

PSEG Long Island Request for Information (RFI)

For the Development of PSEG Long Island's 2020 North Fork RFP April 10, 2020

Issued by
PSEG Long Island LLC
Through its operating subsidiary,
Long Island Electric Utility Servco LLC
As agent of and acting on behalf of
Long Island Lighting Company d/b/a LIPA

Amended 04-28-2020

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1. Information

PSEG Long Island LLC, on behalf of the Long Island Lighting Company d/b/a LIPA, is planning to issue a Request for Proposal ("RFP") for energy resources that are either located on the North Fork of Long Island and/or directly interconnected to the North Fork Long Island electric grid in the third quarter of 2020. To help achieve a productive RFP process, PSEG Long Island LLC, is issuing this Request for Information ("RFI") to entities experienced in financing, developing and operating energy resources on Long Island and elsewhere ("Respondents").

1.1 Background

The Long Island Lighting Company d/b/a LIPA ("LIPA" or "Company"), a corporation organized and existing under the laws of the State of New York, is a wholly owned subsidiary of the Long Island Power Authority, a corporate municipal instrumentality and political subdivision of the State of New York. LIPA, by and through its agent, PSEG Long Island LLC, provides electric service to approximately 1.1 million LIPA customers in its service area, which includes Nassau County, Suffolk County, and the portion of Queens County known as the Rockaways, in the State of New York. LIPA is the second largest municipal electric utility in the nation in terms of electric revenues, third largest in terms of customers served and seventh largest in terms of electricity delivered.

Pursuant to the Amended and Restated Operations Services Agreement ("A&R OSA") dated December 31st, 2013, as it may be restated, amended, modified or supplemented from time to time, PSEG Long Island LLC, through its operating subsidiary Long Island Electric Utility Servco ("Servco"), assumed the responsibility as LIPA's service provider, to operate and manage the Long Island transmission and distribution electric system ("T&D System"), and other utility business functions as of January 1, 2014. PSEG Long Island LLC and Servco (collectively referred to as "PSEG Long Island" or "PSEG LI"), as agent of and acting on behalf of LIPA per the A&R OSA, will administer this RFI on behalf of LIPA.

New York State, through its Climate Leadership and Community Protection Act ("CLCPA") enacted last year, has set a target that 70% of its electricity be produced from renewable resources by 2030 with the additional expressed goal of achieving a 100% carbon-free grid by 2040. The North Fork area is currently served by the Long Island bulk transmission system and two local generating plants, a 50 MW FT-8 simple-cycle gas-fired combustion turbine and a 15 MW GE Frame 5 generator, with a combined capacity of 65 MW.



Figure 1: Transmission Map of the North Fork

New York State, through its Climate Leadership and Community Protection Act ("CLCPA")¹ enacted last year, has set a target that 70% of its electricity be produced from renewable resources by 2030 with the additional expressed goal of achieving a 100% carbon-free grid by 2040. PSEG Long Island intends to ensure that North Fork energy demand, for the next twenty years, is served reliably and in a cost-effective manner that minimizes market power issues and is mindful of New York State's renewable energy and carbon targets. To this end, the RFI will assist PSEG Long Island in determining the viability of Non-Wires Alternatives "NWAs" (e.g., resource supply, demand response, energy efficiency, energy storage) for serving demand, and will inform a decision about whether to issue an RFP, which would procure resources to serve up to 130 MW of demand on the North Fork of Long Island. Minimum and maximum aggregate required injections to the North Fork are from 70 MW to 130 MW.

