

Orange and Rockland Utilities, Inc.

# Request for Proposal (RFP)

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Monsey Non-Wires Alternative Project to Provide Solutions for  
Distribution System Reliability and Load Relief

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ISSUED: AUGUST 23, 2017

SUBMISSION DEADLINE: OCTOBER 24, 2017



**Orange & Rockland**



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# 1. Introduction

Orange and Rockland Utilities, Inc. (“O&R” or the “Company”) is requesting proposals from qualified and experienced respondents with the capability to deliver innovative non-wires alternative (“NWA”) solutions that provide electric distribution system load relief and reduce generation capacity requirements in the Monsey substation area.

## 1.1. Background

O&R is a subsidiary of Consolidated Edison, Inc., one of the nation's largest investor-owned energy companies. 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 State Public Service Commission (“NYSPPSC”).

## 1.2. Definitions

**Non-Wires Alternative (“NWA”):** A solution proposed in an identified area as an alternative to a traditional infrastructure resolution for a distribution or transmission problem. Non-wires alternatives may be a singular or portfolio of multiple DERs.

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

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

**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 A of the “Orange & Rockland Initial Distributed System Implementation Plan” filed June 30, 2016 with the NYS Dept. of Public Service.

## 1.3. Purpose

This RFP solicits responses from Respondents that state an interest and have 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 also provides requirements that Respondents must comply with when submitting their proposals.

This RFP is open to all DER approaches that display the potential to provide load relief in the areas identified. Proposed solutions should decrease peak load demand and increase reliability at the lowest reasonable cost possible. O&R will attempt to build a portfolio of projects that will also serve to diversify project execution risks and maximize benefits to customers.

Each RFP response should at a minimum outline a Respondent’s suggested approach, load relief impact, cost for completing the project, project plan 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 in a manner that balances that solution against the solutions proposed by other Respondents. If O&R enters into a contract with a Respondent, then the Respondent will be subject to defined milestones so that O&R can verify that the Respondent is on track to provide the contracted load relief. With regard to any contract entered into with a Respondent to implement a solution, such contract will provide that O&R may terminate that contract if O&R deems that demand reduction goals are not likely to be achieved or if load demand changes in a way that the solution is no longer needed or will not be effective as intended.

## **1.4. General Guidelines**

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.

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 they make 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

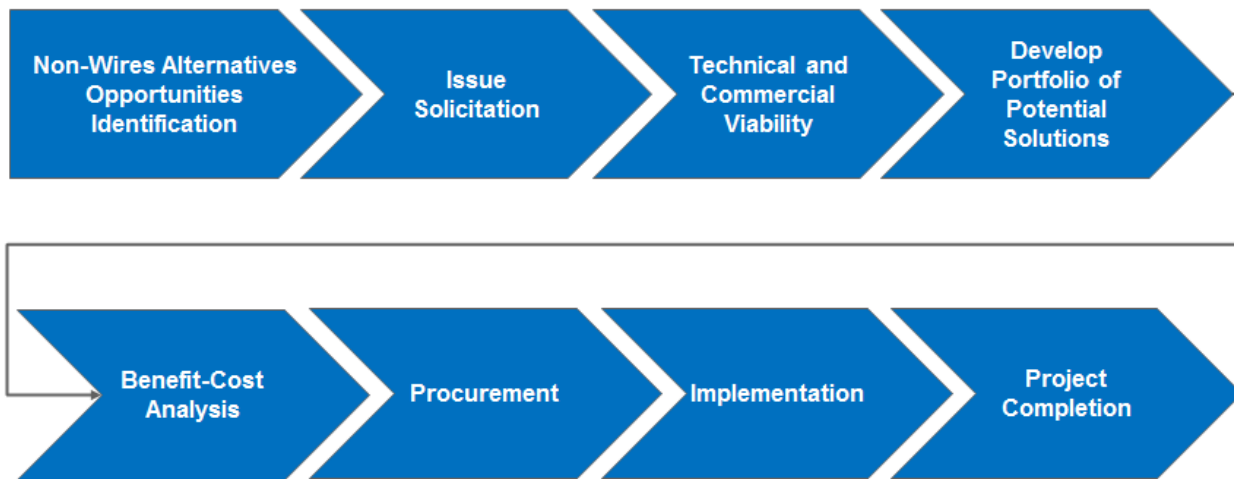


accepts all of this RFP’s terms, conditions, provisions and requirements, except as expressly and specifically stated otherwise by a Respondent in its response to this RFP.

### 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.

Figure 1: O&R NWA Process Flow



## 2. Monsey Non-wires Alternative Project Description

### 2.1. Project Description

O&R is proposing to implement a NWA program in order to defer capital infrastructure investments required to upgrade its Monsey Substation and associated distribution circuits in order to meet short- and long-term customer energy needs. The Company is focusing on NWAs that will reduce peak demand in areas where substantial capital investments are needed to improve system reliability and resiliency. 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”), a combination of 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.



O&R will use this NWA program to support the NYSPSC’s regulatory initiative Reforming the Energy Vision (“REV”).<sup>1</sup> REV aims to reorient both the electric industry and the ratemaking paradigm toward a consumer-centered approach that harnesses technology and markets.

O&R’s Monsey Substation is comprised of two 138kV-13.2kV, 25 MVA transformer banks (Banks 144 and 244), each serving three distribution circuits. These banks have experienced significant load growth which has begun to overload the banks and associated distribution circuits during system contingencies (i.e., loss of service of a substation transformer bank). The Monsey NWA seeks to achieve the following two distinct goals:

- I. For bank contingency purposes, reduce peak electric load within the area served by the Monsey Substation and Banks 144 and 244; and
- II. For single distribution circuit contingency purposes, reduce peak electric load on Monsey distribution circuits 44-2-13, 44-3-13, 44-6-13 and associated distribution circuit ties.

