Mountain Lodge Park Non-Wires Alternatives Pre-Bid Webinar

December 12, 2019

Agenda

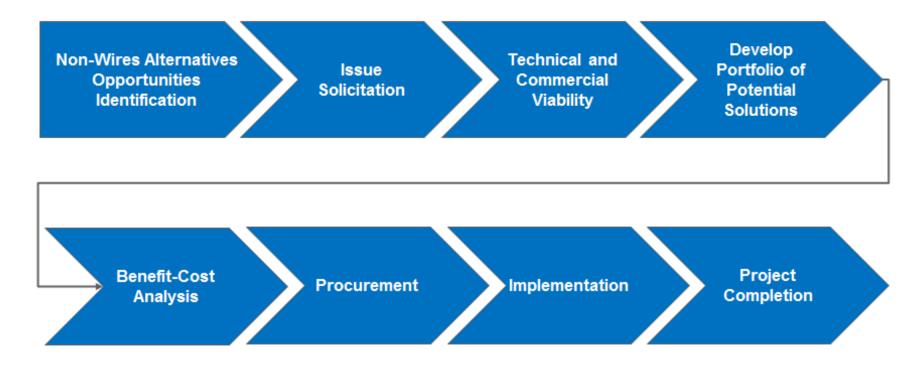
- Purpose
- O&R NWA Process
- Mountain Lodge Park NWA Overview
- Description of Need
- Potential Solutions
- Information to Include in Bid
- Evaluation Criteria
- Proposal Response and Submittal Process
- RFP Schedule
- Next Steps: Clarification Questions

Purpose

- Through this webinar, O&R intends to:
 - Describe the O&R Non-Wires Alternatives ("NWA") process
 - Provide an overview of the Mountain Lodge Park NWA RFP
 - Discuss the evaluation criteria and process
 - Review next steps
- This webinar is not intended to:
 - Discuss potential solutions in detail
 - Provide a cost of the traditional solution

O&R NWA Process

 The process shown below is an example of the high-level steps that occur during the NWA process, which includes the evaluation, procurement, and implementation of potential solutions.



Mountain Lodge Park NWA Overview

The Objective

 O&R proposes to implement the Mountain Lodge Park ("MLP") NWA project to defer a capital infrastructure investment to meet short-term and long-term energy needs.

The Need

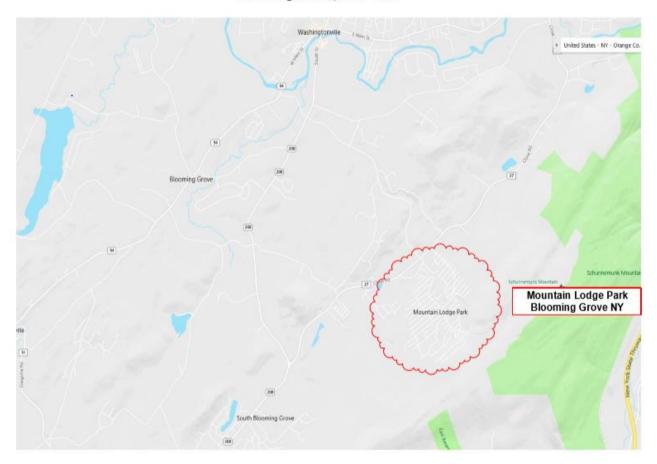
 The scope of the MLP NWA will be to provide load relief capacity on the local electric delivery system that does not have backup during the worst contingency scenario on the pole-mounted step down transformer banks 25/53 and 10/87.

The Traditional Solution

O&R's traditional solution is to convert the 4.8kV distribution facilities to 13.2 KV operating voltage to serve the growing load in Mountain Lodge Park area.

Mountain Lodge Park Area

Mountain Lodge Park Blooming Grove, New York



Description of Need (1 of 4)

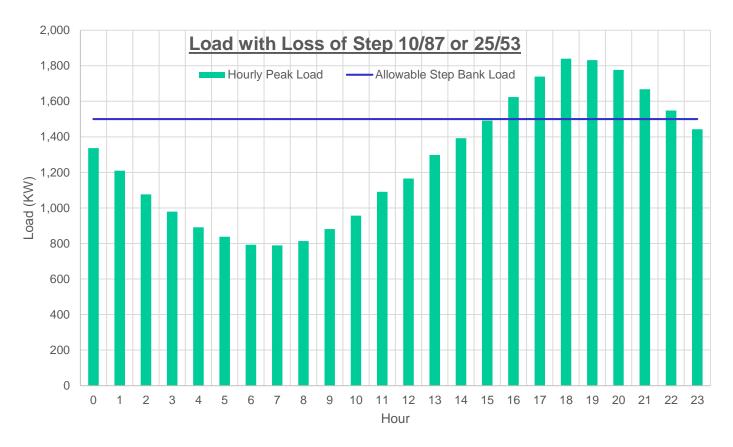
- Two pole-mounted step-down transformers 1500kVA, 13.2 kV wye to 4.8kV delta
- 25/53 is located at the intersection of Clove Road and Mountain Lodge Road
- 10/87 is located at Clove Road and Glenwood Road
- In the event of the contingency on one of the step banks, the other can pick up 82% of the load.
- Reducing the load on one or both of the banks would allow to pick up 100% of the load

Description of Need (2 of 4)

- Load reduction would need to take place from 3pm to 10pm.
- Summer period (June 1 September 30)
- Maximum load reduction of 350KW between 6pm to 7pm.
- Expected system load levels requiring contingency on either step down transformer bank on average 12 times annually.
- Load reduction should be balanced among all three phases of the distribution system

Description of Need (3 of 4)

Load profile on a peak day.



Description of Need (4 of 4)

- Customer Breakdown
 - Mountain Lodge Park is a community of approximately 792 customers, the majority of which are residential.

	Customers*				
Step Bank	Residential	C & I	Total		
10/87	548	8	556		
25/53	229	7	236		
Total	777	15	792		

^{*} As of [11/1/2019]

Potential Solutions (1 of 2)

- The RFP seeks an alternative solution which will solve a contingency need, in an area where a capital investment is needed to improve system reliability and resiliency.
- Keep in mind 4.8KV delta distribution system and interconnection challenges
 - Include control systems capable of remote monitoring and control that can be integrated into DSCADA system
 - Protection schemes must be capable of distinguishing internal from external system disturbances.
- Alternatives may include the following DER: (a) Energy Efficiency ("EE"), (b)
 Demand response ("DR"), (c) behind the meter DR including Energy Storage
 ("ES")(d), and/or (e) any combination which may allow the Company to meet
 the stated need.
- 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.

Potential Solutions (2 of 2)

- Vendor proposals should demonstrate :
 - The Technology/Solution description (tested and proven or innovative technology);
 - Type of contract (e.g., shared savings, performance contract, sale (Utility to Own), 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;
 - Potential risks and challenges of deploying the particular DER asset being proposed;
 - Proposal to mitigating risks and challenges of deploying the DER asset;
 - Specification and details associated with implementing the proposed solution (e.g., permitting requirements);
 - Proposed site-layout and one line of the proposed project, taking into account all local AHJ rules and regulations;
 - Detailed description of non-energy benefits associated with the proposed solution; and
 - Ability of solution to increase or decrease in scale.

Information to Include in Bids

- Responses should include:
 - Methods and procedures required to comply with technical, safety, and operational requirements for the interconnection and operation of equipment with O&R's electric delivery system,
 - For proposed renewable generation, verification that stated demand reduction coincides with the Company's peak loading period,
 - For demand reduction services, assurances that the committed amount of measures will be installed, and that the committed in-service date for each measure will be met,
 - Data and methodologies used to estimate demand reduction, annual kWh savings attributable to each measure/solution proposed, and methods/proposals to confirm measurement and verification of delivered demand reductions
 - Information which 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

Evaluation Criteria (1 of 2)

- Evaluation criteria will include but not be limited to:
 - Proposal content: comprehensive proposal which addresses the need.
 - Viability: extent to which the proposed solution would address the need.
 - Functionality: the extent to which the proposed solution would provide the needed load reductions
 - Proposed NWA technology: the maturity of DER technology being proposed, ability to scale that technology, and any potential risks in deploying the proposed technology, and planned mitigations for those risks.
 - Project Timeline and Implementation Plan: the ability to meet O&R's schedule and project deployment requirements,
 - Respondent Qualifications: Respondent's relevant experience and success providing these solutions to other locations, including references and documentation of results

Evaluation Criteria (2 of 2)

- Evaluation criteria will include but not be limited to:
 - Price and reliability: respondents should provide the pricing for the project broken down as follows:

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

- Respondent should itemize and identify various items in each of the cost buckets, i.e., material cost components, labor cost components
- Applicability to REV: supports the goals and objectives outlined in the REV proceedings
- Execution risk: the expected ease of project implementation within the timeframe required (e.g., permitting, construction risks, operating risks)

Proposal Response and Submittal Process

- The following process should be used to submit proposals:
 - 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 unable to submit their proposals. Respondents are encouraged to upload their proposals well in advance of the closing time to avoid any potential issues.
 - Respondents <u>must</u> take the following actions to ensure acceptance of a proposal submission:
 - Download the Mountain Lodge Park NWA RFP, Non-Wires Alternative Questionnaire, and Supplier Enablement Template.
 - 2. Become enabled in the Oracle RFQ System* by submitting the following items to Michael Heaton (heatonm@coned.com) (a) W-9 form (version last updated), and (b) Supplier Enablement Template (Select 'Sourcing' under Oracle responsibility field). Please note: if a 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
 - Receive Formal RFQ response request (will be same information downloaded from nonwires alternative website).
 - Submit response and fully completed questionnaire to Oracle RFQ System prior to the deadline.



RFP Schedule

RFP Solicitation Milestones	Completion Date		
RFP Issued	December 6, 2019		
Pre-bid conference call	December 12, 2019		
Deadline to submit clarification questions	December 27, 2019		
Responses to clarification questions due	January 15 , 2020		
Deadline to become enabled in O&R/Con Edison procurement system	January 15, 2020		
Qualified respondents proposals due	February 14, 2020		

Clarification Questions

- O&R will accept, answer and respond to vendor questions according the following process:
 - During the clarification period, Respondents should direct clarification questions via email to O&R's Utility of the Future team, heatonm@coned.com, of O&R's/Con Edison's Supply Chain Department.
 - The deadline for submitting clarification questions is on Friday, December 27, 2019.
 - O&R will have no obligation to evaluate late submissions, nor be responsible in any way for any consequences associated with late submissions
 - 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-opportunities/non-wires-alternatives on January 15, 2020.
 - Respondent's identities will be kept confidential.

Thank you