Well, P20 will be upgraded with a 4,000 GPM vertical turbine pump, piping, and control system. Existing natural gas fuel engine the powers the vertical turbine will be replaced by a diesel-powered engine. A double walled above graded storage tank for the storage of diesel fuel, plus, leak detection, overfill protection, freeze protection for the fuel line. Storage system must be in compliance with NYSDEC and SCDHS petroleum storage regulations.
- All four supply wells will be tested to confirm condition of their wells and determine their specific yield and maximum sustainable flow rates.

## Justification Summary:

The hydrant system piping is original to the plant (1971) and has a history of repairs. Ultrasonic Thickness Testing (UT) was performed at six (6) different locations of the hydrant system piping to evaluate the condition of the piping and assess its integrity. The results of the UT testing indicate that the wall of the piping is showing signs of corrosion and pitting. Additionally, the C-factor (a measure of friction loss based on the interior surface of the pipe) of the hydrant system piping is severely degraded from its original design. Replacing the piping system will drastically reduce the pressure loss through the system and improve flow supply at each of the site hydrants.

The pumps have not been replaced since their original installation, and their performance is decreasing. Global Risk Consultants conducted flow tests on each of the three fire pumps in June 2020. The fire pump tests show all three fire pumps performing well below their design curves.

All below grade piping is concrete lined cast iron and over the years cement has broken loose making its way to nozzles and valve bodies blocking flow or preventing tight valve shut offs. Replacing the piping will significantly improve system flow and operability of the system. Unplanned system failures or leak repairs can disrupt operations and lead to unplanned expenditures. These unforeseen failures are expected to increase as the pipe ages.

Additionally, the hydropneumatics reservoir tank that, in conjunction with the jockey pumps, maintains the pressure in the hydrant system, is in an underground service well vault in a confined space that has limited means of access / egress and makes maintenance challenging. Concerns about corrosion and other environmental effects damaging the tank are also present. This replacement equipment increases safety and reliability at the plant.

Motor Operated valves are located below grade in vaults. It is not practical for plant personnel to enter a confined space during an emergency situation scenario to manually operate those valves if there is a malfunction. Bringing the manual operators above grade will eliminate that risk of entering a confined space and allow for faster operation response time.

#### **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 customers, the plant also plays a strategic role in the Company’s gas supply portfolio. The facility has an LNG storage tank with a total design capacity of 600 MMSCF. Holtsville LNG facility has a design output of 100 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 the fire pumps, hydrant system piping and associated equipment as part of this upgrade to increase the overall reliability of the fire protection system and reduce the likelihood of an unplanned outage to replace one or more of the existing, degrading pieces of equipment.

#### **Funding Detail**

#### **Cost Breakdown:**

|       | FY28         |
|-------|--------------|
| CAPEX | \$ 2,000,000 |
| OPEX  |              |
| TOTAL | \$ 2,000,000 |

### Alternatives

**Alternative 1: Combining the Warming and Cooling Spray Systems on same zone and upgrade hydrant system.** This scope is like the proposed scope, except the warming spray system and the cooling spray system will be on the same zone and will flow simultaneously and the warming spray to the west of the LNG tank would not be installed.

Supplying both spray systems simultaneously will create a significant demand on the fire protection system. By putting the warming and cooling sprays on the same zone, it will require significantly upsizing the capacity of the fire pumps to achieve an 8,000-10,000 gpm to support the hydraulic demand. There is no scenario where both the warming and cooling sprays need to be activated simultaneously, and for this reason, this option is not recommended.

**Alternative 2: Do Nothing.** Continued use of the aging system without the necessary upgrades will lead to the inevitable failure of the equipment, compromising the facilities fire hydrant system and preventing the plant's ability to properly extinguish a fire.

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
  - unplanned maintenance and repairs
  - operators work around to continue system operations
- Potential loss or danger to customers and public

### **Alternative 3: Non-Pipes Alternative ("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 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:** 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)<sup>1</sup>? ☐ 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.
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

<sup>1</sup> 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: \_\_\_\_\_

# LNG - IPC Coating Upgrade



|                                                                                                                                                                                                 |                                                                                                   |                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--------------------------------------|
| Type: <input checked="" type="checkbox"/> Project <input type="checkbox"/> Program                                                                                                              | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                                      |
| Investment Code: 5230001138                                                                                                                                                                     | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                                      |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input type="checkbox"/> Mandated <input checked="" type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                                                                                   |                                      |
| Annual Program: <input type="checkbox"/>                                                                                                                                                        | Estimated Start Date: 4/1/2026                                                                    | Estimated In-Service Date: 11/1/2028 |
| Status: <input checked="" type="checkbox"/> Initiation/Planning <input type="checkbox"/> In-Progress (Projects Only) <input type="checkbox"/> On-Going (Programs Only)                          |                                                                                                   |                                      |
| Sponsor: Leyble, Dennis                                                                                                                                                                         | Business Contact: Smith, Daniel                                                                   |                                      |