Peak electric load reduction in the Monsey area currently served by all six Monsey distribution circuits will contribute to reducing the load during bank contingencies. However, reducing load on the above mentioned distribution circuits and their associated circuit ties has the potential to alleviate not only bank contingency issues but also single distribution circuit contingency issues. DERs placed in areas that serve both purposes will be given priority.

The Monsey Substation presently serves approximately 9,100 customers, the majority of which are residential, while the remaining customers are commercial and industrial (“C&I”). See Table 2 below for the customer breakdown by bank and circuit. Considering the historic load data as well as current new business applications in process, the growth rate per year for the Monsey area is projected to be as shown below in Table 1:

Table 1: Monsey Area Projected Load Growth

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<sup>1</sup> Case 14-M-0101, *Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision*.



<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>
<b>1.26%</b>	<b>1.37%</b>	<b>1.48%</b>	<b>1.59%</b>	<b>1.70%</b>	<b>1.81%</b>	<b>1.92%</b>	<b>2.04%</b>	<b>2.15%</b>	<b>2.26%</b>

Table 2: Customer Breakdown by Bank and Circuit

Monsey Bank	Distribution Circuit	Customers		
		Residential	C & I	Total
Bank 144	44-1-13	1,217	274	1,491
	44-2-13	1,268	293	1,561
	44-3-13	1,911	157	2,068
Bank 244	44-4-13	1,532	170	1,702
	44-5-13	684	32	716
	44-6-13	1,494	104	1,598

\*Above numbers are approximate as of July 6, 2017.

## 2.2. Substation Bank Contingency Analysis and Requirements

Based on O&R system planning studies, portions of the electric delivery system in the Monsey substation area are projected to not meet the Company’s design standards by 2020. The objective is to explore the potential for reducing load on the Monsey bank and distribution circuits through potential non-wires alternatives (“NWA”), including Distributed Energy Resources (DER”).

Bank 144 and Bank 244 each have ratings that guide the assessment and determination of acceptable system operating performance with respect to risk for both ability to serve load and for attendant customer hours of outage exposure. Starting in 2020, even with the transfer of load to adjacent tie circuits, the load on Bank 144 during a Bank 244 contingency would exceed the normal rating of Bank 144. The area has experienced growth that has led to highly loaded circuits and substation transformer banks. Consequently, the circuits have limitations in providing backup during contingencies. Of the circuits in Monsey, 44-2-13, 44-3-13 and 44-6-13 have limited backup in contingencies. Below is the summary of the MW reduction needed for the Loss of Bank 244 and the Loss of 44-2-13, 44-3-13 and 44-6-13 for the respective years.





The table below indicates the cumulative circuit MW reduction needed by year, which aggregates from the individual MW reduction for each circuit contingency and at the specific geographical area. Also the Loss of 44-6-13 on 51-3-13 and loss of 44-6-13 on 19-10-13 would factor in for the Loss of Bank 244 as well.

Loss of Bank 244										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Total MW Reduction	0.08	0.84	1.67	2.57	3.54	4.59	5.71	6.91	8.20	9.58

Circuit Contingencies										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
MW Reduction for Loss of 44-2-13 on 44-1-13	1.27	1.45	1.66	1.88	2.12	2.38	2.66	2.97	3.30	3.65
MW Reduction for Loss of 44-3-13 on 19-11-13	0.00	0.08	0.26	0.46	0.68	0.91	1.17	1.44	1.74	2.06
MW Reduction for Loss of 44-6-13 on 51-3-13	0.62	0.79	0.99	1.20	1.43	1.68	1.95	2.24	2.55	2.89
MW Reduction for Loss of 44-6-13 on 19-10-13	0.32	0.50	0.69	0.89	1.12	1.36	1.63	1.91	2.22	2.55
TOTAL MW Reduction needed	2.21	2.82	3.6	4.43	5.35	6.33	7.41	8.56	9.81	11.15



Figure 2 below shows the area where load reduction is required which includes area served by Bank 144 and Bank 244 and the associated circuit ties of Bank 244 during the above mentioned contingency. Table 3 indicates the required load reductions by year and the associated time frames when load relief is required. Figure 3 below graphs the typical weekday peak load profile of the Monsey substation with the loss of Bank 244, as forecasted for years 2020, 2022 and 2029.

