



Request for Proposal
Demand-Side Non-Pipeline Alternatives (NPA)
for North Queens Gas System Capacity Constraints

RFP Issued: December 13, 2021
Proposals Submission Deadline: February 14, 2022

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I. INTRODUCTION

National Grid is an electric and gas investor-owned utility serving nearly 3.3 million electric and 3.5 million gas customers through its subsidiary companies in Massachusetts, New York, and Rhode Island. National Grid is committed to providing safe, reliable, and affordable energy to all customers throughout our service territories.

A. BACKGROUND

In 2021, and for the foreseeable future, National Grid faces two moral and regulatory/legislative imperatives. It must address the consequences of climate change while at the same time continuing to provide safe, reliable, and affordable service to its customers.

First, regarding climate change, National Grid supports New York State’s decarbonization and clean energy goals as described in the Climate Leadership and Community Protection Act (“CLCPA”), which calls for reducing greenhouse gas (“GHG”) emissions by 85 percent from 1990 levels by the year 2050. In furtherance of the goals contained in the CLCPA, National Grid refined its plan to achieve New York’s net zero GHG emissions by 2050 goal (“Net Zero”) via its “Net Zero by 2050” plan and updated its Responsible Business Charter to include those ambitions.¹ This includes our own operations and emissions that result from the sale of natural gas to our customers.

To reduce GHGs as called for in the CLCPA, to achieve Net Zero and to produce the reductions in natural gas use this will require, National Grid has developed a framework that focuses on multiple areas through 2050 and beyond. These areas include reducing demand through energy efficiency, decarbonizing our natural gas network, implementing methane emission reductions, and promoting innovative technologies for decarbonizing heating and cooling, among many other actions. Furthermore, National Grid is working with its customers, stakeholders, state and local governments, and industry to develop and implement the actions required to achieve a clean, reliable, equitable and affordable energy future.

Second, National Grid’s Downstate New York (“DNY”) customers depend on us to deliver safe, reliable, and affordable natural gas to their homes and businesses — especially on the coldest days and hours when customer gas demand is at its peak. Additionally, over the past decade, the region has seen dynamic economic growth drive ever higher gas demand. However, opportunities to meet that growth via traditional gas infrastructure and supply solutions are increasingly limited as New York State policies required to address climate change and greenhouse gas emissions evolve. As a result, if no actions are taken gas demand is projected to outpace existing system delivery capabilities, creating capacity constrained areas throughout the gas network.

Therefore, in order to meet the two imperatives of addressing climate change while still meeting the energy needs of our customers, National Grid has developed an evolving portfolio of Demand-Side Management (“DSM”) programs. One component of this DSM portfolio of programs is the Non-Pipeline Alternatives (“NPA”) Third-Party Solutions Program. The NPA Third-Party Solutions Program looks to procure demand-side solutions to solve capacity constrained areas of the gas network. NPA is the inclusive term for any targeted investment or activity that is intended to defer, reduce, or remove the need to construct or upgrade components of a natural gas system, or

¹ National Grid has committed to achieve net zero by 2050 by reducing Scope 1 and 2 GHG emissions 80 percent by 2030, 90 percent by 2040, and to net zero by 2050 from a 1990 baseline. See National Grid Responsible Business Charter, at p.5. Available at <https://www.nationalgridus.com/media/pdfs/ourcompany/usnationalgridresponsiblebusinesscharter2020us.pdf>.

“pipeline investment.” The NPA Third-Party Solutions Program offers an alternative to the pipe investments that traditionally have been used to address capacity constrained areas of the gas network.

As the Company continues to build out its NPA Third-Party Solutions Program, you can visit the Company’s NPA website² for the latest information on the planning process, available opportunities, and links to the System Data Portals, and the Ariba vendor platform.

The specific need and request for this NPA RFP follows below in [Section II](#).

B. PROJECT OVERVIEW

The RFP’s problem statement and its solutions requirements are outlined in Table 1.

Table 1. RFP Problem Statement and Solution Requirements

Problem Statement	
Background	National Grid is seeking permanent demand reduction to address existing and forecasted capacity constraints in our gas system in northern Queens.
Solution Description	Demand reduction is to be achieved via proven, cost-effective measures, and can include energy efficiency, weatherization, and/or electrification, but not via demand response or front-of-meter supply solutions.
Solution Requirements	
Minimum Demand Reduction	5,600 Dth
Period of Need	Winter Season Design Days
First In-Service Date	September 1, 2023 (2,800 Dth. minimum)
Second In-Service Date	September 6, 2024 (Remainder)
Target Area	11368, 11369, 11370, 11371, 11372, 11373, 11374, 11375, 11377
Contract Term	3 years
Total Customer Accounts in Target Area	117,772

² <https://www.nationalgridus.com/Business-Partners/Non-Pipeline-Alternatives/>

C. SCHEDULE

The RFP schedule outlined below in Table 2 is subject to change. Note that resources included in awarded bid(s) are required to be in-service no later than the dates detailed below. The in-service date represents the minimum requirement; however, earlier installations would also be considered.

Table 2. RFP Schedule by Milestone

Planned Date*	Milestone
December 13, 2021	RFP Issued
January 11, 2022	Project Pre-Bid Meeting
February 4, 2022	Deadline to submit questions through Ariba
February 11, 2022	National Grid responses to questions due
February 14, 2022	RFP Responses Due
July 2022	RFP Evaluations Complete, All Bidders notified of their status
August 2022	File Petition with NYS Department of Public Service (DPS) ³
September 1, 2023 (or sooner)	Phase 1 In-Service Date
September 6, 2024 (or sooner)	Phase 2 In-Service Date

*The Company reserves the right to change any of the above dates.

D. INQUIRIES

All questions and clarifications for this RFP should be posted to the Ariba Message Board no later than Friday, February 4th, 2022. Questions and clarification requests received after this date and time will not be answered. All questions received will be answered by National Grid through Ariba. National Grid will work to address questions and provide responses as soon as possible after their receipt during this period.

E. PROJECT PRE-BID MEETING

The goals and expectations of the project will be reviewed in the pre-bid meeting. The pre-bid meeting will be held virtually through Microsoft Teams on January 11th, 2022.

F. CLOSING DATE FOR RECEIPT FOR PROPOSAL

Proposal will be accepted no later than February 14th, 2022. Proposals received after the deadline will not be considered.

³ The timeline to review and award bid(s) is subject to approval by DPS

G. DEFINITIONS OF TERMS

Benefit-Cost Analysis (BCA)	An assessment of benefits and costs, performed by National Grid during bid proposal evaluation, to determine if the proposals are cost-effective and cost competitive.
Bidder	A person and/or entity, or a representative thereof, replying to this RFP. In the case where one or more firms choose to partner and submit one proposal, there should be one Responsible Party who will be considered the Bidder. The Bidder is held fully accountable for all aspects of any projects proposed in their response to this RFP by the partnered entities, irrespective of which partnered entity performs a particular function.
Capacity Constraint	Refers to areas of the gas network where the gas system is challenged to deliver natural gas when and where it is needed in sufficient quantities to meet customers' peak demand. These capacity constrained areas serve to greater benefit from the implementation of an NPA in their potential to reduce usage during timeframes of peak demand.
Design Day	The greatest amount of natural gas that could be required to be delivered via National Grid's distribution system on a particular day when the official temperature in Central Park is expected to have a 24-hour average of 0°F.
Front-of-Meter	Refers to activities, actions etc. that impact the natural gas distribution system prior to the revenue meter that is installed at a customer's facility. This is the opposite of activities and actions that take place after the revenue meter, which is known as "behind-the-meter" and which would impact an individual customer's usage.
In-Service Date	The date on which the project is commissioned by obtaining applicable certifications and/or passing applicable inspections, is operating within agreed parameters, and otherwise meeting standards of operation and care requirements. This includes all required customer acquisitions, installation of system(s), monitoring and verification of equipment or systems, and any needed testing to deliver the needed demand reduction outlined as a part of the proposal. For this RFP, there are two In-Service Date deadlines.

Dekatherm (Dth)	An industry standard term referring to a quantity of natural gas containing 1 million British thermal units of energy and represents approximately 1,000 cubic feet of natural gas.
Non-Pipeline Alternative (NPA)	The inclusive term for any action, strategy, program, or technology that serves as a targeted investment or activity that is intended to defer, reduce, or remove the need to construct or upgrade components of a natural gas system, or “pipeline investment.” These NPA investments are required to be cost-effective and are required to meet the specified gas system need.
Target Area	Geographic area of focus for the statement of need where existing National Grid customers are eligible for NPAs to produce the requested demand reduction as outlined in the Statement of Need.
Responsible Party	The firm listed in a proposal submitted by two or more separate entities that shall be held accountable for all aspects of any projects proposed in the response to this RFP by the partnered entities, irrespective of which entity performs a particular function.
Winter Season	Calendar dates including November 1 st through March 31 st

II. REQUEST FOR PROPOSAL

A. PURPOSE

The purpose of this RFP is to procure a third-party NPA(s) to address existing and forecasted capacity constraints on National Grid's gas system in northern Queens ("Target Area"). In general, the gas system is designed to meet highest natural gas demand which currently occurs in the Winter Season due to widespread adoption of natural gas for space heating. Proposals should deliver demand reduction throughout the year but must deliver demand reduction during the Winter Season when Design Days occur. Given there are existing capacity constraints on the gas system, proposals that deliver the needed demand reductions earlier will be prioritized. The contract term for this RFP is 3 years in order to include NPA implementation, two phases of In-Services dates and National Grid's verification of NPA demand reduction.

National Grid uses a Design Day standard of a 24-hour average temperature of 0°F in Central Park to evaluate highest natural gas demand (and corresponding supply needs) for our long-term system models. National Grid uses a Design Day standard of a 24-hour average temperature of 0°F in Central Park to evaluate highest natural gas demand (and corresponding supply needs) for our long-term system models. Design Day demand is typically estimated at approximately 1-2% of annual usage in aggregate, depending on the customer market segment involved (residential, multifamily, commercial, etc.).

Eligible demand-side solution technologies include, but are not limited to, energy efficiency, weatherization, and electrification. All proposed demand-side solutions shall deliver demand reductions permanently through load removal (i.e., energy efficiency measures, alternative energy sources like electrification). A proposal could include more than one solution technology to deliver the needed demand reduction. Regardless of solution technology, an analysis of a proposal's ability to deliver daily demand reductions is expected. This RFP excludes demand response solutions because they provide temporary load reduction and not permanent load removal. Additionally, Front-of-Meter supply-side resources (e.g., renewable natural gas, hydrogen blending) are excluded from this RFP.

The Company is open to proposals that include commercial, industrial, multi-family and residential customers served under National Grid gas tariffs. This includes both heat and non-heat National Grid customer accounts. This RFP is only applicable to and only includes service for National Grid gas customers.

In addition, many of the communities in the ZIP codes in this RFP are considered disadvantaged communities, which is inclusive of Environmental Justice ("EJ") communities. As a result, we will look favorably upon responses that provide solutions in those areas. A map of those areas can be found at the following link: <https://www.nyserda.ny.gov/ny/disadvantaged-communities>.

National Grid is seeking proposals that include end-to-end solutions. All proposals should include a full menu of services including design, customer acquisition, installation, construction, and operations & maintenance. Bidders

with expertise or specialization in a single facet of their proposed solution(s) are encouraged to partner with others to provide an end-to-end solution with customer facing capabilities. In such partnerships, one firm must be designated as the Responsible Party, with the Responsible Party considered the Bidder.

National Grid is seeking proposals that address the full statement of need as described in this RFP. Proposals that address and satisfy the full system need will be prioritized. However, proposals that partially satisfy the system need may be considered. The Company can award several Bidders such that the complete statement of need is satisfied, assuming the benefits justify the costs of doing so. Additionally, at the Company's discretion, National Grid may elect to pursue a proposal that does not pass one or more of these criteria if there is reason to believe that a viable NPA opportunity exists.

Throughout the term of the contract, Bidders will be expected to maintain and repair all installed measures as needed to ensure that the promised level of demand reduction is maintained. Solutions that provide the longest duration of demand reduction will also be considered.

Bidders should note that failure to deliver their demand reduction commitment as part of any awarded bid(s) may result in penalties to be defined in the applicable agreement. The Bidder may be required to furnish security to National Grid that demonstrates, among other things, financial capabilities to pay penalties should the Bidder fail to satisfy its obligations as to be detailed in the contracting phase.

Bidders should account for and include existing incentives to reduce the cost of their proposal. This includes federal, state and local incentives. National Grid currently offers incentives to customers for demand reduction and energy efficiency. These programs and their incentives are constantly being refined to promote additional demand reduction and energy savings as new technology comes into the market.

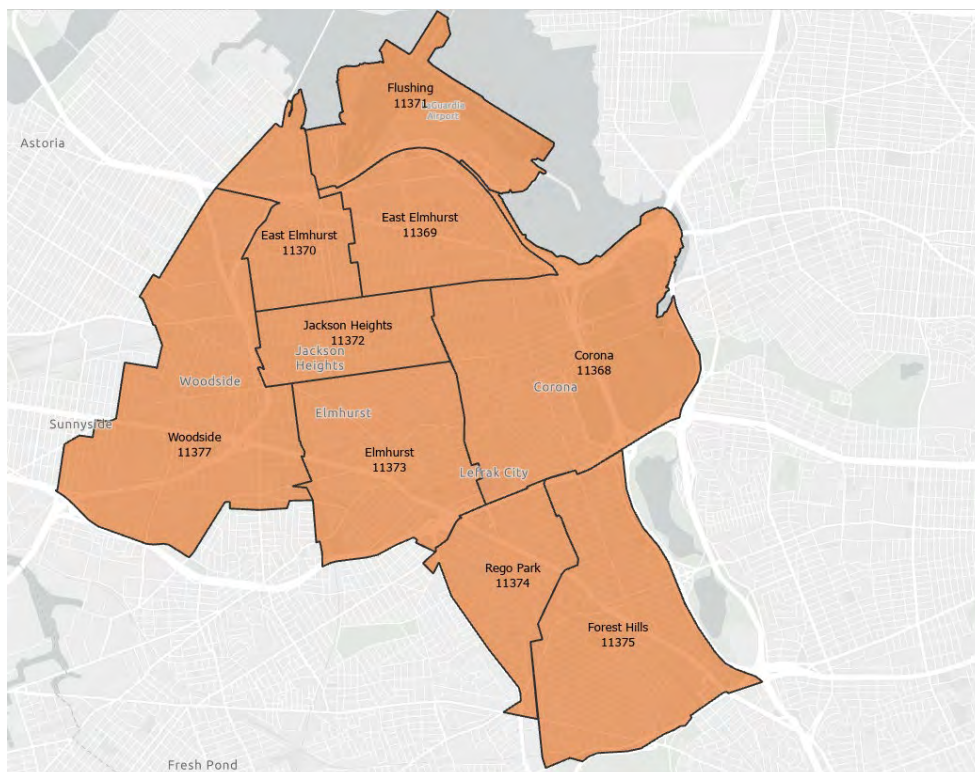
B. STATEMENT OF NEED

Proposals should deliver demand reduction during the Winter Season when Design Days occur. Proposals that provide demand reduction throughout the year in addition to the Winter Season will also be considered. On a Design Day the needed reduction the Company is seeking 5,600 Dth. The Target Area includes nine ZIP codes which are listed in Table 3 below. Additionally, a map of the Target Area is displayed in Figure 1.

Table 3. ZIP Codes within RFP Target Area

Target Area ZIP Codes
11368
11369
11370
11371
11372
11373
11374
11375
11377

Figure 1. Map of RFP Target Area



NPA measures are to be implemented in two phases. The first phase has an In-Service Date of no later than September 1, 2023 (“Phase 1 In-Service Date”). The second phase has an In-Service Date of no later than September 6, 2024 (“Phase 2 In-Service Date”). Proposals should implement measures to deliver at least 2,800 Dth per Design Day of demand reduction by the Phase 1 In-Service Date and implement measures to deliver the remaining demand reduction to reach a minimum total of 5,600 Dth per Design Day by the Phase 2 In-Service Date.

Proposals that deliver additional demand reduction beyond 5,600 Dth per Design Day and/or deliver the needed demand reduction earlier than the required In-Service Dates will also be considered.

The NPAs are to be implemented by September of each year to ensure the needed demand reduction is in place for the approaching Winter Season. Verification of demand reduction will occur after each Winter Season. The contract term for this RFP is three (3) years in order to include NPA implementation, two phases of In-Services dates and National Grid’s verification of NPA demand reduction.

C. DATA & INFORMATION

Bidders should use the customer energy usage information detailed in the tables below to support their proposal development. This energy usage is from December 2020 through November 2021. Table 4 shows Design Day energy usage per customer class by ZIP code and Table 5 shows the total annual energy usage per customer class by ZIP code. Table 6 shows the number of customer accounts per customer class by ZIP code.

The Company has endeavored to provide accurate data and to the best of its knowledge it has done so. However, by its very nature this data is dynamic, and it can change in ways that are outside of the Company’s control. Therefore, the Company makes no representations as to the data’s accuracy.

Table 4. Design Day Energy Usage per Customer Class by ZIP Code (Dth /day)

Customer Type	11368	11369	11370	11371	11372	11373	11374	11375	11377	Total
Commercial Heating	4,404	3,385	1,094	2,132	3,989	3,728	2,178	3,960	5,421	30,290
Commercial Non-Heating	2,515	481	374	12	1,766	1,970	804	1,050	1,156	10,129
Industrial Heating	321	27	26	4	71	106	18	667	637	1,877
Industrial Non-Heating	130	19	0	3	52	68	0	208	131	609
Multiple Dwelling Non-Heating	645	96	78	N/A	538	1,236	542	911	491	4,538
Multiple Dwelling Heating	8,209	1,897	1,712	N/A	22,392	17,700	16,255	30,541	11,494	110,202
Non-Residential Heating	2,559	510	383	N/A	608	1,786	184	277	1,162	7,469
Public Authorities Heat	2,529	447	917	326	694	4,073	614	371	3,821	13,791
Public Authorities Non-Heating	20	7	N/A	66	5	6	147	2	17	270
Residential Heating	20,268	11,230	9,225	N/A	5,525	19,821	6,227	14,221	14,775	101,292
Residential Non-Heating	911	346	225	N/A	870	929	354	414	719	4,767
Total	42,511	18,445	14,033	2,543	36,510	51,423	27,324	52,621	39,824	285,233

Table 5. Total Annual Energy Usage per Customer Class by ZIP Code (Dth /year)

Customer Type	11368	11369	11370	11371	11372	11373	11374	11375	11377	Total
Commercial Heating	367	1,319	686	5,420	551	435	372	435	418	10,003
Commercial Non-Heating	910	967	1,647	1,151	914	970	677	425	588	8,249
Industrial Heating	475	301	660	291	681	302	198	7,327	419	10,654
Industrial Non-Heating	768	285	3	196	996	872	3	1,599	837	5,559
Multiple Dwelling Non-Heating	253	125	243	N/A	288	298	196	178	184	1,767
Multiple Dwelling Heating	2,115	3,807	1,924	N/A	5,376	3,465	6,764	6,020	1,699	31,171
Non-Residential Heating	240	203	268	N/A	345	233	213	203	218	1,923
Public Authorities Heat	2,262	981	3,408	3,942	2,794	7,567	2,966	897	7,099	31,916
Public Authorities Non-Heating	268	340	N/A	6,088	239	264	2,724	79	268	10,270
Residential Heating	100	114	141	N/A	156	106	95	111	102	925
Residential Non-Heating	9	8	6	N/A	8	7	4	3	5	50
Total	7,767	8,451	8,987	17,088	12,347	14,519	14,213	17,276	11,839	112,486

Table 6. Customer Accounts per Customer Class by ZIP Code (Number of Accounts)

Customer Type	11368	11369	11370	11371	11372	11373	11374	11375	11377	Total
Commercial Heating	579	124	77	19	350	414	283	440	626	2,912
Commercial Non-Heating	256	46	21	1	179	188	110	229	182	1,212
Industrial Heating	52	7	3	1	8	27	7	7	117	229
Industrial Non-Heating	13	5	2	1	4	6	1	10	12	54
Multiple Dwelling Non-Heating	143	43	18	N/A	105	233	155	287	150	1,134
Multiple Dwelling Heating	218	28	50	N/A	234	287	135	285	380	1,617
Non-Residential Heating	889	209	119	N/A	147	638	72	114	445	2,633
Public Authorities Heat	54	22	13	4	12	26	10	20	26	187
Public Authorities Non-Heating	7	2	N/A	1	2	2	5	2	6	27
Residential Heating	10,054	4,874	3,233	N/A	1,753	9,299	3,251	6,330	7,137	45,931
Residential Non-Heating	8,049	3,158	2,824	N/A	8,143	9,886	7,023	12,404	10,349	61,836
Total	20,314	8,518	6,360	27	10,937	21,006	11,052	20,128	19,430	117,772

If Bidders are interested in information regarding current KEDNY natural gas tariff structures, please reference the NYSpsc website, under Files select, "Effective .pdf":

https://ets.dps.ny.gov/ets_web/search/searchShortcutEffectiveAction.cfm?M%3Ffiw%3F%21ZQOH%25NL%40LNR%3C%2BR%3F%2BXTWD8AM%3F%263%40JZ%3E%3EME%2AOC9%3E4J%292TH%21J%3EH%2AK%3D%26%28VP%0AML%5EGL%2A%5F%25AKO%2BS%5EH%3BQO%5B%2A%23%3C%2DD4%3B%2F%2FO%20%2AVBMFR4K%3BHK%2AR%3EAD%5EHF16%3E1%40%5F%3F%28%5BW%3D%0AMD1Z%2FFH%5D%3CLSZK%5F%29W3W%28VVV9%20%28H%24J%5ENJ%2AD0G7%26D%2B6%5F8%3D%25%5BU%5FF%5EOZS%20MZR%21V%3A%26%3D%0AM%3DB%2B%3F2IJEAG6KD%22%26HN%26%3AA%5D%22%27JE7%5E%28%5D%5B%2AT3UH%3DMXVT%3DW%29%20MQ9ZO%2DEFQ%2B%5D0GKG%5D%0A%2A2Z0%5E6ZCWLW%20NA0%20%20%0A

III. INSTRUCTIONS FOR BIDDERS: PROPOSAL REQUIREMENTS

Please provide a concise written proposal of under 25 pages, excluding appendices. Bidders should include sufficient detail in their proposal regarding how they will perform each of the required categories detailed below. Proposals that do not provide the information requested below may be disqualified by National Grid. Bidders must submit their proposal in the format outlined below and in accordance with the Ariba RFP event.

A. EXECUTIVE SUMMARY

The Executive Summary must contain the following:

- Bidder's legal name and mailing address
- A designated person to contact regarding Bidder's submission - name, title and telephone number
- High-level summary of NPA proposal including a description of the strategy(ies) and technology(ies) the Bidder would implement to meet the statement of need

B. PROFESSIONAL BACKGROUND & EXPERIENCE WITH THE PROPOSED SOLUTION

The background and experience must contain the following:

- Firm's core business and organizational structure
- State total number of completed projects with similar solution(s) and technology(ies) to those proposed
- Please provide three (3) case studies involving prior industry specific work delivering the solution(s) to other utilities or other organizations. These case studies should demonstrate your ability to implement the solution(s) and technologies(ies), or similar, included in your proposal. Preferably two (2) of the case studies should involve working with utilities, with one (1) involving a different organization type. In addition to detailing the specifics of the implementation and outcomes, the case study examples should include the following information:
 - Project location
 - Description of the solutions provided, and level of success achieved (i.e., EUL, load relief targeted vs. achieved)
 - Commercial operation date
 - Construction/implementation timeline
 - Marketing & customer acquisition plan outcomes
 - Lessons learned

- Any other relevant information supporting and validating the proposed solution in response to this RFP
 - Customer reference contact information
- Outline your production capability by detailing production locations and output over the last three years. If you depend upon a third-party supplier, please outline their production capability and output over the last three years. Highlight any supply chain challenges experienced as a result of the global pandemic and any mitigation strategies employed.
- Awarded Bidder(s) shall obtain and maintain appropriate insurance to protect any resulting projects, National Grid customers and National Grid itself through design, installation, operation and maintenance throughout the term of any agreement reached.
- Any other relevant information deemed appropriate and noteworthy that supports and validates the proposed solution, outside of what is already required in Section 6 and 7 of the Ariba RFP event (to be included in the Appendix of your proposal).

C. PROJECT APPROACH AND METHODOLOGY

This section must detail how your proposal will address the Statement of Need. Please be sure to include:

- Solution(s) description overview:
 - Accurate and validated, (preferably independently verified), performance characteristics of the proposed solution(s)
 - Minimum and maximum load reduction available
 - Performance characteristics of the technology(ies) proposed
 - Description of the flexibility and applicability of the technology(ies)
 - Availability and reliability
 - Detail energy benefits associated with proposed solution(s).
 - For any solutions that would impact Con Edison's electric distribution system, any increase in energy use and peak demand should be described
 - Describe non-energy benefits associated with proposed solution(s)
- Example report template and proposed frequency of reporting to demonstrate the measurement and verification of NPA performance.

- Identification of any risks, barriers, and/or challenges with your proposed solution (e.g. permits, potential environmental, acoustic or aesthetic impacts, implementation risks, operational risks); confirm management of risks, barriers, and/or challenges is considered in your overall business plan.
- Description of customer impacts including aesthetic, economic, acoustic, comfort and environmental.
- An O&M plan for proposed solutions.
 - Confirm that costs and schedules for O&M are considered
 - Describe required maintenance of systems and equipment installed
 - Identify lifecycle expectancy for all major components and confirm any needed component replacement during the contract term
 - Identify changes in equipment capacity/degradation over expected lifetime; confirm capacity degradation is considered
 - Identify specific equipment warranties for all major components and how warranty terms and conditions have been considered
 - Offerings for customer maintenance agreements and their ability to be extended beyond the contract term
 - Define any applicable M&V procedures, forecasting and notification processes, and/or means of integration with utility monitoring, communications, and control systems as applicable
- Bidder proposals that include Huawei and/or ZTE technology or products will not be considered, in alignment with the proposed (as of 7/29/19) NERC Level 2 alert
- Describe how the system(s) and components will comply with all manufacturers' installation requirements, applicable laws, regulations, standards, codes, licensing, and permitting requirements. This includes, but is not limited to, all applicable state, city, town, or local laws, policies, acts, and regulations according to the building codes, disposal, the environment, standards involved, and all applicable State, city, town, or local ordinances or permit requirements, and any additional applicable requirements. It is the awarded Bidder's responsibility to ensure compliance with all such laws.

D. CUSTOMER ACQUISITION PLAN

As a part of their submission, Bidders must provide a robust strategy and compelling evidence for achieving sufficient customer adoption within the specified times to achieve the needed demand reduction. National Grid expects that it is the responsibility of the Bidders to reach their target audience.

Bidders proposing to market the installation of measures to customers must include the following:

- A full and complete assessment of the opportunity, including at a minimum, a description of the targeted customer classes (residential, multifamily, commercial, etc.) and the applicable measures and technologies being proposed to those customer classes.
- An illustration of the marketing and sales strategies that will be employed to capture the customer class(es) and to deliver the measures included in your proposal. This should include a discussion of the challenges and solutions to those challenges presented by each market segment you will be approaching. Please note that marketing and sales plans must be expressly approved by the Company. Upon award and contract negotiation, awarded Bidder will provide a final timeline for review and approval by National Grid.
- Letters of support from partners, vendors, customers, and/or any party that will influence the success and desired outcomes of Bidder's proposal

E. SCHEDULE

Provide a project solution schedule in a Gantt Chart format as requested in Section 6.6 of the Ariba RFP event containing the following:

- Start and end dates, along with key intermediate milestones, for the completion of Phase 1 In-Service Date and Phase 2 In-Service Date and/or construction deliverable from customer outreach through operation & maintenance of NPA In-Service Dates ahead of statement-of-need In-Service Dates.
- Required permitting milestones on main timeline that allocate the time needed to obtain any required permits, with some buffer as appropriate
- Communication Plan milestones (e.g. report outs, meetings, etc.)

In addition to the overall Gantt Chart schedule, detail the following:

- Communication Plan that outlines communication pathways and frequency of reporting methods with National Grid (reports, meetings, etc.) to share implementation progress and demand reductions being achieved
- Outline any risks or challenges anticipated with the overall project and project construction schedule and detail mitigation plans for each risk or challenge outlined (e.g. permitting, etc.)

F. GLOSSARY OF TERMS

Bidders should provide a proposal-specific glossary of terms to support the Company's evaluation of the submission.

G. COMMERCIAL

Cost-effectiveness is a key consideration within proposal evaluation. Bidders should populate and submit the NPA RFP Response Template as an appendix to their proposal as per Section 7.1 of the Ariba RFP event. Detailed cost information for the proposal should be included within the NPA RFP Response Template. No cost/price information of any sort should be included in any part of the response other than in the NPA RFP Response Template.

In addition to the NPA RFP Response Template, Bidders should submit at minimum one (1) appendix to demonstrate their energy calculations within their submitted NPA RFP Response Template as per Section 7.1 of the Ariba RFP event. This appendix should include all pertinent measure parameters, computations, equations, and the logic to arrive at the final values input into the NPA RFP Response Template.

The NPA RFP Response Template includes the following itemized breakdown of proposal costs/incentives:

- All resources and their associated costs to acquire customers to adopt your proposal (e.g. marketing, promotions, advertising, labor, etc.)
- Direct material costs, labor costs, and overhead costs for performing all installation and construction work required to satisfy the Phase 1 In-Service Date and Phase 2 In-Service Date
- O&M costs associated with the proposal through the end of the contract term (e.g. maintenance, repair, warranty, labor, etc.)
- Detail existing National Grid, Federal, State, Local, NYSERDA, Con Edison, and/or other incentives available to reduce the cost of your proposal
- Adder Costs worksheet (per the Installation and/or Construction aspects of your solution), as this will be ONLY utilized to evaluate financial impacts based on unexpected but necessary change orders, if required, during solution implementation
- Permitting expenses (Note: All permitting costs are the responsibility of the Bidder)
- Allowances for expenses, travel, etc.
- Other costs

H. APPENDICES

The appendices of the proposal should be in accordance with the required deliverables in Section 6 and 7 of the Ariba RFP # 3254537256.

IV. EVALUATION METHODOLOGY

Proposals will be evaluated and scored on the following criterion as relevant to National Grid's evaluation:

Proposal Content & Presentation	The information requested has been provided by the bidder and is sufficiently comprehensive and well presented to allow for evaluation.
Bidder's Experience	The experience of the Bidder, any Engineering, Procurement and Construction (EPC) contractor, prime subcontractors and, if applicable, O&M operator or other entity responsible for the development, construction, or operation of the proposed solution.
Environmental	The Bidder's proposal shall address impacts including but not limited to acoustic, aesthetic, air and greenhouse gas (GHG) emissions, water, and soil impacts, and permitting and zoning considerations. This includes greenhouse gas abatement and considers a proposal's ability to produce an outcome that reduces the amount of greenhouse gas emissions that would otherwise be produced from the pipes option.
Project Viability	The likelihood that the solution(s) associated with a proposal can be financed and completed as required.
Functionality	The extent to which the proposed solution would meet the defined functional requirements and the ability to provide demand reduction during peak times and within the geographic area of need.
Technical Reliability	The extent to which the proposed type of technology and the equipment would reliably meet the statement of need.
Safety	National Grid requires that the Bidders recognize safety is of paramount importance. Bidders will be required to provide safety information related to the proposed technology and information regarding safety history. The bid should comply with any jurisdictional compliance and regulatory safety codes.
Customer and Socio-economic Impacts	The Bidder's proposal shall address how the proposed technology impacts the customer in addition to temporary and permanent jobs to be created, economic development impacts, and property tax payments. National Grid also assesses public health and energy pricing impacts of each solution proposal.
Scheduling	The Bidder's proposal shall include proposed timelines outlining milestones and provide sufficient detail for each deliverable, including meeting the in-service need date.

Offer Price	The Bidder's total cost associated with all measures and services provided in response to this RFP.
Credit	Bidder's capability and willingness to perform all of its financial and other obligations under the relevant agreement will be considered by National Grid in addition to Bidder's financial strength, as determined by National Grid, and any credit assurances acceptable to National Grid that Bidder may submit with its proposal.
Customer Acceptance	The extent to which the bidder provides compelling evidence for achieving sufficient customer adoption to achieve needed customer adoptions. This may include data, market research, outreach plans on how to promote customer adoptions.
Cost-Effectiveness	This analysis will be performed to determine the cost-effectiveness of a proposal and the NPA BCA Model will be used.

V. BENEFIT COST ANALYSIS

Once project costs and benefits have been appropriately identified, evaluated, and present valued, three tests are used to assess the overall benefit of the project and to assess the relative benefits of competing projects. While there are similarities across all three tests, each focuses on a portfolio of solutions from a different perspective and considers different benefits and costs in its calculation. Table 7 summarizes these tests.

Table 7. Cost-effectiveness Tests

Cost Test	Perspective	Key Question Answered	Calculation Approach
Societal Cost Test (SCT)	Society	Is the State of New York better off as a whole?	Broadest measure. Includes direct costs and benefits of project (e.g., capital costs, Avoided Upstream Supply Costs, etc.) but also broader externalities associated with the program (e.g., carbon emissions and other net non-energy benefits). Calculation universe focuses broadly on New York residents.
Utility Cost Test (UCT)	Utility	How will utility costs be affected?	Utility focused. Includes costs and benefits applicable to the utility, such as Avoided Upstream Supply Costs, direct capital expenditures, administrative costs, direct incentives paid to participating customers or project participants. Excludes broader societal externalities (e.g., CO2 and related costs where these are not a direct charge to the utility).
Rate Impact Measure (RIM)	Ratepayer	How will utility rates be affected?	Customer focused. Recognizes impacts on customers, including non-participating customers. Incorporates secondary implications of projects (e.g., cross-subsidization effects) on non-participant bills.

VI. ADDITIONAL CLAUSES

A. ELECTRIC-PEER UTILITY REVIEW OF PROPOSALS

All projects that include any level of electrification or could result in additional electrical load are subject to review and acceptance by the electric utility that serves the customers involved, which in this case is Con Edison.

It will be the sole responsibility of Bidders to meet any and all requirements of Con Edison in connection with any potential additional load placed on Con Edison's electric distribution system. Therefore, Bidders are advised to review all relevant Con Edison electrical service specifications, application processes, and related materials prior to submitting any such proposals.

Winning proposals are to demonstrate familiarity with and competency in dealing with any siting, permitting, installation, or other related requirements of Con Edison, including expected timelines, that would be involved in implementing a proposed electrification solution. Additionally, all risk factors that would be involved in an electrification solution are to be detailed and discussed. Proposals that minimize impacts on the electric grid and associated risks will be prioritized.

Bidders are also expected to investigate Con Edison's incentives for energy efficiency measures as well as for their Clean Heat programs.

B. PUBLIC SERVICE COMMISSION APPROVAL

Any transaction resulting from this RFP will be subject to National Grid receiving all required regulatory approvals, including, but not limited to, acceptance by the New York State Public Service Commission (NYSPSC) of the transaction as well as approval for cost recovery acceptable to National Grid. Bidders in this RFP agree to execute a definitive agreement with terms customary in the industry and appropriate under the circumstances.

C. INFORMATION REQUESTS

Throughout the year the Company is required to provide various information about the program to the NYSPSC. The Company expects the awarded Bidder(s) will collect, validate, and provide the Company with any such data as we may require in order to fulfil this requirement of the NYSPSC. All data involving this program is the property of the Company. It is expected Bidders will discuss their data security and integrity in their proposal.

D. NPA KEY PROVISIONS

Described below are areas that would need to be addressed prior to entering into a NPA contract.

UNDERPERFORMANCE - Should any committed load relief not be delivered Bidder will potentially be subject to a reduced performance payment. In addition, in such a circumstance a bidder may be required to pay liquidated damages to National Grid under the terms of any contract between a Bidder and National Grid.

SECURITY - Any Bidder that receives an award as a result of this RFP may be required to provide security to National Grid demonstrating financial capability to pay liquidated damages in an instance where that Bidder fails to meet its agreed upon performance target. To ensure that Bidder's projects achieve the goals of this RFP while ensuring National Grid's energy systems continues to be safe and reliable, financial assurances may be required.