## Work Description:

The Liquefied Natural Gas (LNG) Storage Tank at the Holtsville LNG Facility is surrounded by a concrete primary containment dike. The dike provides sufficient impoundment capacity in case of a spill or leak from the LNG tank. Given the volatile nature of LNG, an insulating polymer concrete (IPC) Coating is applied to dike's surface to limit heat transfer from the ground to any LNG held within the dike. This reduces the rate of vapor cloud formation and the subsequent risk of ignition.

The current condition shows significant degradation in the IPC coating including cracking, degraded caulk joints, spalling and delamination. Due to its poor condition, sections have broken loose providing no insulation. The IPC coating shall be replaced with a comparable polymer material used through the LNG industry.

## Justification Summary:

The IPC coating upgrade is required to ensure safe operation of the Holtsville LNG Facility. The IPC coating acts as one of the final protective measures to mitigate risk in case of a catastrophic tank failure or large spill of LNG. The coating slows the rate of evaporation which lowers the concentration of LNG (methane) below its flammability limits, thus mitigating the potential for a large vapor cloud and subsequent ignition.

## 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 Long Island customers, the plant also plays a strategic role in the company's gas supply portfolio. The facility has one LNG storage tank with a total design capacity of 600MCF of LNG. Holtsville LNG facility has a design output of 100 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 plant safety by ensure the IPC coating is in good condition and will function as intended to prevent vapor cloud formation.

## Funding Detail

## Cost Breakdown:

|       | FY28         |
|-------|--------------|
| CAPEX | \$ 6,957,643 |

|  |       |              |
|--|-------|--------------|
|  |       |              |
|  | OPEX  |              |
|  | TOTAL | \$ 6,957,643 |

## Supplemental Information

### Alternatives

#### **Alternative 1: Partial IPC Coating Replacement**

A condition assessment will be completed of the entire impoundment to identify areas for repairs and/or replacements. This repair will be to the wall and floors of the most deteriorated areas.

#### **Alternative 2: Full IPC Coating Replacement**

Replace entire impoundment IPC coating. This option is not selected because a full replacement is not required. Only areas of severe deterioration need to be repaired or replaced.

**Alternative 3: Do nothing / Defer.** Without this investment the IPC coating will continue to deteriorate and no longer be effective at mitigating a catastrophic event. It is not recommended that this investment is deferred, or this upgrade is not performed.

#### **Alternative 4: Non-Pipes Alternatives (“NPAs”)**

**Risk of No Action:** See Alternative 3.

### 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:**

### CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)<sup>1</sup>? ☐ Yes ☒ No
2. If so, explain how was the routing determined and how will the project impact the surrounding 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
- ☐ 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

<sup>1</sup> 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](#).

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p><b><u>Reliability Benefits</u></b></p> <ul style="list-style-type: none"><li><input type="checkbox"/> Supports growth forecast</li><li><input type="checkbox"/> Addresses supply/capacity constraint or supply diversity needs</li><li><input type="checkbox"/> Addresses storm/climate change resiliency</li></ul> <p><b><u>Other Customer Benefits:</u></b></p> <ul style="list-style-type: none"><li><input type="checkbox"/> Improves Customer Satisfaction</li><li><input type="checkbox"/> Reflects efficiency savings of \$____</li><li><input type="checkbox"/> Reduction in Billing Errors and Re-Bills</li><li><input type="checkbox"/> Supports implementation of Gas Business Enablement</li></ul> <p><b><u>Safety Benefits:</u></b></p> <ul style="list-style-type: none"><li><input type="checkbox"/> Enhances response time to Emergency Gas Leaks</li><li><input checked="" type="checkbox"/> Enhances employee safety</li><li><input type="checkbox"/> Increases automation (reduces human error)</li><li><input checked="" type="checkbox"/> Enhances Public Safety</li><li><input checked="" type="checkbox"/> Reduces Damages potential (<i>i.e., in the case of mapping system</i>)</li><li><input type="checkbox"/> Addresses specific safety initiative: _____</li></ul> <p><b><u>Societal Benefits/Externalities:</u></b></p> <ul style="list-style-type: none"><li><input type="checkbox"/> Emissions Reduction</li><li><input type="checkbox"/> Reduces use of Alt. Fuel</li><li><input type="checkbox"/> Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)</li><li><input type="checkbox"/> Other: _____</li></ul> |  |
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# Main Protection - Storm Hardening Smart Meters



|                                                                                                                                                                                                 |                                                                                                   |                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------|
| Type: <input type="checkbox"/> Project <input checked="" type="checkbox"/> Program                                                                                                              | Category: <input type="checkbox"/> Capital <input checked="" type="checkbox"/> Both Capital & O&M |                            |
| Investment Code: 5230000083                                                                                                                                                                     | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                            |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input type="checkbox"/> Mandated <input checked="" type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                                                                                   |                            |
| Annual Program: <input checked="" type="checkbox"/>                                                                                                                                             | Estimated Start Date:                                                                             | Estimated In-Service Date: |
| Status: <input type="checkbox"/> Initiation/Planning <input type="checkbox"/> In-Progress (Projects Only) <input checked="" type="checkbox"/> 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 KEDLI'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  |
| Smart Gas Meter Install | 1,340 |

## 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 KEDLI's customers reside within the Federal Emergency Management Agency's (FEMA) 500-year flood zone, totaling 65,000 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 | \$4,000,000 |
| OPEX  |             |
| TOTAL | \$4,000,000 |

**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 flooding. The issues identified 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 expenses, while negatively impacting customer satisfaction. Furthermore, 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.

**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 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 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)<sup>1</sup>?** ☒ 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**

<sup>1</sup> 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: \_\_\_\_\_

# Proactive Regulator Stations - Proactive



|                                                                                                                                                                                                 |                                                                                                   |                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------|
| Type: <input type="checkbox"/> Project <input checked="" type="checkbox"/> Program                                                                                                              | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                            |
| Investment Code: 5230000059                                                                                                                                                                     | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                            |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input type="checkbox"/> Mandated <input checked="" type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                                                                                   |                            |
| Annual Program: <input checked="" type="checkbox"/>                                                                                                                                             | Estimated Start Date:                                                                             | Estimated In-Service Date: |
| Status: <input type="checkbox"/> Initiation/Planning <input type="checkbox"/> In-Progress (Projects Only) <input checked="" type="checkbox"/> 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 Long Island. 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 | \$ 1,980,317 |
|  | OPEX  |              |
|  | TOTAL | \$ 1,980,317 |

## Supplemental Information

### Alternatives

**Alternative 1: Do Nothing.** 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.

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

**Risk of No Action:** See Alternative 1.

### 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 program does not qualify for replacement with an NPA as certain projects will be completed within 24 months and involves in-service assets serving existing customers.

### CLCPA/GHG Analysis

1. Is the project/program located in an area designated as a disadvantaged community (DAC)<sup>1</sup>? ☒ 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.
- ☒ 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**

<sup>1</sup> 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]."

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p><b><u>Reliability Benefits</u></b></p> <ul style="list-style-type: none"><li><input type="checkbox"/> Supports growth forecast</li><li><input type="checkbox"/> Addresses supply/capacity constraint or supply diversity needs</li><li><input checked="" type="checkbox"/> Addresses storm/climate change resiliency</li></ul> <p><b><u>Other Customer Benefits:</u></b></p> <ul style="list-style-type: none"><li><input type="checkbox"/> Improves Customer Satisfaction</li><li><input type="checkbox"/> Reflects efficiency savings of \$ ____</li><li><input type="checkbox"/> Reduction in Billing Errors and Re-Bills</li><li><input type="checkbox"/> Supports implementation of Gas Business Enablement</li></ul> <p><b><u>Safety Benefits:</u></b></p> <ul style="list-style-type: none"><li><input type="checkbox"/> Enhances response time to Emergency Gas Leaks</li><li><input checked="" type="checkbox"/> Enhances employee safety</li><li><input checked="" type="checkbox"/> Increases automation (reduces human error)</li><li><input checked="" type="checkbox"/> Enhances Public Safety</li><li><input type="checkbox"/> Reduces Damages potential (<i>i.e., in the case of mapping system</i>)</li><li><input type="checkbox"/> Addresses specific safety initiative: _____</li></ul> <p><b><u>Societal Benefits/Externalities:</u></b></p> <ul style="list-style-type: none"><li><input type="checkbox"/> Emissions Reduction</li><li><input type="checkbox"/> Reduces use of Alt. Fuel</li><li><input type="checkbox"/> Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)</li><li><input type="checkbox"/> Other: _____</li></ul> |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