**Figure 2 - Monsey Area**

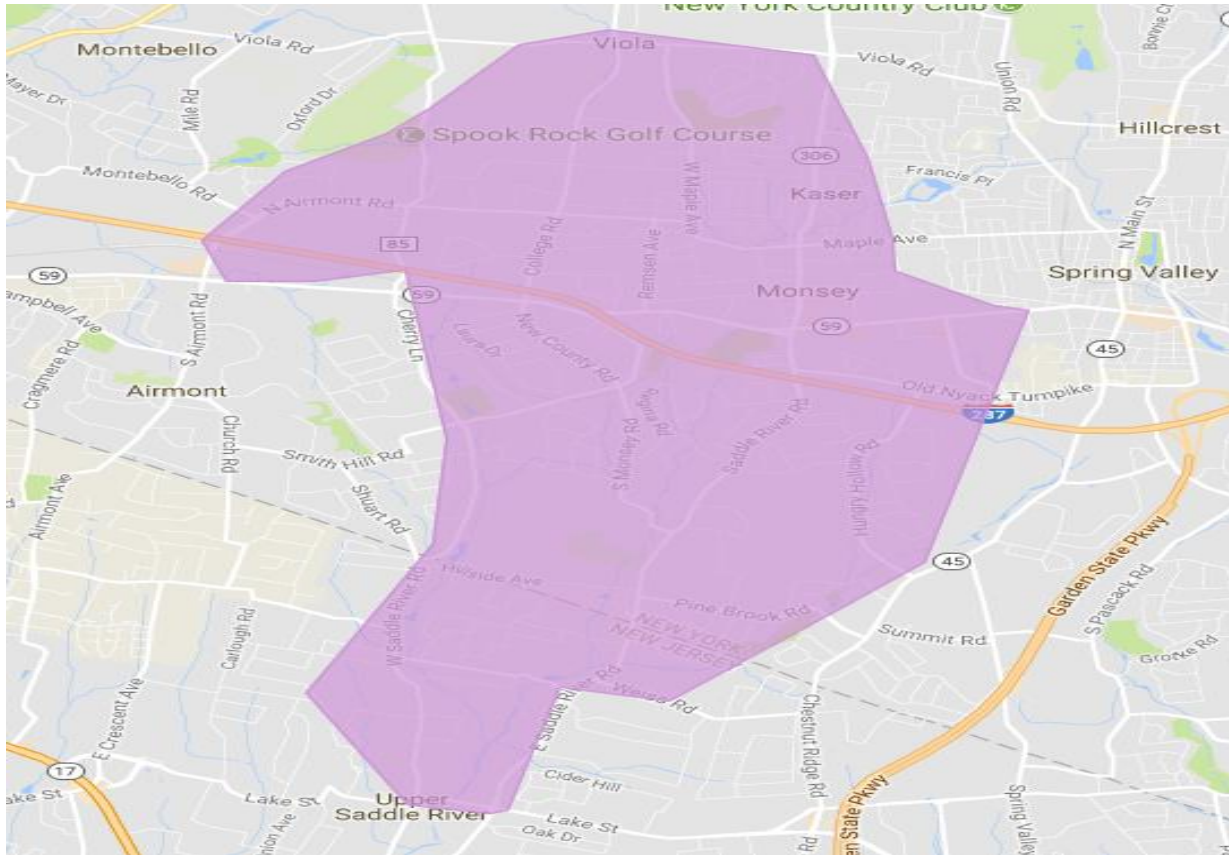
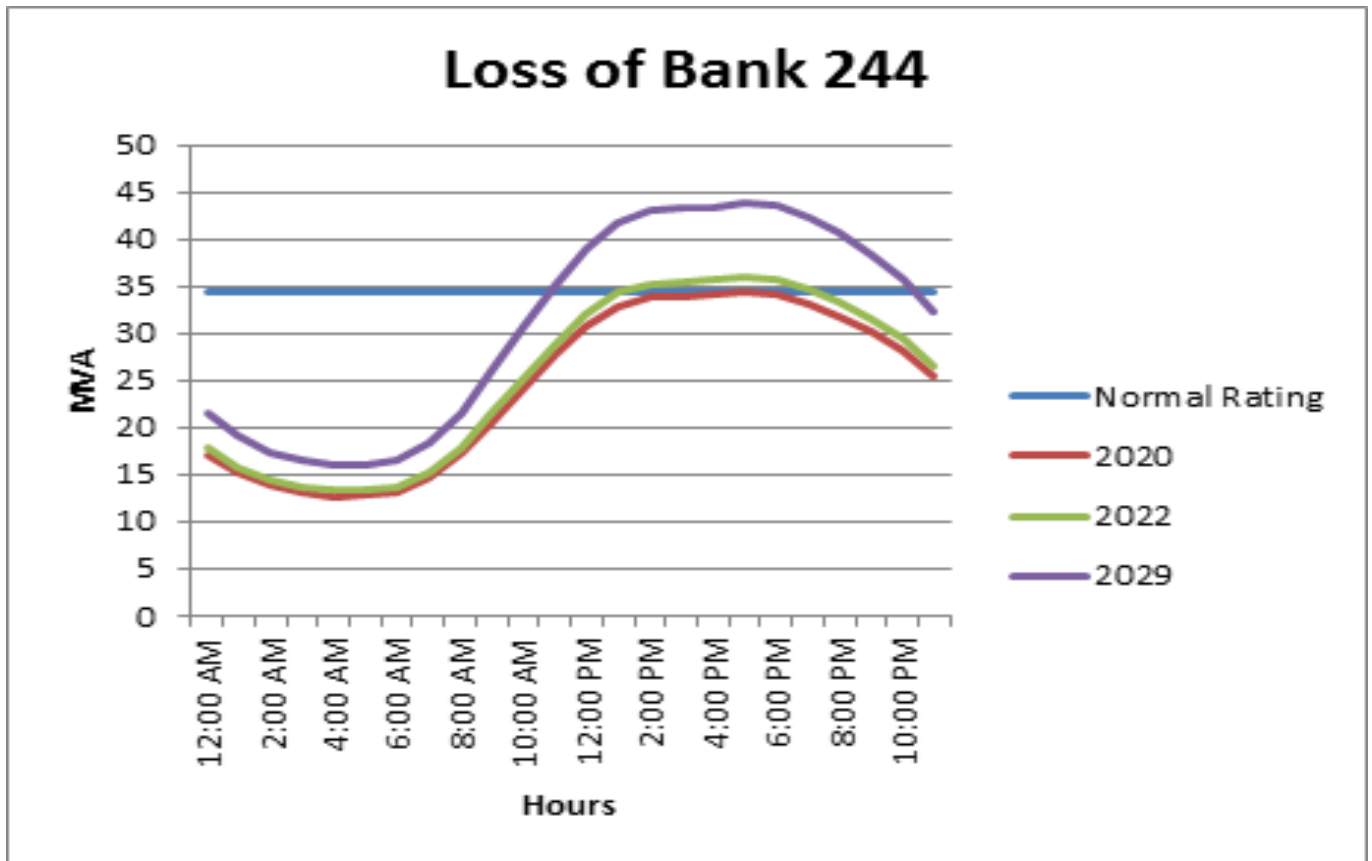




Table 3: Required Load Reduction and Hours of Need for Bank 244 Contingency

Loss of Bank 244										
Year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Total MW Reduction	0.08	0.84	1.67	2.57	3.54	4.59	5.71	6.91	8.20	9.58
Days of Need in a Year	3	4	4	7	12	18	23	26	33	38
Hours of need based on load profile	4p.m. to 5p.m.	2p.m. to 6p.m.	1p.m. to 7p.m.	1p.m. to 7p.m.	1p.m. to 8p.m.	12p.m. to 8p.m.	12p.m. to 9p.m.	12p.m. to 9p.m.	12p.m. to 10p.m.	11a.m. to 10p.m.

Figure 3: Typical Peak Day Load Profiles for Bank 244 Contingency





### 2.3. Distribution Circuit Contingency Analysis and Requirements

There are six existing Monsey circuits. In the case of the heavily loaded Monsey circuits, adjacent circuits needed to tie at peak time will also be heavily loaded and are incapable of providing 100% backup. Transferring load would simply transfer the problem to other local circuits, which could exacerbate the circuit loading concern. Among the six Monsey circuits, single circuit contingencies on the 44-2-13, 44-3-13 and 44-6-13 are the worst and will not pass design standards with 100% backup. Adjacent circuits that tie at peak time will also be heavily loaded beyond the point that they are not capable of providing 100% backup. As the load growth continues on these circuits, the number of hours of risk for the contingencies will continue to grow or worsen.

#### Circuit 44-2-13 Contingency

With the loss of circuit 44-2-13, Monsey circuit 44-1-13 can only be used to pick-up a portion of the 44-2-13 circuit without exceeding its allowable ratings. Table 4 indicates the required MW load reduction and hourly need to maintain the load on 44-1-13 below its normal rating.

Table 4: MW Load Reduction and Hourly Need for a Circuit 44-2-13 Contingency with 44-1-13 Backup

Loss of 44-2-13 on 44-1-13										
Year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Total MW Reduction	1.27	1.45	1.66	1.88	2.12	2.38	2.66	2.97	3.30	3.65
Days of need in a year	10	10	14	19	20	24	28	30	41	45
Hours of need based on load profile	1p.m. to 3 p.m.	1p.m. to 4p.m.	12p.m. to 5p.m.	12p.m. to 5p.m.	12p.m. to 6p.m.	12p.m. to 6p.m.	12p.m. to 7p.m.	11a.m. to 7p.m.	11a.m. to 7p.m.	11a.m. to 8p.m.

The load profiles for the loss of 44-2-13 on 44-1-13 on a peak day are shown in Figure 4 for years 2020, 2022 and 2029. A geographical map of the area served by 44-1-13 and portions of 44-2-13 is shown in Figure 5.



Figure 4: Typical Peak Day Load Profiles for Circuit 44-2-13 Contingency on Circuit 44-1-13

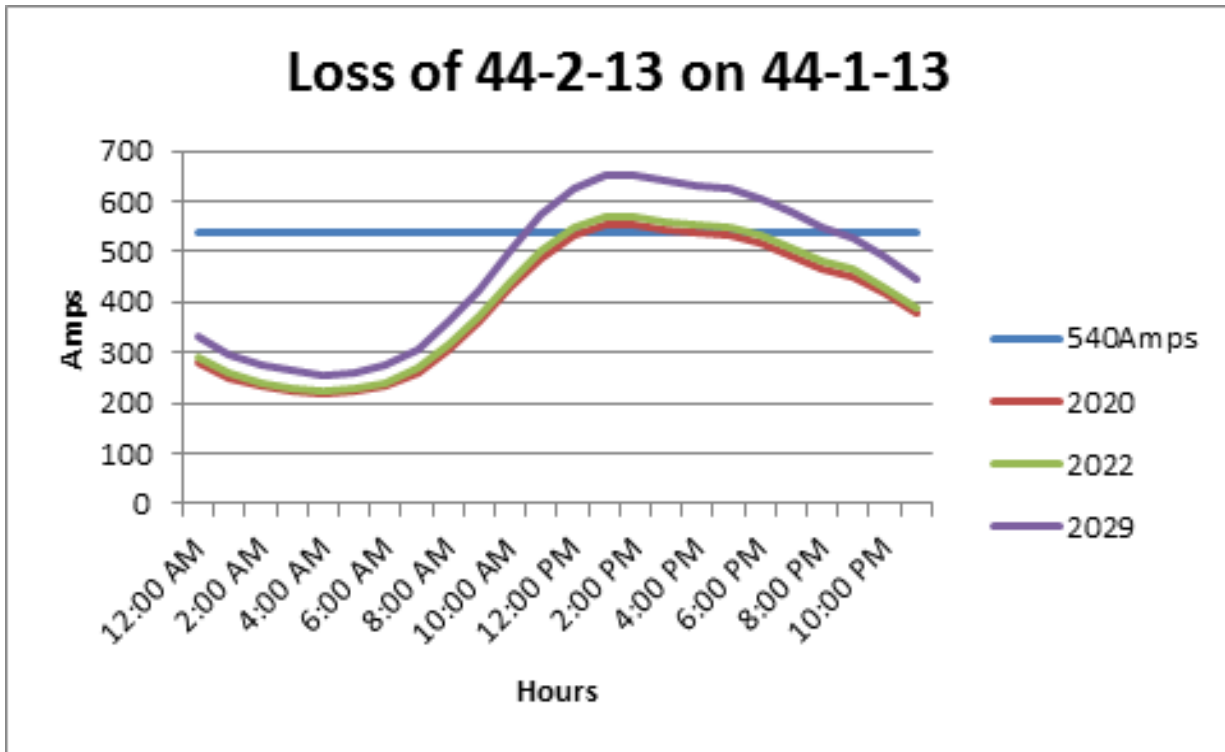


Figure 5: Area Served by Circuits 44-1-13 and some portion of 44-2-13





**Circuit 44-3-13 Contingency**

With the Loss of circuit 44-3-13, Burns Substation circuit 19-11-13 can only be used to pick-up a portion of the 44-3-13 circuit without exceeding its allowable ratings. Table 5 indicates the required MW load reduction and hourly need to maintain the load on 19-11-13 below its normal rating.

Table 5: MW Load Reduction and Hourly Need for a Circuit 44-3-13 Contingency with 19-11-13 Backup

<b>Loss of 44-3-13 on 19-11-13</b>										
Year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Total MW Reduction	0.00	0.08	0.26	0.46	0.68	0.91	1.17	1.44	1.74	2.06
Total MW Reduction	0	1	1	3	5	5	7	8	12	17
Hours of need based on load profile	N/A	3p.m. to 4p.m.	3p.m. to 4p.m.	2p.m. to 4p.m.	2p.m. to 5p.m.	1p.m. to 5p.m.	1p.m. to 6p.m.	1p.m. to 6p.m.	12p.m. to 7p.m.	12p.m. to 7p.m.

The load profiles for the loss of 44-3-13 on 19-11-13 on a peak day are shown in Figure 6 for years 2020, 2022 and 2029. A geographical map of the area served by 19-11-13 with 44-3-13 is shown in Figure 7.



Figure 6: Typical Peak Day Load Profiles for Circuit 44-3-13 Contingency on Circuit 19-11-13

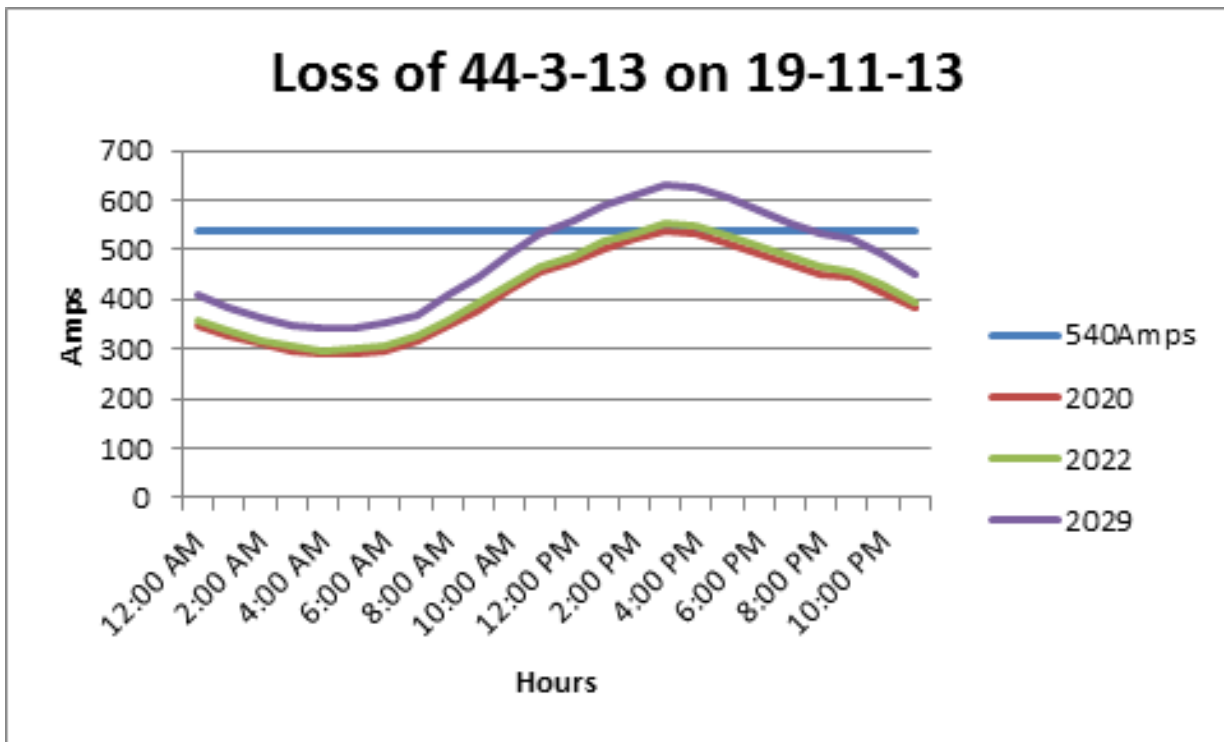
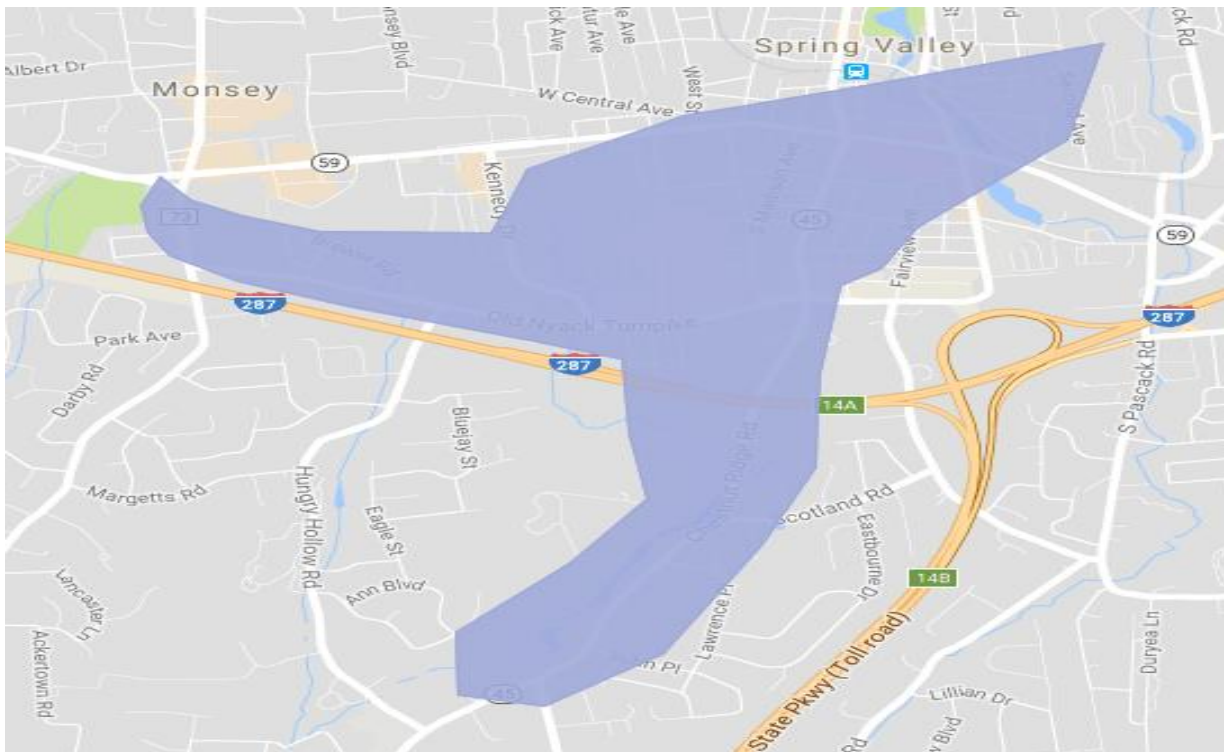


Figure 7: Area Served by Circuits 19-11-13 and portions of 44-3-13





### **Circuit 44-6-13 Contingency**

With the loss of 44-6-13 on a peak load day, circuits 51-3-13 and 19-10-13 would be needed to pick up portions of the 44-6-13 circuit. Only a portion of the load can be picked up by the 51-3-13 without exceed its allowable ratings. Table 6 indicates the required MW load reduction and hourly need to maintain the load on 51-3-13 below its normal rating.

Table 6: MW Load Reduction and Hourly Need for a Circuit 44-6-13 Contingency with 51-3-13 Backup

<b>Loss of 44-6-13 on 51-3-13</b>										
Year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Total MW Reduction	0.62	0.79	0.99	1.20	1.43	1.68	1.95	2.24	2.55	2.89
Days of need in a year	2	3	3	3	5	6	7	10	15	18
Hours of need based on load profile	3p.m. to 7p.m.	3p.m. to 7p.m.	3p.m. to 7p.m.	2p.m. to 7p.m.	2p.m. to 8p.m.	2p.m. to 8p.m.	1p.m. to 8p.m.	1p.m. to 8p.m.	1p.m. to 9p.m.	1p.m. to 9p.m.

The load profiles for the loss of 44-6-13 on 51-3-13 on a peak day are shown in Figure 8 for years 2020, 2022 and 2029. A geographical map of the area served by 51-3-13 with 44-6-13 is shown in Figure 9.





Figure 8: Typical Peak Day Load Profiles for Circuit 44-6-13 Contingency on Circuit 51-3-13

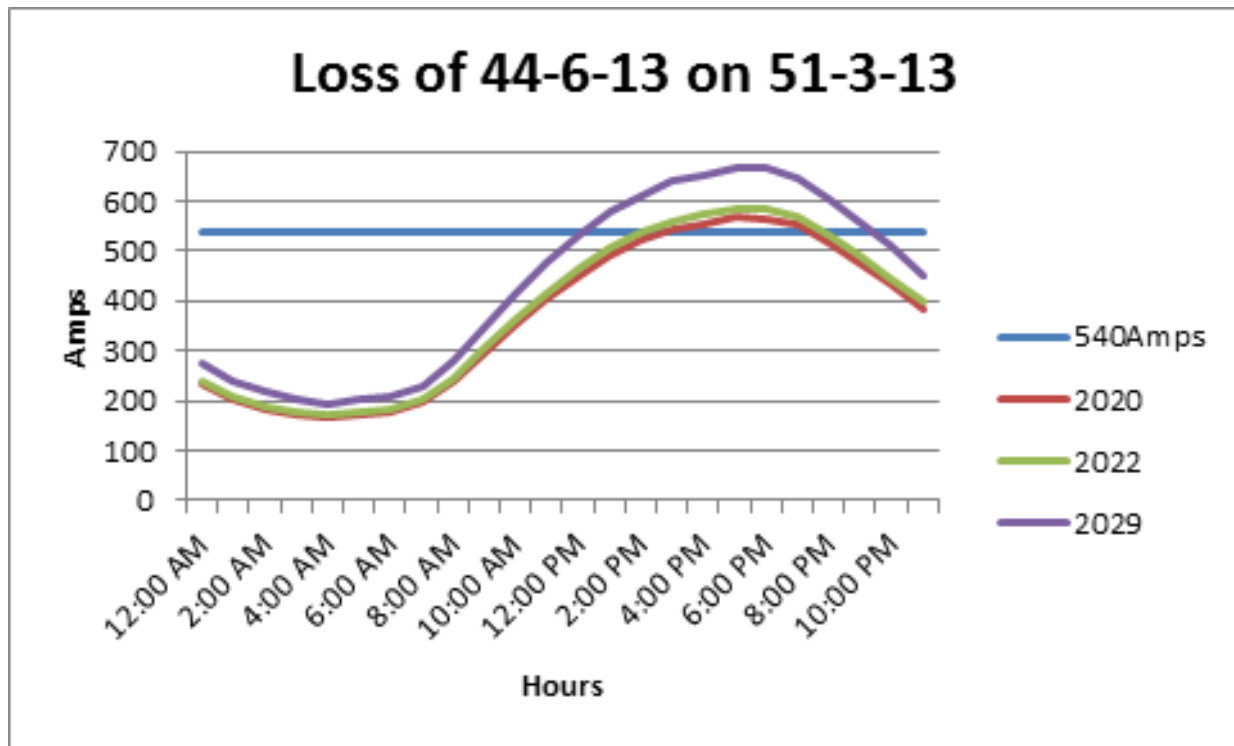


Figure 9: Area Served by Circuits 51-3-13 and portions of 44-6-13





19-10-13 cannot pick up additional portions of the 44-6-13 as it would exceed the allowable ratings on 19-10-13. Table 7 indicates the required MW load reduction and hourly need to maintain the load on 19-10-13 below its normal rating.

Table 7: MW Load Reduction and Hourly Need for a Circuit 44-6-13 Contingency with 19-10-13 Backup

<b>Loss of 44-6-13 on 19-10-13</b>										
Year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Total MW Reduction	0.32	0.50	0.69	0.89	1.12	1.36	1.63	1.91	2.22	2.55
Days of Need in a year	1	1	1	1	1	1	1	3	4	4
Hours of need based on load profile	5p.m. to 7p.m.	5p.m. to 7p.m.	4p.m. to 7p.m.	4p.m. to 8p.m.	3p.m. to 8p.m.	3p.m. to 9p.m.	2p.m. to 9p.m.	2p.m. to 9p.m.	2p.m. to 10p.m.	1p.m. to 10p.m.

The load profiles for the loss of 44-6-13 on 19-10-13 on a peak day are shown in Figure 10 for years 2020, 2022 and 2029. A geographical map of the area served by 19-10-13 with 44-6-13 is shown in Figure 11.



Figure 10: Typical Peak Day Load Profiles for Circuit 44-6-13 Contingency on Circuit 19-10-13

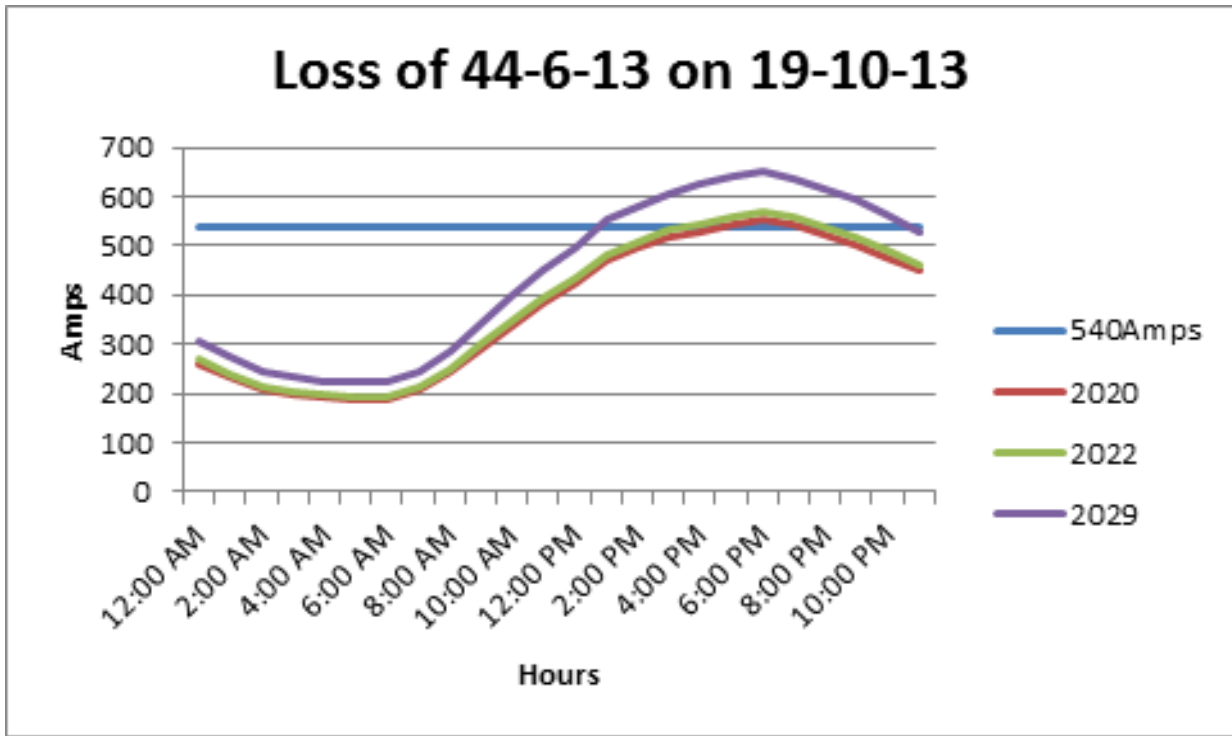
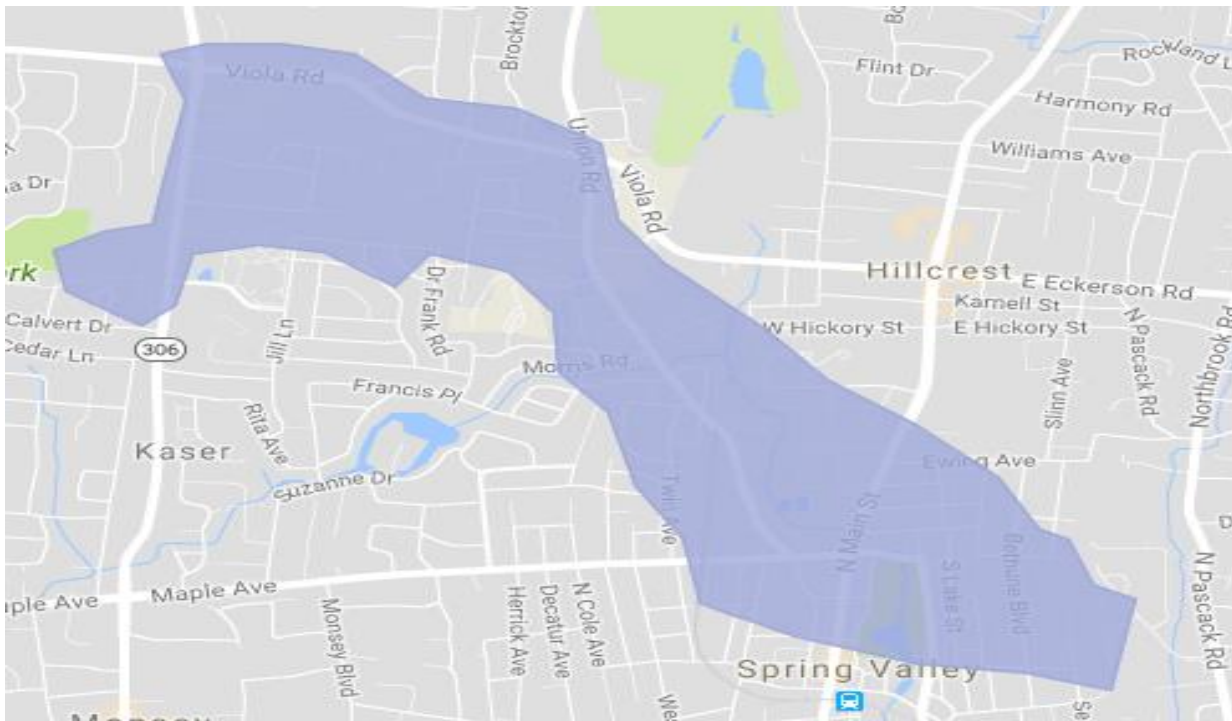


Figure 11: Area Served by portion of Circuit 44-6-13 and 19-10-13





### **Traditional solution:**

The Company anticipates the traditional wires solution to include the upgrade of the Monsey Substation, which will require the replacement of the two 25MVA transformers with two 40MVA transformers and the addition of three distribution circuits by 2022. The Bank upgrade will provide additional capacity for load growth in the Monsey area and provide relief and improved backup to the Burns and Tallman Substations.

To defer the station upgrade, the capacity reductions identified in the tables above will be needed by 2022 (refer to summary table in section 2.2). This amount of load reduction in the area has been identified on the specific geographical areas and it would provide sufficient capacity reduction to defer the traditional alternative. O&R conducts an annual planning cycle to monitor substation needs and will adjust capacity requirements based on actual growth, block load additions and other factors. The capacity requirements may be adjusted to include factors that would provide equivalent reliability of the traditional solution.

## **3. Solution 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;
- Firm’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.

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); and
- Detailed description of non-energy benefits associated with the proposed solution.
- 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.

The 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 DM 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).

Vendors 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). 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.

The Company is interested in proposals which will take advantage of funding available from other funding streams. In order to mitigate the cost impact on the Company's customers it will be important to maximize the use



of existing municipal, State and Federal funding opportunities. Respondents should also identify their ability to unleash private sector funding. Respondents are expected to provide detailed explanations and validation of such funding strategies, including examples which are provable and repeatable.

### **3.4. Functional Requirements**

Respondents have been provided a detailed Non Wire Alternative Solution Questionnaire in Attachment A. Please provide your responses in the document and submit with the RFP proposal. Major categories within the functional questions include:

- Respondents go-to-market strategy;
- Measurement & Verification confidence plan;
- Other Funding Sources Available;
- Environmental and Community Impacts;
- Respondents 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. Respondents are expected to provide detailed explanations and validation of such funding strategies, including examples which are provable and repeatable.
- Respondents should identify other funding streams that may be used to mitigate cost impact to the Company's customers (i.e., City, State, and Federal funding opportunities). Respondents should also identify if private sector funding will be used.

## **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. Some primary review criteria to be applied to qualified proposals received are listed below. The review process is intended to be fair and equitable, with the objective of achieving the greatest overall value. Respondent should note that although O&R will be reviewing Respondent's solution if the submission criteria are met, there is no guarantee that Respondent's solution will be selected.

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;
  3. Functionality - the extent to which the proposed solution would provide the needed load reductions;
  4. Environmental and community impacts associated with the proposed solution;
  5. Unit Cost – total cost, and \$/MW at peak required for the proposed solution;
  6. Benefit-cost analysis (“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;
  7. 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;
  8. Price and reliability, particularly as compared to other proposed solutions along with the dependability and benefits that would be provided to the grid;
  9. Respondent Qualifications - the Respondent's relevant experience and success providing these solutions to other locations, including reference checks and documented results;
  10. Applicability to REV- supports the goals and objectives outlined in the REV proceedings;
  11. Execution risk - the expected ease of project implementation within the timeframe required for the non-wire alternative solution (e.g., permitting, construction risks, operating risks);
  12. Community impact - the positive or negative impact that the proposed solution may have on the community in the identified area (e.g., noise, pollution).

Respondents should note that by reviewing the solution, O&R is not guaranteeing that the solution will be selected.

## 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](mailto: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 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](mailto: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 <https://www.oru.com/en/business-partners/non-wires-alternatives>. 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.



### 4.2.1 RFP Schedule

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

RFP Solicitation Milestones	Completion Date*
RFP Issued	August 23, 2017
Pre-bid conference call (see details below)	August 31, 2017 1pm EDT
Deadline to submit clarification Questions	<b>September 5, 2017</b>
Responses to Clarification Questions Due	September 19, 2017
Deadline to become enabled in O&R/Con Edison Procurement System	<b>September 29, 2017</b>
Qualified Respondents Proposals Due	<b>October 24, 2017, 3PM EDT</b>

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

Pre-bid conference call details:

Date: August 31, 2017

Time: 1pm EDT

#### [Join by phone](#)

Dial-in Number: **(646) 679-1825**

Meeting ID: **775773722**

Smartphone link: [\(646\) 679-1825,,775773722#](tel:(646)679-1825,775773722#)

#### [Join by web browser](#)

[Follow this link](#) for video conference and screen sharing.

Can't join the meeting? [Contact support.](#)



### 4.3. Proposal Response Format

**Note:** 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

#### 4.3.1. 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.

#### 4.3.2. Respondent Checklist

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



### **4.3.3. Table of Contents**

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

### **4.3.4. Professional Background & 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.

### **4.3.5. Proposed Solution & 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.

### **4.3.6. Costs Associated with the Proposed Solution**

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

### **4.3.7. 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).

### **4.3.8. Glossary of Terms**

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

### **4.3.9. 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: 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)	
<ul style="list-style-type: none"> <li>• Summary</li> </ul>	
<ul style="list-style-type: none"> <li>• Energy</li> </ul>	
<ul style="list-style-type: none"> <li>• Financials</li> </ul>	
<ul style="list-style-type: none"> <li>• Additional Review Criteria</li> </ul>	

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: