Orange and Rockland Utilities, Inc.

Request for Proposal (RFP)

Blooming Grove
Non-Wires Alternative Project
to Provide Solutions for
Distribution System Reliability

ISSUED: DECEMBER 28, 2018
SUBMISSION DEADLINE: ~~MARCH 7~~ APRIL 30, 2019

Orange & Rockland

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1 Introduction

Orange and Rockland Utilities, Inc. ("O&R" or the "Company") requests proposals from qualified and experienced respondents with the capability to deliver innovative non-wires alternative ("NWA") solutions that provide system reliability and load relief to the electric distribution system in the Blooming Grove, New York area.

1.1 Background

O&R is a subsidiary of Consolidated Edison, Inc., one of the nation's largest investor-owned energy companies, and an affiliate of Consolidated Edison Company of New York, Inc. ("Con Edison"). O&R, which provides electric and gas service to Orange County, Rockland County, and parts of Sullivan County, New York, is regulated by the New York Public Service Commission ("NYPSC" or "the Commission").

O&R will use this NWA program to support the NYPSC's regulatory Reforming the Energy Vision ("REV") initiative.[1] REV aims to reorient both the electric industry and the ratemaking paradigm toward a consumer-centered approach that harnesses technology and markets.

1.2 Definitions

Benefit-Cost Analysis ("BCA"): A BCA will be applied to potential NWA solutions. O&R developed a BCA Handbook in collaboration with the New York Joint Utilities to provide consistent and transparent statewide methodologies that calculate the benefits and costs of potential projects and investments. The BCA Handbook can be found as Appendix E of Orange and Rockland's Distributed System Implementation Plan, filed July 31, 2018 with the NYPSC.

Distributed Energy Resource ("DER"): Energy efficiency, demand response, distributed generation, energy storage or other local generation resources that prove to be feasible for the identified area of need.

Non-Wires Alternative ("NWA"): A solution proposed in an identified area as an alternative to a traditional infrastructure resolution for a distribution or transmission constraint. NWAs may consist of a single solution, or include a portfolio of individual solutions to meet the system need.

Respondent: A person and/or entity, or a representative thereof, replying to this RFP.

1.3 Purpose

This RFP solicits responses that state an interest and demonstrate qualifications to supply O&R with solutions for load relief for the NWA project described below. To assist Respondents, this RFP provides information on the specific NWA project, and provides the requirements that Respondents must comply with when submitting their proposals.

This RFP is open to all DER approaches that display the potential to provide system reliability and load relief in the area identified. Proposed solutions should meet the need, or a portion of the need, and maintain reliability at the lowest reasonable cost possible. O&R may seek to build a portfolio of projects that will serve to diversify project execution risks and maximize benefits to customers.

[1] Case 14-M-0101, *Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision* ("REV Proceeding").

Each RFP response should include, at a minimum, the Respondent's suggested approach, load relief and reliability impact, cost for completing the project, scope of work or proposal, and a timeline for implementation – as outlined in the Non-Wires Alternative Solution Requirements section of this RFP. Responses must also include an hourly impact analysis resulting from the proposed DER solution, as well as a fully completed **Non-Wires Alternative Solution Questionnaire (Attachment A)**.

Respondents are expected to be financially and technically capable of developing, constructing and operating their proposed projects such that the anticipated benefits can be realized. O&R will evaluate each Respondent's proposed solution against the solutions proposed by other Respondents. If O&R enters into a contract with a Respondent, the Respondent will be subject to defined milestones, which verify that the Respondent is on track to provide the contracted reliability. Such contract will provide O&R the right to terminate if it is deemed that reliability goals are not likely to be achieved.

1.4 General Guidelines

O&R reserves the right to make changes to this RFP by issuance of addenda or amendments and to distribute additional clarifying or supporting information relating thereto. O&R may ask any or all Respondents to elaborate or clarify specific points or portions of their submission. Clarification may take the form of written responses to questions, phone calls or in-person meetings for the purpose of discussing the RFP and/or the responses thereto.

It is the sole responsibility of each Respondent to include all pertinent and required information in its submission. O&R reserves the right to determine in its sole discretion whether a submission is incomplete or non-responsive.

Respondents should clearly state all assumptions about the meaning or accuracy of information contained in their response to this RFP. If a Respondent does not ask questions or identify its assumptions, O&R will assume that the Respondent agrees with and understands the requirements in this RFP. While O&R has endeavored to provide accurate information to Respondents, O&R makes no warranty or representation regarding the accuracy of the information contained in this RFP.

Respondents are encouraged to provide and release necessary authorizations for O&R to verify any of such respondent's previous work, except where it is contractually prohibited from doing so.

This RFP shall not be construed to establish an obligation on the part of O&R to enter into any contract, or to serve as a basis for any claim whatsoever for reimbursement of costs for efforts expended by Respondents.

Furthermore, the scope of this RFP may be revised at the option of O&R at any time, or this RFP may be withdrawn or cancelled by O&R at any time. O&R shall not be obligated or bound by any responses or by any statements or representations, whether oral or written, that may be made by the Company or its employees, principals or agents in connection with this RFP.

Any exceptions to the terms, conditions, provisions and requirements herein must be specifically noted and explained by a Respondent in its response to this RFP. O&R will assume that any response to this RFP expressly accepts all of this RFP's terms, conditions, provisions and requirements, except as expressly and specifically stated otherwise by a Respondent in its response to this RFP.

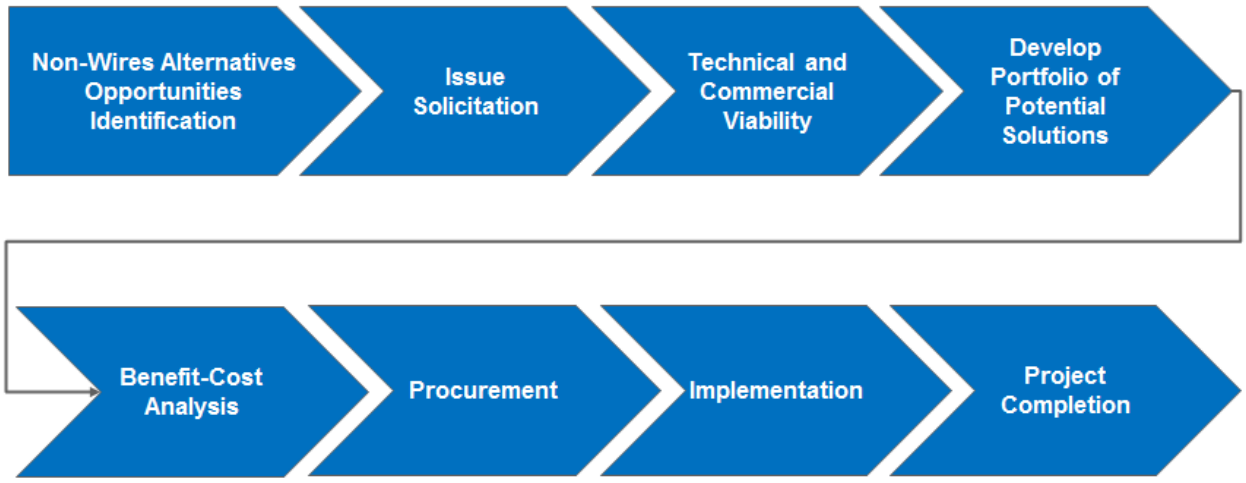
1.5 Non-Wires Alternatives High Level Process

The process shown below is an example of the high-level steps that occur during the identification of NWA solutions, as well as the evaluation, implementation, and verification of the identified solutions. Please note that

there are multiple actions that take place between each step to move NWA projects forward to implementation and verification of load relief achieved.

The Company identifies potential NWA projects as part of its annual capital planning process. Traditional infrastructure projects are screened via the NWA suitability criteria based on project type (reliability or load relief), timeline and cost to gauge their suitability as non-wires alternative candidates. These alternatives may include DERs such as energy efficiency ("EE"), demand response ("DR"), clean (i.e., gas fired and solar) distributed generation ("DG"), and energy storage ("ES"), which may allow the Company to delay the construction of needed infrastructure. The Company will leverage its existing EE and DR programs to lower the amount of DER that needs to be procured. The Company may entertain proposed EE and DR solutions that have the potential to enhance its existing programs.

***Figure 1.1**: O&R NWA Process Flow*



2 Blooming Grove Non-Wires Alternative Project Description

2.1 Project Description

The Blooming Grove Substation is currently a single bank substation with a 25 MVA 69/13.2kV transformer. The substation serves an area of Orange and Rockland's service territory consisting of approximately 5,716 customers. Although the non-load tap changer ("LTC"), 25 MVA transformer has a normal rating of 29.8 MVA and a long term emergency ("LTE") rating of 37.3 MVA, the substation bus limits both ratings to 27.4 MVA. Currently there are four 13.2 kV distribution circuits which originate from the Blooming Grove Substation.

In the event of a substation bank failure, this single-bank station has limited contingency circuit tie capabilities provided from three lengthy, high exposure distribution circuits from adjacent stations. Therefore, in the event of a bank contingency, only 21% of the load would have backup through switchable ties until a mobile transformer could be installed, resulting in the failure of the Company's design standards based on exceeding customer hours of interruption.

2.2 Project Need

The scope of the NWA will be to provide capacity on the portion of the local electric delivery system that does not have backup during the worst contingency scenario. These capacity requirements will be incremented by a reliability factor to be determined to provide equivalent reliability of the traditional solution.

The worst contingency is the loss of the single substation transformer bank. During this bank contingency, circuit 76-2-13 from Blooming Grove has 100% backup from its South Goshen and Chester ties. Circuit 76-4-13 that feeds the Mountain Lodge area has 50% backup from its ties to Monroe. This leaves the remaining two circuits (76-1-13 and 76-3-13) and 50% of the third circuit (76-4-13) with no backup during peak load conditions.

Table 2.2, below, represents the total needed peak capacity, by year.

Table 2.2: MW Need for Loss of Bank										
Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
MW Reduction	15	15.2	15.4	15.5	15.7	15.9	16.1	16.3	16.5	16.8

Figure 2.3 and *Figure 2.4* indicate the 24-hour peak day load requirements for 2021 and 2030, respectively. The area under each graph reflects the MW capacity needed per circuit, per hour – summing to the total need across the day, assuming the worst contingency situation. Please note: the proposed solution will be required to provide load relief for a 24 hour period. The NWA solution should be available Monday through Friday (five days) per week for the five months of the summer availability period (May – September).

Figure 2.3: 2021 Need, by circuit, by hour *(assumes need on worst contingency day)*