1.2 RFI Purpose

The purpose of this RFI is to gather information and obtain input from the energy resource community to assist PSEG Long Island in determining whether to pursue, and to assist PSEG Long Island in preparing, an RFP for appropriate resources. The RFI should not be construed as the final document on timing or scope of an RFP to be issued later in 2020. The issuance of this RFI is an opportunity for PSEG Long Island to learn about Non-Wires Alternatives (NWAs) available to address the need on the North Fork and to establish a better understanding of the NWAs that could bid into an RFP. Developers should not rely on or use information herein, or developers' own submissions in response to

¹ See https://legislation.nysenate.gov/pdf/bills/2019/S6599.

this RFI, as a guideline for what may be included in or required by a final RFP. Responses to this RFI may be used by PSEG Long Island to help develop the contents of the RFP but will not be used for prequalification of RFP bidders, or for any purposes other than those expressly stated in this RFI. A response to this RFI is not a prerequisite for a developer receiving and submitting a proposal in response to the possible RFP.

In sum, this RFI seeks relevant input from Respondents about suggested approaches to providing all or part of energy and capacity needed to serve up to 130 MW of demand on the North Fork of Long Island, beginning as early as 2025, but not later than 2027, with a minimum project size of 5 MW. Creative, non-traditional approaches and suggestions are encouraged. Such approaches could involve a combination of existing technologies, implementation of new technologies, novel contract structures, or other creative project characteristics.

Respondents' suggestions should reflect and acknowledge the goals of New York State's recently enacted CLCPA. One of the goals of the CLCPA is to have 100% carbon-free electricity generation in the state by 2040. This might affect approaches that employ conventional gas-fired generation, at least from a power purchase contract term perspective. Responses that include conventional generation will be given full consideration; however, review of these approaches will include consideration of the fact that implementation of such a technology – or, more precisely, the fuel to fire the combustion - may be restricted beyond 2040.

1.3 General Guidelines

PSEG Long Island reserves the right to make changes to this RFI, at any time, by issuance of one or more addenda or amendments and to distribute additional clarifying or supporting information relating thereto. Any such addenda, amendments, and/or information shall be posted on the PSEG Long Island RFI website at https://www.psegliny.com/aboutpseglongisland/proposalsandbids.

PSEG Long Island 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 RFI, the responses thereto, or both. It is solely the responsibility of each Respondent to ensure that all pertinent and required information is included in its submission. PSEG Long Island reserves the right to determine, at its sole discretion, whether a submission is complete or eligible for consideration.

While PSEG Long Island has endeavored to provide accurate information to Respondents, PSEG Long Island makes no such warranty or representation of accuracy. Respondents should clearly state all assumptions they make about the meaning or accuracy of information contained in this RFI. Any exceptions to the terms, conditions, provisions, and requirements herein must be specifically noted and explained by a Respondent in its response to the RFI. If PSEG Long Island does not receive any questions concerning this RFI, it is assumed that the Respondent agrees with and understands the requirements in the RFI.

In order to better understand the substance and origin of a Respondent's response, PSEG Long Island requests all Respondents state their respective company / organization affiliation, relevant experience in bidding into PSEG Long Island or LIPA energy resource projects, and experience in financing and developing projects in general. More details can be found in Section 2.3.

This RFI shall not be construed to create an obligation on the part of PSEG Long Island or LIPA to enter into any contract or to serve as a basis for any claim whatsoever for reimbursement of costs for efforts expended by Respondent firms. The issuance of this RFI and the submission of a response by any person or entity does not obligate PSEG Long Island

or LIPA to qualify the person or entity in any manner whatsoever. A legal obligation on the part of PSEG Long Island or LIPA to engage in any business transaction with a Respondent will only arise if and when a formal written contract is entered into between or among LIPA and such Respondent

PSEG Long Island shall not be obligated by any responses or by any statements or representations, whether oral or written, that may be made by PSEG Long Island or its employees, principals, or agent as part of this RFI. Information that any respondent wishes to submit as part of this RFI will be provided voluntarily with the understanding that this RFI is for information gathering purposes only and is not a formal solicitation.

Any information the Respondent provides to PSEG Long Island that the Respondent deems to be confidential under the Freedom of Information Law ("FOIL") should be clearly marked as confidential in the response. By responding to this RFI, Respondents are deemed to agree to keep confidential all information that is directly or indirectly provided by PSEG Long Island to a Respondent in connection with this RFI, provided that the foregoing confidentiality obligation shall not apply to any information that PSEG Long Island has previously made generally available to the public or information that must be disclosed pursuant to law. Subject to the foregoing, PSEG Long Island reserves the right, in its sole discretion and without liability, to utilize any or all of the submissions, responses and materials received in connection with this RFI in PSEG Long Island's planning efforts and otherwise.

1.4 RFI Schedule

Activity	Date
RFI Issuance	April 10, 2020
Webinar	April 23, 2020
Last day to submit Clarifying Questions	April 30, 2020, 5 PM EDT
Target PSEG Long Island response to Questions	May 18, 2020
Notification of Intent to Respond	May 19, 2020, 5 PM EDT
RFI Response Submission Deadline	June 18, 2020, 5 PM EDT

2. Response Requirements

The sub-sections below outline the requirements for responses to the RFI, which were developed so that responses received would be similarly formatted so as to facilitate a timely evaluation. Responses to this RFI should conform to the sections and format outlined below. If necessary, additional information may be included as additional attachments. Responses to this RFI should not exceed 20 pages, including attachments.

2.1 Table of Contents

Include a clear identification of the RFI response by section and by page number.

2.2 Executive Summary

Respondents should provide a summary of their RFI response.

2.3 Professional Background and Experience

Respondents should describe their industry experience in the following areas:

A. If readily available, provide a brief (one to three page) outline of their company, its history, leadership, financial position and the products and/or services offered.

- B. Highlight where their company has performed industry-specific work that is similar in nature and relevant to the RFI.
- C. Provide a detailed list of the portfolio of electric resource projects they have developed including, but not limited to, energy resource projects, including the year they achieved COD (or if they have not achieved COD, the estimated COD), the location, the technology type, the MW size, and the buyer.
- D. Other entities should provide their background and experience with energy resources and provide details of any products or services they offer that can further the goals of the RFP. Examples would include an entity that has an interest in providing available property for lease or sale for project development use.

2.4 Answers to Questions in Appendix A

This section is for the Respondent to provide answers to each of the questions it decides to answer in Appendix A.

3. Instructions to Respondents

Respondents are requested to submit RFI responses in accordance with the instructions outlined below, with the response content focused on meeting the requirements and format set forth in Section 2 above. All responses to this RFI must be submitted via the email address provided in Section 3.1 below.

3.1 RFI Response and Submittal Instructions

Responses and supporting attachments are to be submitted in an email to:

PSEG-LI-NorthForkRFI2020@pseg.com. Please format the email subject line as "PSEG Long Island North Fork RFI". Where possible, attachments should be in Microsoft Word format. Please note there is an email attachment size limit of 15MB. If necessary, alternative standard formats such as searchable .pdf or Microsoft Excel may be used. PSEG Long Island will not be responsible for late, lost, illegible or misdirected submissions. Review of responses submitted to this RFI will be coordinated through the PSEG Long Island Power Markets Department and will include other company departments, LIPA staff, and consultants, as appropriate. PSEG Long Island may, at its option, contact Respondents with additional questions or information requests. Additional action by PSEG Long Island related to this RFI is solely at PSEG Long Island's option, and as such, PSEG Long Island has no obligation whatsoever to address questions, comments, or information requests related to this RFI after receipt of Respondents' responses.

Any questions or needed clarifications concerning this RFI should be sent to:

PSEG-LI-NorthForkRFI2020@pseg.com. The deadline to submit clarifying questions via email is 5:00 PM EDT on April 30, 2020. Emailed questions received after this date may not receive a response. PSEG Long Island will not respond to any questions received in-person, by mail, by fax, or by phone.

3.2 Review Approach

Respondents should note that while PSEG Long Island intends to review and carefully consider the information in the responses received, it is not a guarantee that the information will be implemented or included in the RFP. **PSEG Long Island has issued this RFI for information gathering purposes to improve the procurement process and related contracts. This RFI is not a formal solicitation.**

Appendix A--Topics for Discussion

1. Non-Wires Alternatives (NWAs)

PSEG Long Island is interested in learning if there are NWAs (may include fossil fuel or renewable resources, demand-side resources, and/or energy efficiency, as well as storage resources) potentially available in response to an RFP to serve up to 130 MW of demand on the North Fork of Long Island over a period of time up to the next twenty years reliably and in a cost-effective manner and are compatible with New York State's renewable and carbon targets.

- a. What NWAs are recommended?
- b. Fuel source and plans for supply, type and source, where appropriate.
- c. Project site location and status of ownership or control for delivery within (or to) the North Fork.
- d. Estimated costs associated with the NWA, including (if applicable) customer and utility costs, as well as any other relevant costs.
- e. Proposed point of transmission interconnection.
- f. Describe whether the technology has been implemented elsewhere and has been successful, tested and proven, or is innovative.
- g. Risk management and hedging considerations, including dispatchability, curtailment rights, and other flexibility opportunities.
- h. A discussion of the feasibility of the proposed project, including potential obstacles, environmental considerations and site characteristics (i.e., greenfield, % tree cover, brownfield, rooftop, industrial, etc.), and community impacts.
- i. Are there any local, state and/or federal regulations that PSEGLI should be aware of that are likely to impact your ability to respond to an RFP?

2. Technical Requirements

PSEG Long Island wishes to obtain Respondents' comments on technical requirements that it is considering including in the RFP. For responses suggesting new generation resources (but not load reduction or energy efficiency alternatives), the requirements under consideration are as follows:

- a. Minimum MW size of 5 MW at one location
- b. Ten-minute start capability (preferred, but not required)²
- c. Black start capability (preferred, but not required)

3. Locations and MW Amounts

Although, for the purpose of this RFI, PSEG Long Island plans to allow Respondents to propose energy resource projects to interconnect at any location on the North Fork, it also has preliminarily identified "LIPA Recommended Interconnection Locations" and maximum hosting capacity MW amounts at those locations (as applicable) for energy resource projects that provide increased benefits to LIPA's customers. These recommended locations are chosen primarily due to interconnection feasibility. Alternate interconnection points may require additional costs and

² Renewable Technologies coupled with Energy Storage Technologies are also appropriate for this requirement.

expansions. Those "LIPA Recommended Interconnection Locations" are set forth in Appendix B.³ Following a more extensive study of the North Fork resource needs, more specific points of interconnection will likely be detailed in the RFP, if such an RFP is deemed beneficial.

- a. Are there other locations on the North Fork T&D system that you believe should be considered as interconnection locations? If so, please state your reasons in detail.
- b. Are there benefits of economies of scale (e.g. larger projects at fewer sites) that PSEG Long Island should consider in formulating its RFP requirements?
- c. What property characteristics of potential host sites, such as a LIPA substation or customer-owned facility, are needed to address integration and operational issues for energy resource deployment (e.g., spare/vacant property, property ownership, potential lease arrangements for LIPA-owned vacant property, standards for security access for facilities within/adjacent to LIPA-owned facilities)? What such information would you suggest we include in North Fork RFP?
- d. What other characteristics of a host site are needed to address integration and operational issues for energy resource deployment (e.g., facility capacity headroom for energy import/export, identification of local load pockets, locational value of capacity/energy/ancillary services, electrical interconnection standards, etc.)? What such information would you suggest we include in a North Fork RFP?

4. Contractual Arrangements

Below are four alternative contract arrangements that PSEG Long Island is considering for the RFP. Under Cases 1-3, PSEG Long Island would include a preferred contract with the RFP that developers would be expected to review and either accept or clearly take exceptions in writing to any terms or conditions in the preferred contract in their proposal submittal. Any exceptions taken would be considered in PSEG Long Island/LIPA's evaluation of the proposal. Please review these four cases and answer the questions below:

Case 1 ("Traditional Contract"):

This contract would provide for LIPA's purchase of the entire output of the energy resource project from the developer/owner. The developer/owner could take exceptions to the terms and conditions of the preferred contract in their submittals and the parties would negotiate a final contract. Operational control of the energy resource project would be by PSEG Long Island as LIPA's agent during the contract's term. Following the term of the contract, which could be a traditional 20-year PPA, or, depending on the technology or the need to meet Climate Leadership and Community Protection Act goals, could be less, the output and operational control of the project would revert to the developer owner (or its successor in interest).

Case 2 ("Traditional Contract with LIPA Ownership Option at End of Term"):

The same as the Traditional Contract except that, following the expiration of the contract term, LIPA would have the option to purchase the project from the developer/owner under the terms and conditions set forth in the contract. If LIPA decided not to purchase the project, then operational control of the project would revert to the developer/owner (or its successor in interest).

³ This is a preliminary list of LIPA Recommended Interconnection Locations which may change during the RFI/RFP process.

Case 3 ("Hybrid Contract"):

In this case, the contract would provide for LIPA's purchase of the output from the developer/owner and its operational control of the energy resource project during part of each contract year and for the developer/owner to have entitlement to and operational control and the output of the project during the remainder of the year. Following the term of the contract, which, as discussed above, could be a traditional 20-year PPA or, depending on the technology or the need to meet Climate Leadership and Community Protection Act goals, could be less, the output and operational control of the project would revert to the developer owner (or its successor in interest).

Case 4 ("Turn-Key Contract"):

This contract would provide for the developer's construction of the proposed energy resource project and, upon completion of the project to PSEG Long Island's/LIPA's satisfaction, transfer of ownership to LIPA under the terms and conditions of an engineering, procurement, construction ("EPC") contract.

Please respond to the following general questions applicable to all contract Cases:

- a. PSEG Long Island is interested in Respondents' comments, information, and interest in each of the four contract Cases. Please provide your views on each one.
- b. What are the pros and cons of each Case?
- c. How would each Case impact your financing options?
- d. How would each Case impact your risks?
- e. Are there changes that could be made in each Case to better align with your constraints?
- f. Which Case do you prefer? Why?
- g. PSEG Long Island/LIPA is considering different contract terms, which could include 20-year contracts and/or also contracts for shorter terms. What contract term would allow your proposed project technology to provide the best value to LIPA's customers? Why?
- h. If the RFP allows energy resource projects to propose different contract term lengths, what comments do you have on how to compare projects with different contract lengths given changes in such things as falling prices in technology costs over time?

5. Proposed Procurement Schedule

If LIPA determines it will be beneficial to follow this RFI with an RFP for resource procurement, such RFP would be issued in the third quarter of 2020 at the earliest and allow respondents three (3) months for developing proposals, and up to six (6) years between selection and project COD, subject to development milestones to be included in the offtake agreement.

- 1. Is the time provided for developing proposals appropriate, too short, or too long?
- 2. Is the time between selection and expected COD date adequate for the permitting, procurement and development of the energy resource project?

Appendix B—LIPA Recommended Interconnection Locations

A preliminary list of "LIPA Recommended Interconnection Locations" includes the following substations with maximum injection limits indicated where applicable. Please note that the LIPA Preferred Locations and the corresponding MW are preliminary and may change during the course of the RFI/RFP process with or without notice. Comprehensive studies are required to assess interconnection feasibility and MW values including, but not limited to, charging limitations, load-curve analysis, thermal impact on underground cables, resource deactivations, resource interconnections, performance requirements, field surveys, constructability, engineering design, property rights/easements, and environmental restrictions. These studies will be conducted as applicable for the RFP phase.

LIPA Recommended Location	Maximum Injection Limit MW
Southold	130
Orient Point	8