

Request for Information
Innovative Solutions to Provide Transmission and Distribution Load Relief

PSEG Long Island Responses to Respondent Questions
May 22, 2015

Question: The RFI states on page 10 to submit Kwh reduction numbers, if available. On page 7, the document asks for the data and methodology used to determine annual Kwh savings attributable to the solution. Is it a requirement of this RFI to submit Kwh savings methodology and reductions from proposed solutions?

Answer: It is not a requirement to submit KWH savings information or methodology for this RFI. However, since RFI responses will be used to determine if a potential economic alternative solution exists and if a subsequent RFP will be issued, omitting information on KWH savings could have unintended consequences on the outcome of the RFI. If available, please include KWH savings estimates with your proposal.

Question: There is no discussion of integration with any existing or new PSEG- LI CIS (Customer Information System) or DRMS (demand response management system). Will these be requirements for solutions chosen?

Answer: While PSEG Long Island hopes to institute a DRMS in the future which a successful, Respondent would need to integrate with, at this time there are no specifics on either a DRMS or CIS system available. Any subsequent RFP will provide more details concerning integration with PSEG Long Island CIS and DRMS

Question: Given the lack of AMI presence in much of PSEG-LI territory, will solutions that incorporate metering into their offering be given particular consideration?

Answer: All solution types are of interest and will be considered equally, based on merit and cost.

Question: With respect to the ability of a respondent to perform work this summer (2015), or to plan for work to be operational by May 1, 2016, could the Company provide a timeline of the short-term key decision points up to May 1, 2016?

Answer: The timeline will be dependent on the portfolio of resources and technologies provided based on this RFI and subsequent RFPs. PSEG Long Island is expecting load reduction resources to be available prior to the 2016 summer peak season.

Question: Does the LIPA board and/or the NY State PSC have to approve any new solution resulting from future awards from this RFI?

Answer: The results of this RFI will determine whether a subsequent RFP will be issued – there will not be any direct awards made from this RFI. Any RFP's subsequently issued would indicate who the contracting party would be and identify the planned approval process.

Question: Can PSEG-LI provide any more specific information with regard to the load profiles of the 5 targeted load pockets? For example, penetration of pool pumps, electric water heaters and different HVAC systems? Can PSEG provide any other segmentation data beyond residential/commercial?

Answer: PSEG Long Island does not have specific equipment penetration rates for the areas specified in the RFI, however, the data below show the estimated equipment penetration rates for the PSEG Long Island service territory as a whole.

- A. Pool pumps < 20%
- B. Electric Water Heaters < 10%
- C. Residential central HVAC – 43%
- D. C/I central HVAC – 75%
 - 1. Packaged systems – 68%
 - 2. Split system – 16%
 - 3. Wall units – 12%

Question: For the listed geographic areas, what percentages of residential customers are single-family homes? Of these, does PSE&G have any data on the percentage with central air conditioning? Is PSE&G willing to share such information?

Answer: The vast majority of the residential customers reside in single family homes. It is estimated that single family homes make up as much as 75% of the residential housing base in the targeted geographical areas. In addition, central HVAC makes up as much as 43% of the residential air conditioning within the targeted areas.

Question: Is PSE&G willing to play an active role in customer recruitment?

Answer: PSEG Long Island will support the various demand reduction programs that may be initiated over the next several years, however, the Respondent should assume that customer recruitment will be the sole responsibility of the Respondent.

Question: What are the forecasted temperature ranges during the periods of time that PSE&G is requesting assistance?

Answer: PSEG Long Island does not have any specific weather forecast information for the time periods outlined in the RFI.

Question: Is PSE&G looking for a constant load reduction percentage across the entirety of an event?

Answer: Yes. PSEG Long Island needs 100% of the committed load reduced during the entirety of a specific load reduction event

Question: What % of the peak load comes from HVAC?

- a. What % of this AC load comes from Residential?
- b. What % of Residential is from split systems?
- c. What % is from room AC or package units?
- d. What % of the AC load comes from Small Commercial?
- e. What % of this is from split systems?
- f. What % is from room AC or package units?
- g. Can the above be broken down by each area of interest?

Answer: Although PSEG Long Island does not have the specific load information for each market segment, the data below show the estimated equipment penetration rates for the PSEG Long Island service territory as a whole.

- A Pool pumps < 20%
- B. Electric Water Heaters < 10%
- C. Residential central HVAC – 43%

- D. C/I central HVAC – 75%
1. Packaged systems – 68%
 2. Split system – 16%
 3. Wall units – 12%

Question: What is the penetration of electric water heaters?

Answer: The estimated penetration of electric water heaters in the residential sector is approximately 10%.

Question: How many pool pumps are there in the target areas?

Answer: We do not have specific counts of Pool Pumps. However, generally the penetration rate for pool pumps system wide is approximately 20%. We have estimates that the rates may break down along the following lines: South Fork of the Island may be around 40%, the North Fork and Brookhaven township may be around 30%, Western Suffolk and Nassau range around 20% with that range dropping further as proximity to the Queens border increases.

Question: Does PSEG Long Island have an existing DR program in place? If yes,

- a. How many customers?
- b. What is the available load capacity?
- c. What type of devices are used?
- d. What is the customer incentives paid?
- e. Can the above be broken down by town or county?

Answer: PSEG Long Island has approximately 29,385 customers in an existing DR program. The available load capacity from the program for the summer of 2014 was approximately 29 MW. The program utilizes commercial and residential thermostats to regulate electric load within the building. Customers receive a free thermostat for taking part in the DR program.

Question: Besides the peak load reduction specified in this RFI, is PSEG also seeking for baseload reduction (kWh)?

Answer: Peak load reduction is of paramount importance to PSEG Long Island, however, base load reduction solutions will also be considered in this RFI.

Question: Will PSEG Long Island seek a single or multi-vender approach to address each segment?

Answer: Future RFP award(s) will be based on type of solution and cost structure within each capital project area. Multi-vendor awards will be considered.

Question: If multi-vendor, is PSEG LI interested in a single DRMS to dispatch to all segments in all areas?

Answer: Yes. PSEG LONG ISLAND hopes to institute a DRMS to communicate and dispatch all DER type solutions which may result from subsequent RFP(s).

Question: Is PSEG Long Island seeking a vender capable of administering a BYOD program?

Answer: Yes. BYOD programs will be considered in the future.

Question:: For each substation, please provide a breakdown of peak kW demand for the C&I customers (ideally number of customers and total MW between 50-200kW, same between 200-500kW and same greater than 500KW).

Answer: The commercial customers with some additional time could be further broken down into rate codes, however, the rate codes group customers according to demand 0-7kW, 7kW to 145kW and then >145kW. We will attempt to post this information to the website during the week of May 25th.

Question: For each substation, if available, please provide the total MWs by C&I customer segment (i.e., manufacturing, healthcare, commercial office, educations etc.).

Answer: This information is not readily available.

Question: Can you provide a cost estimate of the different planned capital investments that are being considered?

Answer: While we do not believe this information should be the basis for developing a response to this RFI, the capital budget which was filed as part of the existing rate case can be found at the following link: <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={76E50370-4FF4-4AC5-BCB1-3A3A0779D617}>

Question: Is PSEG-Long Island or a PSEG-LI/PSEG affiliate submitting a response to this RFI?

Answer: No. PSEG Long Island affiliates will not be submitting a response to this RFI.

Question: “Multiyear solutions” are requested for this RFI. Could you please elaborate? What is the minimum number of years that the solution needs to be available? Do solutions that sign up for a longer period of time earn additional value in the analysis? Do solutions that are for longer periods (e.g. 20 years) in any way negatively viewed in the analysis?

Answer: PSEG Long Island would prefer longer term solutions to help mitigate capital improvement projects; however, 5 years is minimum number of years under consideration. Longer term solutions (those between 10-20 years) are preferable. Those resources or solutions that exceed 20 years are not viewed negatively, if an acceptable benefit/cost ratio is maintained.

Question: The peak period is defined as the period between June through September. Does PSEG-LI have the ability to call on the project outside the peak period time? Does it want to see proposals that also offer services outside the peak period? How would these additional benefits be valued in the analysis?

Answer: For the purposes of this RFI, PSEG Long Island is only interested in on peak resources during the June – September timeframe. However, Respondents are encouraged to provide information on relief capability of the proposed solution throughout the year and any other benefits the solution would provide along with associated incremental costs.

Question: In the Capital Project Detail Appendix there are several stations where “non-summer days of exposure” is mentioned. Does that mean that PSEG-LI requires a solution with those number of days of “non-summer” rights to the solution?

Answer: Yes, depending upon situation – for instance Kings Highway is throughout the year while Riverhead and Plainview are only summer requirements.

Question: Does the respondent need to sign an NDA with PSEG-LI in order to provide confidential information or is it assumed that material marked confidential will be treated as such? If yes, is there a form of NDA for submission with the June 2 response? If yes, please include.

Answer: Material that a Respondent believes to be confidential under New York State Freedom of Information Laws should be marked as confidential and will be considered as such and will not be shared with any external party. Any information that is subject to FOIL regulations will require a

Non-Disclosure Agreement. A copy of the standard Non- Disclosure Agreement is available at the following web address

<https://www.psegliny.com/page.cfm/AboutUs/CompanyProfile/DocumentLibrary>.

Question: How many times per year does PSEG-Long Island envision using the resource? Is there a maximum number of calls per year that can be used by the resource?

Answer: The resource will be required to be available based on weather conditions and load requirements. At this time, there are no restrictions on the number of calls or use of a particular resource or technology. However, Respondents are encouraged to provide degradation rates (if applicable) which are associated with call frequency per season.

Question: Could you please provide more detail on the interconnection policy that these projects will be subject to? Specifically, we are interested in learning more about in-front-of-the-meter solutions that connect to either the distribution or transmission voltages. Is there an expedited interconnection process that will be in place for these solutions?

Answer: All interconnection requirements can be found at the following:

<https://www.psegliny.com/page.cfm/AboutUs/CompanyProfile/Powering/SGIP>. There will not be any “special handling” of interconnection requirements outside of the standard interconnection process.

Question: Does PSEG-LI value in-front-of-the meter solutions that provide the utility with complete control at a higher value than behind-the-meter solutions that are not directly under PSEG-LI control?

Answer: The purpose of this RFI is to provide PSEG LONG ISLAND with insight into all available alternative solutions and their associated benefits and costs. Respondents are encouraged to identify the benefits and costs of their specific solutions so that PSEG Long Island may be able to better understand how different solutions compare to one another and to traditional solutions.

Question: Could you provide respondents with a one-line diagram of the distribution network and the transmission network?

Answer: Not directly, due to confidentiality and security reasons.

Question: Could you provide respondents under NDA with one-line diagrams of the specific substations in question? If not, what information could you provide that would allow respondents to understand the current configuration of the substation and properly estimate the costs to connect?

Answer: Respondents seeking confidential information on specific electric grid capacities, rating and other characteristics should contact PSEG Long Island at

<https://www.psegliny.com/page.cfm/AboutUs/CompanyProfile/Powering/SGI> to request such information .

Question: Could you provide information about the substation, transformer, and feeder ratings?

Answer: Not directly, due to confidentiality and security reasons.

Question: Could you provide the off-peak load (MW) of the given substation, feeder, and banks (as was provided for peak load)?

Answer: No, this information is not readily available.

Question: In the Appendix, could you please define “Feeder relief” in the comments section? Is this a thermal overload on the wire?

Answer: Feeder relief should be interpreted as desired load reduction.

Question: In the RFI Capital Project Detail Appendix there is a column labeled “Substation Space” with a “yes” or “no” indicator. Please elaborate – does “yes” mean that a solution could be placed on PSEG-LI land at the substation? When “no” is indicated is placing a solution on PSEG-LI land not a possibility?

Answer: Yes. If a specific substation is marked yes, then the specific substation may have the ability to include a load reduction resource at the facility.

Question: Please indicate whether participation in a subsequent Request for Proposal (RFP) would be limited to only those that responded/participated in the current Request for Information (RFI)

Answer: Any RFP resulting from this RFI will be a new procurement open to all.

Question: Please indicate whether the “innovative Solution” information sought within the RFI is limited only to Demand Reduction/Behind-the-Meter options, or can it include Utility Scale options (e.g.Storage)

Answer: While the RFI is focused on behind the meter solutions, Respondents are encouraged to provide information on any and all solutions which can be considered as alternative, reliable and cost effective solutions that are generally not traditional electric utility solutions

Question: How many homes with pools are in each load pocket or overall?

Answer: We do not have that level of information broken down by substation. Generally the penetration rate for pool pumps system wide is approximately 20%. We have estimates that the rates may break down along the following lines:South Fork of the Island may be around 40%, the North Fork and Brookhaven township may be around 30%, Western Suffolk and Nassau range around 20% with that range dropping further as proximity to the Queens border increases.

Question: Can you share list of zip codes for each load pocket?

Answer: PSEG does not currently have a listing of zip codes by project

Question: Can you share how many of these C&I customers are small to medium sized businesses for each load pocket or overall?

Answer: The commercial customers with some additional time could be further broken down into rate codes, however, the rate codes group customers according to demand 0-7kW, 7kW to 145kW and then >145kW, so the range of small to medium can be 0 to 145kW.

Question: Do the numbers listed for C&I include small to medium sized businesses?

Answer: Numbers listed include all commercial customers including small to medium sized businesses.

Question: For each project, the type and count of customers are provided by Resi and C/I classifications. Is there a further breakdown on each of these classes, i.e. for residential 1-4 family, multi family, low income within the projects and by substation? Same for C/I – small-medium business, large commercial, industrial?

Answer: Currently PSEG Long Island only has information at this level. The commercial customers with some additional time could be further broken down into rate codes, however, the rate codes group customers according to demand 0-7kW, 7kW to 145kW and then >145kW. We will attempt to post this information to the website during the week of May 25th.

Question: Can PSE&G LI provide a list of zip codes by project and within each project by substation?

Answer: PSEG does not currently have a listing of zip codes by project.

Question: Is PSE&G looking for a constant load reduction percentage across the entirety of an event?

Answer: Yes, PSEG Long Island would be looking for solutions which could provide relief for the duration of an event. However, as this is an RFI, Respondents are encouraged to provide information on maximum duration they could provide if they were not able to deliver relief for the duration of the event.

Question: What percentage of customers in Bank 1&2 under King's Highway are commercial/industrial versus residential?

Answer: The commercial customers with some additional time could be further broken down into rate codes, however, the rate codes group customers according to demand 0-7kW, 7kW to 145kW and then >145kW. We will attempt to post this information to the website during the week of May 25th.