# Proactive Regulator Stations - Riverhead Yard (SL-31, SL-25, SL-23)



|                                                                                                                                                                                                 |                                  |                                                                                                   |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------|--|
| Type: <input checked="" type="checkbox"/> Project <input type="checkbox"/> Program                                                                                                              |                                  | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |  |
| Investment Code: 5230101791                                                                                                                                                                     |                                  | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |  |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input type="checkbox"/> Mandated <input checked="" type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                  |                                                                                                   |  |
| Annual Program: <input type="checkbox"/>                                                                                                                                                        | Estimated Start Date: 04/01/2023 | Estimated In-Service Date: 12/1/2027                                                              |  |
| Status: <input type="checkbox"/> Initiation/Planning <input checked="" type="checkbox"/> In-Progress (Projects Only) <input type="checkbox"/> On-Going (Programs Only)                          |                                  |                                                                                                   |  |
| Sponsor: Leyble, Dennis                                                                                                                                                                         |                                  | Business Contact: Adesina, Risikat                                                                |  |

## Work Description:

SL-23 & SL-25 are 1987 vintage stations within the Riverhead Gas Plant located at the intersection of Mill Rd. and NYS Rt. 25 in Riverhead, NY. SL-23 is a single run station with an inlet pressure of 350psig and an outlet pressure of 124psig that consists of two 6" Fisher 1098H EGR regulators and no second layer of over pressurization protection. Gas entering the station is heated using three Burnham hydronic boilers housed in a steel structure. SL-25 is also a single run station with an inlet pressure of 124psig and an outlet pressure of 60psig that consists of a 3" Fisher 1098 EGR regulator and a 4" Fisher 1098-63EG relief valve with a set point of 64psig. SL-31 is a 1959 vintage station located just to the southeast of the Gas Plant on the south side of NYS Route 25. The station has an inlet pressure of 124psig and an outlet pressure of 60psig and consists of a 4" Mooney Flowgrid DP in the first stage and a 4" Fisher 1098H EGR/30 in the second stage with no over pressurization protection. The scope of work performed at this station will include:

- **Project Overview:** Upgrade aging SL-23, SL-25, and SL-31 stations at Riverhead Gas Plant to improve reliability and safety; these stations currently lack over-pressurization protection and are in poor condition.
- **New Stations:** Construct two new below-grade dual-run stations—SL-82 (350 psig to 124 psig) and SL-83 (350 psig to 60 psig)—with over-pressurization protection and filtration systems.
- **Existing Station Modifications:** Reroute piping at SL-23 and SL-25 to create space for new stations; remove above-grade valve clusters and maintain service during off-cycle construction.
- **Station Retirements:** Retire SL-23 and SL-25 after new stations are operational; abandon SL-31 in place and remove associated equipment and vaults.
- **Instrumentation & Control (I\&C):** Relocate RTU equipment to the new heater building, replace RTU cabinets, install flow meters, thermowell probes, and upgrade communication lines; maintain existing emergency generator.
- **Gas Heating System:** Install new heat exchanger, glycol storage and circulation systems, and two new hydronic boilers; retire three existing Burnham boilers.
- **Civil Work:** Demolish heater building with asbestos abatement, construct new building with same footprint, add roll-up door, lighting, restroom, and evaluate septic/water systems; reconstruct access road and improve site drainage.
- **Additional Improvements:** Replace failing 124 psig cross-tie valve, install automated check valve, add vaults with Bilco doors and ladders, and establish new parking area where old stations were located.

## Justification Summary:

To establish a proactive asset management strategy, all LI 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 Riverhead was prioritized and scheduled. Rebuilding the station ensures that the highest-risk assets are addressed first, reducing system vulnerability and lowering overall operational risk.

Primary issues at the stations are:

- SL-23 is a single run transmission station with no OPP.
- Stations are aging, in poor condition and susceptible to failure.
- Loss of SL-23 would greatly impact the 124psig system East of Riverhead
- SL-25/SL-31 are single run stations responsible for feeding a substantial portion of the Eastern Long Island 60psig system.
- SL-31 relies heavily on SL-23 to maintain pressures during Fall/Winter months.
- SL-31 is in a hazardous location dangerous to field staff while working at the station and vaults often fill with water.
- Asbestos panels on exterior of existing heater building.
- Existing 124psig cross-tie valve is in poor condition and does not seal properly/easily.
- Southside access road to electric ROW & neighboring property is in poor condition (potholes/sunken sections/exposed castings)

**Customer Benefits:**

This initiative represents a proactive reliability and safety enhancement for the Eastern Long Island gas system. By consolidating three aging single-run regulator stations into two modern, below-grade dual-run facilities equipped with over-pressurization protection (OPP), advanced filtration, and upgraded instrumentation, the project mitigates critical failure risks, ensures compliance with current safety standards, and significantly improves operational resilience. These upgrades will reduce system vulnerability, enhance pressure control stability, and minimize the likelihood of unplanned outages or emergency interventions, thereby safeguarding both customer supply continuity and asset integrity.

**Funding Detail**

**Cost Breakdown:**

|       | FY28          |
|-------|---------------|
| CAPEX | \$ 26,235,000 |
| OPEX  |               |
| TOTAL | \$ 26,235,000 |

**Supplemental Information**

**Alternatives**

**Alternative 1: Build New Stations in Existing Location and add OPP**

- Build two new dual-run stations where SL-23/SL-25 are currently located
- Extended outage required for construction and SL-31 will have to be back fed for that duration; Retire SL-31 when new stations are operational
- Temperature restriction of 45°F limits construction window
- Yard space is underutilized

This alternative was not selected due to feasibility concerns with utilization of the existing location.

**Alternative 2: Build New Stations in NW corner of Property and Retire Old Stations**

- Utilize existing access road along Southern edge of property to construct new entrance for CNG trucks and operators
- Remove existing entrance; Build two new dual-run stations in existing entrance roadway and adjacent grass area
- Keep SL-23, SL-25 and SL-31 in service through majority of construction
- Construct new entrance on Mill Rd. for separate I&R access
- Retire SL-23, SL-25 and SL-31

This alternative was not selected due to CNG site interference and entryway challenges caused with the relocation into the NW corner.

### **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? 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 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)<sup>1</sup>? ☒ Yes ☐ No
2. If so, explain how was the routing determined and how will the project impact the surrounding area? Routing was determined by existing site conditions and limitations, no change in impact to the surrounding area.
3. Will the project contribute to GHG emission reductions on the Company’s gas network? ☐ Yes ☒ No

<sup>1</sup> 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:

**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:**

|  |                                                                                                                                                                                                                                                                  |  |
|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|  | <div><input type="checkbox"/> Emissions Reduction</div> <div><input type="checkbox"/> Reduces use of Alt. Fuel</div> <div><input type="checkbox"/> Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)</div> <div><input type="checkbox"/> Other: _____</div> |  |
|  |                                                                                                                                                                                                                                                                  |  |

# Proactive Regulator Station- SL-26



|                                                                                                                                                                                                 |  |                                                                                                   |                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------|---------------------------------------|
| Type: <input checked="" type="checkbox"/> Project <input type="checkbox"/> Program                                                                                                              |  | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                                       |
| Investment Code: 5230102069                                                                                                                                                                     |  | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                                       |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input type="checkbox"/> Mandated <input checked="" type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |  |                                                                                                   |                                       |
| Annual Program: <input type="checkbox"/>                                                                                                                                                        |  | Estimated Start Date: 04/01/2025                                                                  | Estimated In-Service Date: 10/01/2030 |
| Status: <input type="checkbox"/> Initiation/Planning <input checked="" type="checkbox"/> In-Progress (Projects Only) <input type="checkbox"/> On-Going (Programs Only)                          |  |                                                                                                   |                                       |
| Sponsor: Leyble, Dennis                                                                                                                                                                         |  | Business Contact: Adesina, Risikat                                                                |                                       |

## Work Description:

SL-26 is a 1973 vintage station that takes 124 psig gas and supports a 30 psig pocket of just under 1,000 customers in the Holbrook area. SL-26 is a single feed station into the 30 psig system. The station consists of a 2" Fisher 298 TEK regulator along with a 2" Fisher 99-101SP in the primary and a 4" Fisher 1098 in the secondary. It currently does not contain any overpressure protection.

## **Work Scope will include:**

- Removal of all existing station equipment including the main, regulator vault, relief valve vault, vent pole and all other associated equipment.
- Reconstruction of the regulating station to an alternative location.
- Installation of new main to connect the new station to the gas system.
- Installation of new primary vault.
- Installation of new regulator, over pressurization protection (OPP), vent pole, control lines, & telemetry equipment.

## Justification Summary:

To establish a proactive asset management strategy, all LI 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 SL-26 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 condition of the station:**

- Atmospheric corrosion was observed on all piping and regulator components.
- No adequate pipe supports are installed.
- Dresser couplings were observed in both safety and district vaults.
- Telemetry cabinets are mounted on the primary vault vent pole.
- Drip pot is installed at the inlet to the station.
- No OPP is currently installed.
- Station is currently located in a parking lot of a private business.

## Customer Benefits:

The relocation and rebuilding the regulating station will improve the asset condition, and the safety of the asset and address any open reliability concerns. A third layer of overpressure protection will be added to protect the station in an emergency situation.

#### Funding Detail

#### Cost Breakdown:

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

#### Supplemental Information

#### Alternatives

**Alternative 1: Station Refurbishment** The refurbishment of this regulating station will include the following: installation of OPP, replacement of vault chimney with precast, installation of Roxtec seals, waterproofing of vault walls, removal of coating on piping and recoating of all piping and components inside the vaults, installation of new ladders within each vault with ladder ups, replacement of vault lids and manhole covers, replacement of vent poles, installation of new pipe supports, replacement of control lines, installation of protective bollards to protect the telemetry cabinets. This project alternative was not identified as the primary option because it does not appropriately address the reliability concerns currently present with this regulating station.

**Alternative 2: Do Nothing/Deferral.** The consequences of not completing the work could ultimately result in loss of service to customers in neighbouring areas. (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 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 does not qualify for NPAs as it affects critical reliability and cannot be replaced by an NPA, or combination thereof, at this time.

#### **CLCPA/GHG Analysis**

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

2. If so, explain how was the routing determined and how will the project impact the surrounding area?

The project is not located in an area designated as a disadvantaged community (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**

<sup>1</sup> 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: \_\_\_\_\_

# RMD-Residential Methane Detectors

|                                                                                                                                                                                                 |  |                                                                                                   |                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------|----------------------------|
| Type: <input type="checkbox"/> Project <input checked="" type="checkbox"/> Program                                                                                                              |  | Category: <input type="checkbox"/> Capital <input checked="" type="checkbox"/> Both Capital & O&M |                            |
| Investment Code: 5230100787                                                                                                                                                                     |  | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                            |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input type="checkbox"/> Mandated <input checked="" type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |  |                                                                                                   |                            |
| Annual Program: <input checked="" type="checkbox"/>                                                                                                                                             |  | Estimated Start Date:                                                                             | Estimated In-Service Date: |
| Status: <input type="checkbox"/> Initiation/Planning <input type="checkbox"/> In-Progress (Projects Only) <input checked="" type="checkbox"/> On-Going (Programs Only)                          |  |                                                                                                   |                            |
| Sponsor: Khan, Saadat                                                                                                                                                                           |  | Business Contact: Emma, Nicole                                                                    |                            |

## 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 a technician to the customer's location to investigate the alarm. These detectors utilize the latest technologies tested by the Company's Gas Materials Lab, GTI 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 of RMD at Customer premises.

To date, all development has been carried out without integration into the Company's core systems. However, beginning in FY28, initiatives to enable system integration will start that will improve the response efficiency.

The following outlines the average proposed RMD installation schedule for FY28.

|               | FY28   |
|---------------|--------|
| Cellular RMDs | 15,000 |

The cost of the RMD unit, installation and cellular plan will be CAPEX due to the higher cost and the plan to prepay the cellular cost of each RMD.

## 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. RMD program is highly recommended by the DPS safety staff after the success of Con Edison RMD program which was initiated because of the East Harlem incident and potentially saved several subsequent events due to earlier response from RMDs.

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 | \$ 7,944,072 |
| OPEX  | \$ 41,498    |
| TOTAL | \$ 7,985,570 |

**Supplemental Information****Alternatives**

**Alternative 1: Do Nothing.** This option does not increase safety of our customers and public.

**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:** Not increasing RMD installations means customers stay at higher risk from undetected gas leaks. Without real-time alerts, response times slow down, and small leaks can turn into dangerous situations. It also limits The Company's ability to improve safety and reliability, leaving gaps that could lead to emergencies and higher costs.

**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 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)<sup>1</sup>? ☒ 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 based on risk, 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.

Studies/References That Support the Program: N/A

Benefits

<sup>1</sup> 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]."

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p><b><u>Reliability Benefits</u></b></p> <ul style="list-style-type: none"><li><input type="checkbox"/> Supports growth forecast</li><li><input type="checkbox"/> Addresses supply/capacity constraint or supply diversity needs</li><li><input checked="" type="checkbox"/> Addresses storm/climate change resiliency</li></ul> <p><b><u>Other Customer Benefits:</u></b></p> <ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Improves Customer Satisfaction</li><li><input checked="" type="checkbox"/> Reflects efficiency savings (see above)</li><li><input type="checkbox"/> Reduction in Billing Errors and Re-Bills</li><li><input type="checkbox"/> Supports implementation of Gas Business Enablement</li></ul> <p><b><u>Safety Benefits:</u></b></p> <ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Enhances response time to Emergency Gas Leaks</li><li><input checked="" type="checkbox"/> Enhances employee safety</li><li><input checked="" type="checkbox"/> Increases automation (reduces human error)</li><li><input checked="" type="checkbox"/> Enhances Public Safety</li><li><input type="checkbox"/> Reduces Damages potential (<i>i.e., in the case of mapping system</i>)</li><li><input type="checkbox"/> Addresses specific safety initiative: _____</li></ul> <p><b><u>Societal Benefits/Externalities:</u></b></p> <ul style="list-style-type: none"><li><input type="checkbox"/> Emissions Reduction</li><li><input type="checkbox"/> Reduces use of Alt. Fuel</li><li><input type="checkbox"/> Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)</li><li><input type="checkbox"/> Other: _____</li></ul> |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

# Smart Gas Meters (RMD – Smart Meter Program)

|                                                                                                                                                                                                 |                                                                                                   |                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------|
| Type: <input type="checkbox"/> Project <input checked="" type="checkbox"/> Program                                                                                                              | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                            |
| Investment Code: 5230101755                                                                                                                                                                     | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                            |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input type="checkbox"/> Mandated <input checked="" type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure |                                                                                                   |                            |
| Annual Program: <input checked="" type="checkbox"/>                                                                                                                                             | Estimated Start Date:                                                                             | Estimated In-Service Date: |
| Status: <input checked="" type="checkbox"/> Initiation/Planning <input type="checkbox"/> In-Progress (Projects Only) <input type="checkbox"/> 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 KEDLI's service territory. KEDLI's low-pressure zones currently contain approximately 70,000 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 are:

|       |       |
|-------|-------|
|       | FY28  |
| Total | 3,150 |

*Additional traditional diaphragm meters regardless of low-pressure zones will also be replaced with smart meters gradually and systematically through other KEDLI 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 KEDLI'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 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 Networks 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 | \$ 2,476,520 |
| OPEX  |              |
| TOTAL | \$ 2,476,520 |

#### 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 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: 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)<sup>1</sup>? ☒ 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

<sup>1</sup> 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].”

- ☐ 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**

**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

|  |                                                                                                                                                                                                                   |  |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|  | <div><div><input type="checkbox"/> Reduces use of Alt. Fuel</div><div><input type="checkbox"/> Decreases Leak Prone Pipe \Leak Backlog (Type 3 leaks)</div><div><input type="checkbox"/> Other: _____</div></div> |  |
|  |                                                                                                                                                                                                                   |  |

# Tools & Equipment - Field Operations & Construction



|                                                                                                                                                                                                 |                       |                                                                                                   |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------------------------------------------------------------------------------------|--|
| Type: <input type="checkbox"/> Project <input checked="" type="checkbox"/> Program                                                                                                              |                       | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |  |
| Investment Code: 5230000117, 5230101118                                                                                                                                                         |                       | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |  |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input type="checkbox"/> Mandated <input type="checkbox"/> Reliability <input checked="" type="checkbox"/> Non-Infrastructure |                       |                                                                                                   |  |
| Annual Program: <input checked="" type="checkbox"/>                                                                                                                                             | Estimated Start Date: | Estimated In-Service Date:                                                                        |  |
| Status: <input type="checkbox"/> Initiation/Planning <input type="checkbox"/> In-Progress (Projects Only) <input checked="" type="checkbox"/> On-Going (Programs Only)                          |                       |                                                                                                   |  |
| Sponsor: Malone, David                                                                                                                                                                          |                       | Business Contact: Malone, David                                                                   |  |

## Work Description:

KEDLI'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 assure 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 KEDLI). 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 –Construction | \$ 2,304,824 |
| CAPEX – Field Ops   | \$ 1,161,531 |

|  |       |              |  |
|--|-------|--------------|--|
|  | OPEX  | \$ 0         |  |
|  | TOTAL | \$ 3,466,355 |  |

### 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 Alternative (“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

- 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:** NPA analysis is not applicable because the proposal is a tools and equipment investment.

#### CLCPA/GHG Analysis

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

<sup>1</sup> 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

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:
- ☒ 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.
- ☐ 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

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 Protection - Damage Prevention – Mark Outs and Locate Change



|                                                                                                                                                                                                                                                                                                                        |                       |                                                                                                   |                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------------------------------------------------------------------------------------|----------------------------|
| Type: <input type="checkbox"/> Project <input checked="" type="checkbox"/> Program                                                                                                                                                                                                                                     |                       | Category: <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Both Capital & O&M |                            |
| Investment Code: 5230101456                                                                                                                                                                                                                                                                                            |                       | Region: <input type="checkbox"/> KEDNY <input checked="" type="checkbox"/> KEDLI                  |                            |
| Planning Portfolio: <input type="checkbox"/> Customer Connections <input type="checkbox"/> Mandated <input checked="" type="checkbox"/> Reliability <input type="checkbox"/> Non-Infrastructure <input type="checkbox"/> Indirect <input type="checkbox"/> FOH <input type="checkbox"/> Operator Qualification Program |                       |                                                                                                   |                            |
| Annual Program: <input checked="" type="checkbox"/>                                                                                                                                                                                                                                                                    | Estimated Start Date: |                                                                                                   | Estimated In-Service Date: |
| Status: <input type="checkbox"/> Initiation/Planning <input type="checkbox"/> In-Progress (Projects Only) <input checked="" type="checkbox"/> On-Going (Programs Only)                                                                                                                                                 |                       |                                                                                                   |                            |
| Sponsor: Schweiger, Kevin                                                                                                                                                                                                                                                                                              |                       | Business Contact: Terjesen, Robert                                                                |                            |

## Work Description:

Locate and mark operations constitute a mandatory operator responsibility under NYS Code Rule 753 (16 NYCRR Part 753) and are a foundational element of the Company's damage prevention and public safety program.

Pursuant to 16 NYCRR §753-4.6, whenever the Company's underground gas facilities are located in or within fifteen (15) feet of a proposed excavation area, the Company is required to locate and accurately designate those facilities by means of surface markings, staking, or other approved designation methods prior to the commencement of excavation.

These markings must clearly indicate the facility's location and direction of run and must utilize standardized color coding and marking conventions prescribed by the rule. This work is continuous, programmatic, and directly tied to statutory compliance and system safety.

## Justification Summary:

This program is explicitly mandated by New York State regulation and is not discretionary. NYS Code Rule 753, enforced by the New York State Public Service Commission, establishes the legal obligations of underground facility operators to protect their facilities from excavation damage through timely and accurate marking.

Under 16 NYCRR §753-4.6, failure to properly locate and mark underground gas facilities prior to excavation materially increases the risk of third-party damage, gas releases, emergency incidents, and service interruptions.

Excavation damage is a recognized leading cause of gas system safety events, and the locate and mark function serves as a primary preventive control within the Company's safety and integrity management framework.

## Customer Benefits:

The locate and mark program delivers direct, tangible, and measurable benefits to customers, municipalities, and the public by reducing the likelihood and severity of excavation-related incidents.

### **Enhanced Public Safety**

Accurate identification and marking of underground gas facilities reduces the risk of excavation strikes that can result in gas leaks, fires, or explosions. This directly supports the safety objectives underlying NYS Code Rule 753, which was established to protect life, property, and essential services.

### **Improved Service Reliability**

Preventing damage to gas mains and services reduces unplanned outages and emergency repairs, resulting in fewer service interruptions and improved reliability for customers.

#### **Reduced Community Disruption**

Effective damage prevention minimizes emergency roadway closures, traffic disruptions, and extended construction impacts that often follow excavation damage incidents, particularly in high-density service areas.

#### **Cost Avoidance and Ratepayer Value**

Avoided damages reduce emergency response costs, repair expenses, claims, and potential penalties associated with Part 753 enforcement actions. These avoided costs provide long-term value to customers by limiting upward pressure on rates.

#### **Regulatory Transparency and Confidence**

A well-funded and well-executed locate and mark program demonstrates compliance with statutory mandates and reinforces regulatory and public confidence in the Company's stewardship of its underground gas infrastructure.

### **Funding Detail**

#### **Cost Breakdown:**

|              | <b>FY28</b>  |
|--------------|--------------|
| <b>CAPEX</b> | \$ 4,184,873 |
| <b>OPEX</b>  |              |
| <b>TOTAL</b> | \$ 4,184,873 |

### **Supplemental Information**

#### **Alternatives**

**Alternative 1: Do Nothing:** Failure to continue funding and executing locate and mark operations would result in non-compliance with NYS Code Rule 753 (16 NYCRR Part 753) and materially increase safety, reliability, and regulatory risk to the Company.

Under 16 NYCRR §753-4.6, the Company is legally obligated to locate and accurately mark its underground gas facilities when excavation activity is proposed in proximity to those facilities. If this work is not performed, or is performed inadequately, excavation may proceed without clear identification of gas facilities, significantly increasing the likelihood of third-party damage, gas releases, and emergency incidents.

**Alternative 2: Non-Pipes Alternatives ("NPAs")** N/A

**Risk of No Action:** See Attachment 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)<sup>1</sup>? ☒ 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 damage locations 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:

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- ☐ 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

<sup>1</sup> 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:**

**Benefits**

**Reliability Benefits**

- ☐ Supports growth forecast
- ☐ Addresses supply/capacity constraint or supply diversity needs
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- ☒ Improves Customer Satisfaction
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- ☐ Emissions Reduction
- ☐ Reduces use of Alt. Fuel
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