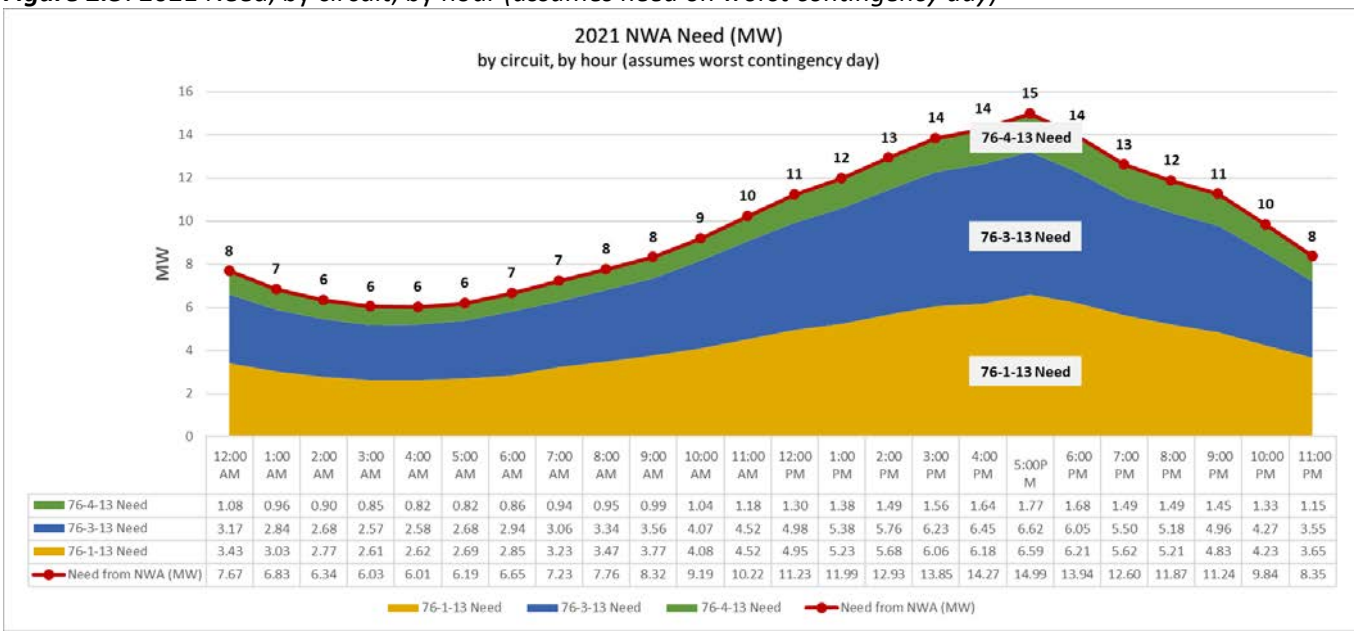
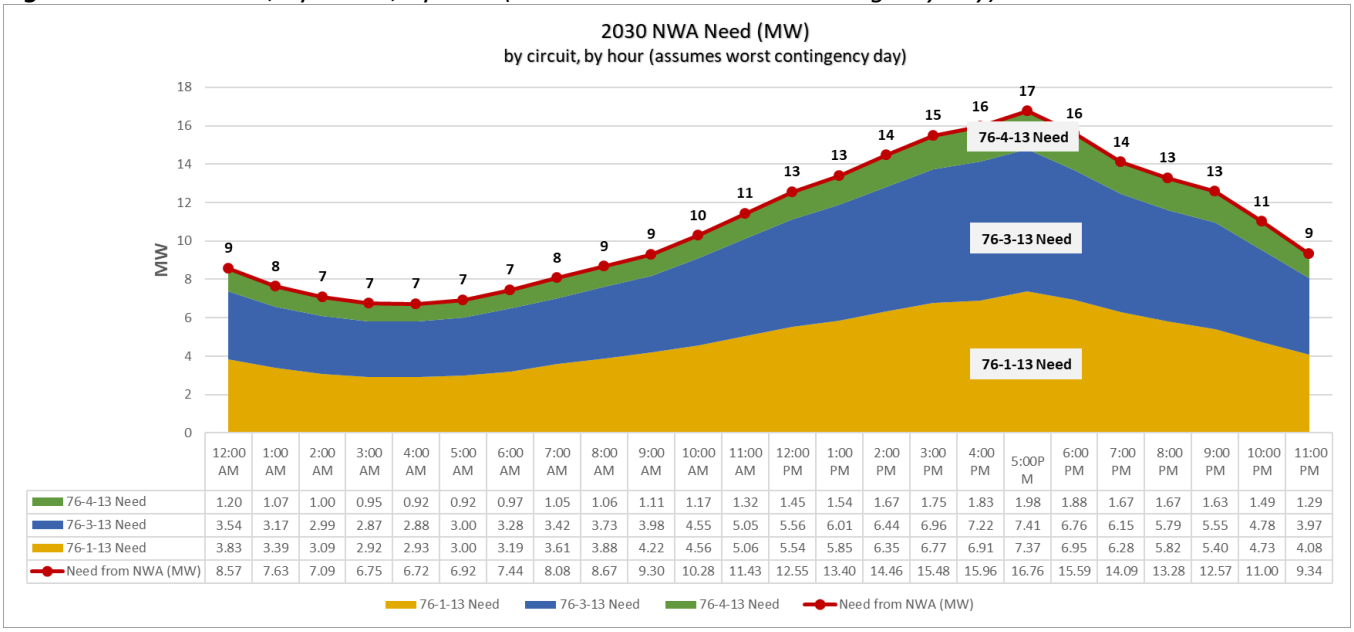


Figure 2.4: 2030 Need, by circuit, by hour *(assumes need on worst contingency day)*



	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
76-4-13 Need	1.20	1.07	1.00	0.95	0.92	0.92	0.97	1.05	1.06	1.11	1.17	1.32	1.45	1.54	1.67	1.75	1.83	1.98	1.88	1.67	1.67	1.63	1.49	1.29
76-3-13 Need	3.54	3.17	2.99	2.87	2.88	3.00	3.28	3.42	3.73	3.98	4.55	5.05	5.56	6.01	6.44	6.96	7.22	7.41	6.76	6.15	5.79	5.55	4.78	3.97
76-1-13 Need	3.83	3.39	3.09	2.92	2.93	3.00	3.19	3.61	3.88	4.22	4.56	5.06	5.54	5.85	6.35	6.77	6.91	7.37	6.95	6.28	5.82	5.40	4.73	4.08
Need from NWA (MW)	8.57	7.63	7.09	6.75	6.72	6.92	7.44	8.08	8.67	9.30	10.28	11.43	12.55	13.40	14.46	15.48	15.96	16.76	15.59	14.09	13.28	12.57	11.00	9.34

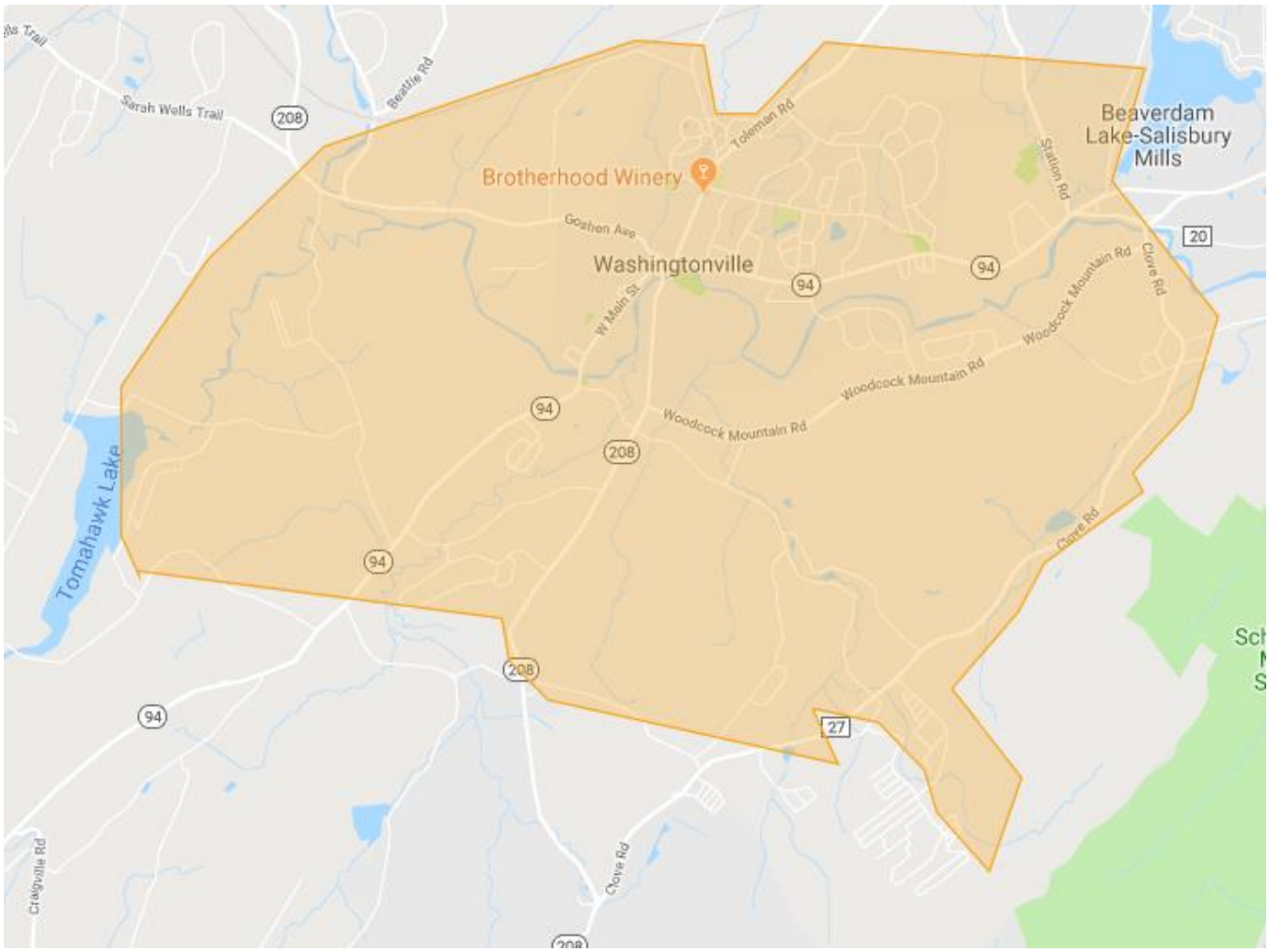
Table 2.5 provides the number of Residential and Commercial & Industrial customers on the four (4) circuits in question. Please note that load on circuit 76-2-13 is not included in *Figure 2.3* and *Figure 2.4* above, since that load is covered during the worst contingency scenario.

Table 2.5: Customer Breakdown, by Circuit and Segment			
Circuit	**Residential**	**Commercial & Industrial**	**Total**
76-1-13	1,667	85	1,752
76-2-13*	557	34	591
76-3-13	2,082	99	2,181
76-4-13	1,165	27	1,192
Total	5,470	246	5,716

**Informational only, not required to meet need.*

Figure 2.6 provides an overview of the approximate area where the load reduction is needed. Please refer to the Company's online hosting capacity map to better understand the area and circuit topography (link provided: https://www.oru.com/en/business-partners/hosting-capacity).

***Figure 2.6**: Approximate area for required load reduction*



2.3 Traditional solution

O&R's traditional solution would be to upgrade the existing single transformer bank with two 35MVA, LTC banks in the same vicinity as the existing substation.

2.4 NWA Solution

In the Blooming Grove/ Washingtonville area, NWA proposals must meet the capacity requirements detailed in the provided 24-hour peak day load curves. Potential solutions will require operating a portion of the Company's facilities as part of an engineered microgrid, and as such, all proposals must demonstrate that they meet all ANSI voltage, frequency and require adequate system protection and synchronization. The proposed microgrid is a group of interconnected loads and distributed energy resources within a clearly defined electrical boundary that will act as a single controllable entity with respect to the grid. The microgrid will connect and disconnect from the grid to enable it to operate in parallel with the existing system or as a microgrid (island mode).

The proposal must serve load on three separate distribution feeders. The Company anticipates DG at multiple locations throughout the identified area. The RFP clearly defines the electrical boundary (Figure 2.6). Orange and

Rockland will install new automatic switching devices to electrically isolate the targeted area. Upon notification the DG must be operational and restore all load within one hour. The solution shall adhere to all other appropriate and reliable operating requirements and standards, including appropriate system protection for the 13.2kV (grd-Y) distribution system and feeders that serve approximately 4,600 electric customers in this portion of the Company's electric delivery system. The DG shall be balanced 3-phase and connected to the existing overhead 13.2kV system without incurring additional distribution system upgrades.

The O&R 13.2kV distribution system is protected with overcurrent protective devices which include expulsion fuses and field reclosers. The proposed NWA solution must demonstrate that it meets the fault current requirements (4000 to 7000 Amps) to operate the existing O&R protection equipment. RFP responses must be site specific with detailed specification on the technology, operation and maintenance needed to maintain the safety requirements needed to serve O&R customers.

The proposed energy management system and proposed protection scheme will balance generation with microgrid demand and maintain adequate frequency, voltage (123V+/- 1%), and power flow across the microgrid network in island mode. The microgrid will require power flow to match active and reactive power to serve the load. The proposal should include microgrid control systems that are capable of remote monitoring and control and that can be integrated into O&R's existing energy management system ("EMS") and distribution supervisory control and data acquisition ("DSCADA") system. During an event, the microgrid must operate within 60 minutes of verbal communication between the parties. If the proposal includes a generator, the system will require black start capabilities and generator will need to ramp up to 60 Hz and prepare to supply each of the separate microgrid loads in sequence.

The microgrid controller will perform a series of operational tests to ensure the microgrid is operating as expected and that power flow is stable and reliable. The microgrid protection schemes must be capable of distinguishing internal from external system disturbances to prevent nuisance tripping to support the resiliency of the O&R system. The system shall continuously balance generation and load in real-time, monitoring relevant variables (frequency, and voltage) and adjust generator/battery output as necessary. Upon availability of the O&R system, the microgrid must synchronize and transfer load to O&R without customer interruption.

3 Proposal Requirements

This section outlines the requirements for responses to the RFP. Respondents should submit their responses to the functional questions included in Attachment A, as part of their proposals. Respondents are encouraged to include, as an attachment (maximum size – 2 MB), any additional information that will clarify how their proposed solution(s) will achieve the required demand reduction. Review priority will be given to the information submitted within the provided format.

3.1 Professional Background and Experience with the Proposed Solution

Respondents should provide the following:

- Executive Summary of proposal;
- Respondent's core business and organizational structure;
- Project organizational chart and project team resumes;
- Financial statements for the past three years, and services offered;
- Examples of prior industry specific work that is similar in nature and relevant to the NWA solution

requirements, with particular emphasis on implementation of the solution, such as at other utilities, large municipalities, co-ops, or any other applicable facilities;
- Relevant project experience;
- Contact information of customers where the solutions have been implemented (at least three references);
- Letters of support from customers who plan to implement the solution at their site in the applicable area of need identified (**Note:** O&R will need to verify customer qualifications);
- References which shall include any authorizations necessary for O&R to verify;
- Respondent's related previous work;
- Specific location of successful technology deployment; and
- Any other relevant information deemed appropriate and noteworthy supporting and validating the proposed solution.

Respondents should address any estimated costs associated with implementing the proposed technology/solution, including customer and utility costs, as well as any other relevant costs. Respondents should also describe in detail non-energy benefits associated with the proposed solutions such as net avoided carbon, SOx, NOx per $/ton.

Respondents should identify and provide contact information for customers who have implemented the technology/solutions. Respondents should note whether O&R can contact these customers for additional information and follow-up questions.

3.2 Proposed Solution Description

Project proposals must demonstrate how the proposed solution will achieve the demand reductions sought and maximize value to O&R's customers. Detailed project information should include:

- Technology/Solution description (tested and proven or innovative technology);
- Type of contract (e.g., shared savings, performance contract, sale, lease-purchase, power purchase agreement);
- Performance characteristics of the technology;
- Description of the flexibility and applicability of the technology;
- Hourly electric load reduction impact provided by the solution;
- Community and environmental impacts derived from the solution;
- Innovation, risks, barriers, challenges;
- Specification and details associated with implementing the proposed solution (e.g., permitting requirements);
- Detailed description of non-energy benefits associated with the proposed solution; and
- Ability of solution to increase or decrease in scale.

The proposal must specify the data (e.g., detailed calculations) and methodology used to determine the estimated demand reduction and annual kWh savings attributable to each DER measure proposed to be installed.

3.3 Project Proposal Requirements

Respondents are encouraged to submit alternative, creative proposals for marketing, sales, financing, implementation, and maintenance, or transaction structures and pricing formulas that will achieve the demand reductions sought and maximize value to O&R's customers.

Selected Respondents, if subsequently contracted with to provide their solutions, will be required to provide full facility and equipment access to the Company and its representatives for pre- and post-installation inspections to verify the installations and the demand reductions, and for subsequent inspections (which may be performed at the Company's discretion), to verify continued operation and maintenance of the DER measures for the applicable term.

The new DER measures must be in service, and the pledged demand reduction must be guaranteed to commence, by the respective need dates for the applicable load area, to address forecasted summer overloads. The type of compensation structure must be included (upfront payment/rebate, pay for performance, loan program or other).

Respondents must provide any and all methods and procedures required to comply with technical, safety and operational requirements for the interconnection and operation of their equipment with the Company's electric delivery system, as well as performance measurement and verification (i.e., are kW actually reduced). Respondents will be allowed to maintain the interconnection after the term of an NWA and allowed to continue to use that asset to provide other non-NWA services for the life of the asset.

For any proposed renewable generation, it is particularly important to verify that any stated demand reduction coincides with the Company's peak loading period. The Company reserves the right to require periodic witness testing on any proposed protective systems and electric system interconnections that could adversely affect the Company's electric delivery system should they fail.

Financial assurances will be required so that the committed amount of demand reduction measures will be installed and the committed in-service date for each measure will be met. Failure to achieve the committed demand reductions or to meet the committed in-service dates will result in liquidated damages and/or other consequences which will be established during the contracting process.

The proposal should specify the data and methodology used to determine the estimated demand reduction, annual kWh savings attributable to each measure/solution proposed to be installed, and methods/proposals to confirm measurement and verification of delivered demand reductions.

Respondents proposing to market the installation of demand management measures to others should include a full and complete assessment of the opportunities. At a minimum, this assessment should include a description of the markets, such as one-to-four family homes, multifamily buildings, small commercial (e.g., retail stores, restaurants), large commercial (e.g., office buildings, industrial) and government or institutional (e.g., hospitals, hotels, schools, colleges), and the applicable demand management measures and technologies to be directed at each selected market or customer segment. In addition, Respondents should illustrate the marketing and sales strategies that they will employ to capture the selected market or customer segment and to deliver the demand reductions included in their proposals. Preference will be given to Respondents which have pre-existing customer agreements to deploy (previously and successfully deployed) the solution.

Respondents may also include proposals that require deployment on utility property or ownership models involving utility ownership, or operation and maintenance, or both, by the Company.

Of key importance to the review of any proposal is consideration of community impact. Proposals must provide information on elements of the proposal that affect the community (both positively and negatively) including, but not limited to, associated greenhouse gas ("GHG") emissions, waste streams and management, job creation potential and community disruption.

Respondents should also identify their ability to execute the NWA project by providing reference to successful similar projects that they have completed in other jurisdictions. Respondents are expected to provide detailed explanations and validation of such funding strategies, including examples which are provable and repeatable.

3.4 Functional Requirements

A detailed Non-Wires Alternative Solution Questionnaire is included in Attachment A. Please provide your responses in the document and submit with your RFP proposal. Major categories within the Questionnaire include:

- Respondents go-to-market strategy;
- Measurement & Verification confidence plan;
- Other Funding Sources Available;
- Environmental and Community Impacts;
- Respondent's Market Understanding;
- Proposed Solution Benefits;
- Other Funding Opportunities; and
- Other Additional Information to clarify or further explain the RFP proposal.

3.5 Detailed Project Plan and Timeline to Implement Solution

Proposed DER measures must be in service, and the pledged demand reduction must be guaranteed to commence, by the date(s) specified in the Non-Wires Alternative Project Description section above.

- Responses must contain a detailed plan to implement the solution including:
  - General scope of work;
  - Customer acquisition and marketing plan;
  - Financing, including transaction structures and pricing formulas;
  - Implementation plan and project schedule; and
  - Operation and Maintenance plan (if, applicable).
- Respondents proposing to market the installation of DER measures to customers should include a full and complete assessment of the DER opportunities. At a minimum, this assessment should include a description of the markets, such as one-to-four family homes, multifamily buildings, small commercial buildings (e.g., retail stores, restaurants), large commercial buildings (e.g., office buildings, industrial) and government or institutional buildings (e.g., hospitals, hotels, schools, colleges), and the applicable DER measures and technologies to be directed at each selected market or customer segment.
- Respondents must illustrate the marketing and sales strategies that will be employed to capture the selected market or customer segment and to deliver the demand reductions included in their proposals. Preference will be given to Respondents with pre-existing customer agreements to deploy the solution upon confirmation by the Company. Marketing and sales plans must be expressly approved by the Company.
- The response must contain a detailed measurement and verification ("M&V") plan for verifying the solution's load reduction. The plan must include provisions for access by the Company and/or its representatives for quality control and quality assurance. Independent M&V may be performed at the Company's discretion. The Company's M&V will include, but not be limited to, verification of continued operation and maintenance of the DER measures for the applicable term.
- Proposals must provide information on elements of the proposal that affect the community (both positive and negative) including, but not limited to, associated GHG emissions, waste streams and management, job

creation potential, and community disruption.
- Proposals must outline a detailed timeline from contracting, to implementation and completion of the proposed solution.

3.6 Detailed Costs Associated with Proposed Solution

- Respondents must provide a detailed cost breakdown in the format shown below.

DER solution	Size	Material Cost	Labor Cost	Admin Cost	Total O&R cost	Total Cost of the Project

- Respondent should itemize and identify various items in each of the cost categories, i.e., material cost components, labor cost components.
- Respondents should identify other funding streams that may be used to mitigate cost impact to the Company's customers (e.g., City, State, and Federal funding opportunities). Respondents should also identify if private sector funding will be used.
- Please propose costs for different ownership mechanisms, mainly
  - Cost if utility is the owner of the NWA solution, operation and maintenance is done by the vendor
  - Cost if utility is leasing/paying toll for the NWA solution
- Please provide costs for lump sum payment and also yearly payment installments for the 10 year NWA contract term.

3.7 Energy Storage Proposed Solutions

Respondents proposing energy storage solutions should provide the following information in addition to that required for all proposals:

- In addition to the cost breakdown in Section 3.6, respondents proposing energy storage solutions should also provide the cost of the solution by $/kw-month, $/MWh, and $/MW for the five-month availability period as discussed in section 2.2.
- Respondents should address their strategy for maintaining energy storage capacity for the duration of the asset lifetime and provide the cost for doing so, whether it be a higher up-front cost for overbuild or a maintenance cost for the life of the project. Other maintenance strategies will also be accepted.
- The Company is interested in proposals which will take advantage of funding available from other funding streams, e.g., participation in NYISO market to offset costs. Proposals should state the intention of seeking these types of additional funding and whether that funding would be used to reduce the cost of system or be split with the Company in a sharing arrangement.
- The Company is interested in projects that will go above and beyond the need of the NWA project to identify cost effective opportunities to reduce customers' total bill. This may include upsizing the energy storage beyond the need of the NWA, in order to participate in additional revenue streams to earn incremental incentives that will further reduce the overall cost of the project.
- The NWA contract will be for a 10 year term. Please also include costs for extending the NWA beyond the 10 years by 5 year increments until the asset reaches the end of its lifecycle.
- Provide any end of life considerations and their costs (i.e., removing the equipment after the end of its lifecycle, repurposing the equipment, recycling and/or site remediation).

4 Proposal Evaluation Approach

Solutions proposed in response to this RFP will be reviewed in detail by O&R. O&R will use an evaluation framework to develop the optimal portfolio to address the identified need. Respondents should also note that

each measure of any proposal submitted, whether part of a single-measure proposal or a multiple-measure proposal, will be evaluated against other like measures for equal comparison. Thereafter, the Company may evaluate all measures in the aggregate in a manner that considers the overall benefit to the Company based on the criteria set forth in this RFP, and to include considerations that could allow for the selection of individual measures across multiple proposals.

4.1 Evaluation Criteria

O&R will review all solutions proposed in response to this RFP. Some of the main review criteria are listed below. The review process is designed to be fair and equitable, with the objective of identifying potential solutions that provide the greatest overall value to customers.

Evaluation criteria will include but not limited to:

1. Proposal content – Information requested has been provided and is comprehensive to allow for evaluation;
2. Viability - the extent to which the Respondent's proposed solution would address the needed solution mentioned in this RFP;
3. Technology – DER maturity, ability to scale, challenges in deploying proposed DER;
4. Functionality - the extent to which the proposed solution would provide needed load reductions and reliability requirements in the area;
5. Environmental and community impacts associated with the proposed solution;
6. Unit Cost – total cost, and $/MW at peak required for the proposed solution; cost inclusivity as outlined in section 3.6;
7. BCA – a BCA of the proposed solution will be performed in accordance with O&R's BCA Handbook as filed with the NYPSC; a BCA will be applied to the portfolio of solutions to determine feasibility of implementing a NWA solution;
8. Timeliness - the ability to meet O&R's schedule and project deployment requirements, also with a mind that the detailed project schedule from contract execution to implementation and completion of projects is important for determination of feasibility;
9. Price and reliability, particularly as compared to other proposed solutions along with the dependability and benefits that would be provided to the grid;
10. Respondent Qualifications - the Respondent's relevant experience and success providing these solutions to other locations, including reference checks and documented results;
11. Applicability to REV- supports the goals and objectives outlined in the REV Proceeding;
12. Feasibility - the expected ease of project implementation within the timeframe required for the non-wire alternative solution (e.g., permitting, construction risks, operating risks); siting, customer acquisition and interconnection challenges;
13. Community impact - the positive or negative impact that the proposed solution may have on the community in the identified area (e.g., noise, pollution).

4.2 Proposal Response and Submittal Instructions

A Respondent is strongly encouraged to submit a proposal in accordance with the summary instructions outlined in this section, with the proposal also to focus on the requirements of the Non-Wires Alternative Solutions Requirements section (and as well as a required submittal of a fully completed **Non-Wires Alternative Solution Questionnaire (Attachment A)** as a separate attachment), and such other requirements set forth in this RFP. Respondents are required to submit their bid response through the Company's Procurement System ("Oracle RFQ System"). Any limitation regarding Respondent's ability to supply information requested in this RFP (or to support

or perform a particular function or service) should be explicitly stated in the proposal response. Any partnering with other solution providers to perform a particular function or service must be explicitly stated.

All proposals must be submitted through the Oracle RFQ System on or prior to the due date and time. Respondents who fail to submit by the due date and time will be locked out of the Oracle RFQ System and unable to submit their proposals. Therefore, Respondents are encouraged to upload their proposals well in advance of the closing time to avoid any potential issues that may occur, including due to unfamiliarity with the Oracle RFQ System, or otherwise. Respondents must take the following actions to complete their proposal submission:

1) Download this Non-Wires Alternative RFP, Non-Wires Alternative Questionnaire (Attachment A), and Supplier Enablement Template.
2) Become enabled in the Oracle RFQ System by submitting the below items to Michael Heaton at **heatonm@coned.com** (note that if respondent has previously been enabled in the Oracle RFQ System as part of a separate bid event then they do not have to do it again, but should email Mike Heaton to notify him of participation interest for this RFP):
    a. W-9 form (version last updated); and
    b. Supplier Enablement Template (Select 'Sourcing' under Oracle responsibility field).
3) Receive Formal RFQ response request (will be same information downloaded from non-wires alternative website).
4) Submit response and fully completed questionnaire to Oracle RFQ System**.**

Responses delivered by hand or fax, regular mail, or any other method will not be accepted. O&R will not be responsible for late, lost, illegible or misdirected submissions.
Review of responses submitted to this RFP will be coordinated through the O&R Utility of the Future organization and other Company departments as necessary. O&R, at its option, may contact Respondents with additional questions or information requests. Additional action by O&R related to this RFP is solely at the Company's option. As such, the Company has no obligation to address questions, comments, or information requests related to this RFP after receipt of Respondents responses.

Contact Information and Questions

All Respondents should direct questions during the clarification question timeframe via email to Michael Heaton, heatonm@coned.com, of O&R's/Con Edison's Supply Chain Department. All questions and answers deemed essential for the viable submission of a bid response will be publicly posted at www.oru.com/nonwires

Respondent's identities will be kept confidential.

The Company will have no obligation to evaluate late submissions, nor be responsible in any way for any consequences associated with late submissions.

4.3 RFP Schedule

Below is the expected schedule to be followed for this solicitation:

RFP Solicitation Milestones	Completion Date*
RFP Issued by O&R	December 28, 2018
Pre-bid conference call (see details below)	January 17, 2019 (1:00 pm EST)
Clarification questions due to O&R (Round 1)	January 24, 2019 (1:00pm EST)
Responses to clarification questions due to bidders (Round 1)	~~February 6, 2019~~ February 13, 2019
Clarification questions due to O&R (Round 2)	February 27, 2019
Responses to clarification questions due to bidders (Round 2)	March 13, 2019
Deadline to become enabled in O&R/Con Edison procurement system	~~February 21, 2019~~ April 11, 2019
Qualified proposals due to O&R	~~March 7, 2019 (3PM EST)~~ April 30, 2019 (3PM EST)

*O&R reserves the right to change any of the above dates.

Pre-bid conference call details:

Date: January 17, 2019
Time: 1:00pm EST

Join by phone

Dial-in Number: **(646) 679-1825**
Meeting ID: **779081994**
Meeting Password: 0509

Smartphone link: (646) 679-1825,,779081994#

Join by web browser

Follow this link (https://conf.coned.com/779081994) for video conference and screen sharing.

Can't join the meeting? Contact support.

4.4 Proposal Response Format

The Oracle RFQ System is only capable of accepting individual documents no larger than 5 MB in size. Respondents may find it necessary to split up large documents into smaller files due to these system constraints.

The written proposal response for the NWA solution should be organized as follows:

Proposal Section	Proposal Section Title
N/A	Cover Letter
N/A	Respondent Checklist (Appendix)
N/A	Table of Contents
1	Professional Background, Financials and Experience with the Proposed Solution (as described in section 3)
2	Proposed Solution Response & Project Plan (as described in Section 3)
3	Cost Associated with Proposed Solution (as described in Section 3)
4	Assumptions and Expectations
Appendix	Glossary of Terms
Attachment	Non-Wires Alternatives Solutions Questionnaire Response

4.5 Cover Letter and Checklist

The cover letter shall include the following:

- The legal name and address of Respondent;
- The name, title and telephone number of the individual authorized to submit information and execute the Agreement;
- The signature of a person authorized to contractually bind Respondent's organization; and
- Statement that the Respondent has read, understands, and agrees to all provisions of the RFP or alternatively, indicating that exceptions will be taken to the RFP and identifying such exceptions.

4.6 Respondent Checklist

Respondent checklist: Respondent should provide to the Company the properly completed Respondent Checklist (Appendix) as part of the proposal.

4.7 Table of Contents

Include a clear identification of the proposal by section and by page number as identified above.

4.8 Professional Background and Experience with the Proposed Solution

This section is for the Respondent to provide an executive overview and summary of your company and general description of the key features of Respondent's proposed solution. It should include the items outlined in Section 2.1 of the RFP. Respondent shall also identify all subcontractors that it will employ to complete the proposed solution.

4.9 Proposed Solution and Project Plan

This is a response to the solution requirements as outlined in this document. Respondents should also provide a proposed project plan for the solution.

4.10 Costs Associated with the Proposed Solution

Respondents should provide a detailed breakdown of the costs associated with implementing the proposed solution.

4.11 Assumptions and Exceptions

Respondent should provide a list of assumptions made in developing the response to this RFP that should be considered when evaluating the response. Respondent should provide a stand-alone section listing any exceptions to the RFP (i.e., indicate which deliverables of the RFP Respondent cannot meet).

4.12 Glossary of Terms

Respondent should provide a glossary of terms that is specific to the Respondent's solution.

4.13 Non-Wires Alternative Solution Questionnaire

Respondents should attach the responses to the Non-Wires Alternative Solution Questionnaire (Attachment A), including as much detail possible, with the RFP submittal.

5 RFP Terms and Conditions

Each Respondent is solely responsible for including all pertinent and required information in its submission. O&R reserves the right to determine, at its sole discretion, whether a submission is incomplete or non-responsive.

Respondents should state clearly all assumptions made with respect to this RFP. In the absence of an explicit statement to the contrary, each Respondent shall be deemed to have agreed with and understood the requirements of this RFP. While O&R has endeavored to provide accurate information, O&R makes no warranty or representation of accuracy.

Any exceptions to the terms, conditions, provisions, and requirements herein must be specifically noted and explained by Respondent in Respondent's response to this RFP. O&R will assume that any response to this RFP expressly accepts all the RFP terms, conditions, provisions and requirements, except as expressly and specifically stated by a Respondent in Respondent's response to this RFP.

Respondents agree to keep confidential all information provided by O&R in connection with this RFP.

5.1 Qualifications of Respondents

The Company may make such investigation as the Company deems necessary to determine the qualifications of Respondent and proposed subcontractors to perform the work. A Respondent should promptly furnish any

information and data for this purpose as may be requested by the Company. The failure of a Respondent to produce timely information and data requested by the Company may provide a basis for rejection of the proposal.

5.2 Proprietary Information

If a proposal includes any proprietary data or information that a Respondent does not want disclosed to the public, Respondent must specifically designate such data or information on each page on which it is found. O&R shall be held harmless from any claim arising from the release of proprietary information not clearly identified as such by a Respondent. Because of the need for public accountability, the following information regarding the proposal shall not be considered proprietary, even if such information is designated as such: pricing terms and non-financial information concerning compliance with RFP specifications.

5.3 Cost of Proposal Preparation

The cost of preparing a proposal in response to this RFP, including, but not limited to, the cost associated with site visits and preliminary engineering analysis, is solely Respondent's responsibility and will not be reimbursed by O&R.

5.4 Right to Reject

This RFP shall not be construed to establish an obligation on the part of O&R to enter into any contract, or to serve as a basis for any claim whatsoever for reimbursement of costs for efforts expended by Respondent. Furthermore, the scope of this RFP may be revised at the option of O&R at any time, or this RFP may be withdrawn or cancelled by O&R at any time. O&R shall not be obligated by any statements or representations, whether oral or written, that may be made by the Company, its employees, principals, or agents in connection with this RFP.

O&R reserves the right to accept any responsive proposal, to reject any and all proposals, and to waive irregularities or formalities if deemed to be in the best interests of the Company. Any such waiver shall not modify any remaining RFP requirements nor excuse any Respondent from full compliance with all other RFP specifications and contract requirements if the Respondent is awarded the contract. O&R shall reject the proposal of any Respondent that the Company determines not to be a responsible bidder, or whose proposal the Company determines to be non-responsive.

O&R reserves the right to withdraw this RFP at any time and for any reason, and to issue such clarifications, modifications, and/or amendments as it may deem appropriate. Receipt by the Company of a response to this RFP confers no rights upon a Respondent, nor any obligations upon the Company.

5.5 Revision to the RFP

O&R reserves the right to make changes to this RFP by issuance of one or more addenda or amendments and to distribute additional clarifying or supporting information relating thereto. O&R may ask any or all Respondents to elaborate or clarify specific points or portions of their submission. Clarification may take the form of written responses to questions or phone calls or in-person meetings for the purpose of discussing the RFP, the responses thereto, or both.

If it becomes necessary to clarify or revise this RFP, such clarification or addendum shall be issued by the Company by letter, email or written addendum to the RFP. Any RFP addendum shall be delivered by hand, certified mail, facsimile, e-mail or delivery by courier service which certifies delivery. Only those respondents that have already received the proposal documentation directly from the Company will be provided the clarification. Any addendum to, and/or clarification or revision of this RFP shall become part of this RFP and, if appropriate, part of the

Agreement that derives from the RFP.

5.6 Basis of Contract Award

Any contract award(s) that may be made by the Company shall be made to the most responsive and responsible respondent meeting the specifications, price and other factors considered, as determined by the Company, in its sole discretion. The proposal evaluation criteria are set forth within this RFP.

5.7 Duration of the Contract

The duration of the Agreement will be for a term agreed to by O&R and the Respondent during contract negotiations and will depend on the parameters of the proposed solution(s) (e.g., the ability to defer traditional capital investments for as long as possible while meeting BCA criteria). Agreements will typically commence upon the completion of construction and commencement of operation of the solution unless otherwise provided herein. In the event that the Company determines not to proceed with the project, the successful Respondent will be paid in accordance with the amounts as agreed by the Respondent and the Company.

5.8 Underperformance

Respondents should note that failure to deliver load relief committed to as part of any solution may result in liquidated damages and/or other consequences provided for by the contract between Respondent and O&R.

5.9 Security

Respondents are put on notice that if a Respondent's solution is selected, then Respondent will be required to furnish security to O&R that demonstrates, among other things, financial capability to pay liquidated damages in the event that the Respondent fails to satisfy its Load Reduction Guaranty during the period required.

5.10 Subcontracting and Assignment

No portion of the work associated with any project resulting from a successful response to this RFP by a Respondent may be delegated, subcontracted, assigned, or otherwise transferred without the prior written approval of the Company in each case.

Appendix B: Respondent Checklist

The Respondent must provide the following checklist which must be properly completed with the proposal and submitted to the Company as part of the proposal.

Checklist Item	Initial
REVIEWED ALL RFP DOCUMENTS AND LAWS AND REGULATIONS THAT IN ANY MANNER MAY AFFECT COST, PROGRESS, OR PERFORMANCE	
FULLY COMPLETED PROPOSAL ADHERING TO THE FORMAT PROVIDED WITHIN THIS RFP	
ENABLED IN CON EDISON PROCUREMENT SYSTEM	
FULLY COMPLETED NON-WIRES ALTERNATIVE SOLUTION QUESTIONNAIRE (ATTACHMENT A)	
Summary	
Energy	

Financials	
Additional Review Criteria	

NOTE: FAILURE TO COMPLY WITH RFP PROCESS, COMPLETION AND SUBMITTAL OF ALL THE ABOVE DOCUMENTS ON THE FORMS PROVIDED HEREIN, WILL RESULT IN A REJECTION OF YOUR BID.

By placing my initials in the boxes provided above, I acknowledge having read and that I understand fully all of the requirements of this RFP, including with regard to each of the documents referenced herein.

RESPONDENT (SIGNATURE):

RESPONDENT (PRINT NAME):

DATE: