2021 Request for Proposals for Bulk Energy Storage

Issued by PSEG Long Island on behalf of the Long Island Power Authority



Issued April 30, 2021 Proposals Due July 30, 2021

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1.0 INTRODUCTION

PSEG Long Island, LLC ("PSEGLI"), on behalf of the Long Island Power Authority ("LIPA"), is issuing this 2021 Request for Proposals for Bulk Energy Storage ("RFP") for bulk energy storage resources that will be interconnected to the Long Island electric grid.

1.1 Company Overview

- 1.1.1 LIPA is a corporate municipal instrumentality and political subdivision of the State of New York. LIPA and its wholly-owned subsidiary Long Island Lighting Company d/b/a LIPA, by and through its agent, Long Island Electric Utility Servco LLC ("Servco"), a subsidiary of PSEGLI, provides electric service to approximately 1.1 million customers in its service area, which includes Nassau County and Suffolk County and the portion of Queens County known as the "Rockaways," in the State of New York (the "LIPA Service Territory").
- 1.1.2 To meet its customers' electricity requirements, LIPA has secured power supply resources, primarily through various power purchase agreements with third-party generation and transmission developers and has undertaken a variety of demand-side initiatives to reduce system peak demand.
- 1.1.3 Pursuant to the Amended and Restated Operation Services Agreement ("A&R OSA") dated December 31, 2013, as it may be restated, amended, modified, or supplemented from time to time, between Long Island Lighting Company d/b/a LIPA and PSEGLI, PSEGLI through its operating subsidiary, Servco, assumed the responsibility as Long Island Lighting Company d/b/a LIPA's service provider, to operate and manage the transmission and distribution system (T&D System) and other utility business functions as of January 1, 2014. On January 1, 2015, PSEGLI assumed responsibility for power supply planning and procurement, and its affiliates provide certain services, such as purchasing power and fuel procurement related to these responsibilities. Additional information about LIPA¹ and PSEGLI² can be found on their respective websites.
- 1.1.4 PSEGLI and Servco (collectively referred to herein as "PSEGLI"), as agent of and acting on behalf of Long Island Lighting Company d/b/a LIPA per the A&R OSA, will administer this RFP. LIPA, as the principal, will be the contracting party under any contract resulting from this RFP. As described in further detail herein, LIPA will be the purchasing party in any contract (see section 1.2.4) resulting from this RFP and any such contract must be approved by the LIPA Board of Trustees ("LIPA

¹ LIPA website: <u>www.lipower.org</u>

² PSEGLI website: <u>www.psegliny.com</u>

Board") and the New York State (NYS) Office of the State Comptroller (OSC), and the NYS Attorney General (AG).

- 1.1.5 Common Terms
 - A response to this RFP submitted by a party is referred to herein as a "Proposal."
 - A party submitting a Proposal is referred to herein as a "Respondent."
 - An energy storage resource proposed by a Respondent is referred to herein as a "Project."
 - Unless otherwise defined in this RFP, capitalized terms shall have the meaning ascribed in "Energy Storage Project Build, Own and Transfer Term Sheet" (herein, the "BOT Term Sheet") (see Section 1.2.5) or "LIPA's Preferred Bulk Energy Storage Build-Own-Operate-Transfer Contract" (herein, the "BOOT Contract") (see Section 1.2.6), both of which are referenced and available through this RFP.
 - Together, the BOT Term Sheet and BOOT Contract are referred to herein as "LIPA's BOT/BOOT Documents."
 - The energy storage contract for which the Respondent is bidding (and which may be either contract model option (see Section 1.2.4) is referred to herein as the "Energy Storage Contract."

1.2 Description of Solicitation

- 1.2.1 NYS, through the Climate Leadership and Community Protection Act ("CLCPA")³ enacted in 2019, has set a target that 70% of the state's electricity be produced from renewable resources by 2030 with the additional expressed goal of achieving a 100% carbon-free grid by 2040. Included in the CLCPA targets is a 3,000-MW 2030 statewide energy storage goal. This goal was preceded by a December 2018 New York Public Service Commission ("PSC") order establishing a 1,500-MW target for 2025.
- 1.2.2 LIPA intends to meet its share of these goals through existing energy storage projects under contracts with LIPA, new projects obtained through this RFP, distribution-level storage projects proposed in PSEGLI's Utility 2.0 Long Range Plan, and behind-the-meter programs established in LIPA's Tariff for Electric Service.⁴ This RFP has a goal to obtain 175 MW of new bulk energy storage projects to help meet LIPA's share of NYS's 2025 storage goal, though LIPA may select more or less than this goal depending on the cost-effectiveness of the Proposals. Among other things, cost-effectiveness will be determined by the value of products and services that can be obtained from the projects, including capacity, energy, and ancillary services in the NYISO wholesale markets, ability to compensate for the intermittency of renewable resources, ability to

³ Climate Leadership and Community Protection Act (Climate Act), State of New York Laws of 2019, Chapter 106S

⁴ Tariff for Electric Service, Long Island Power Authority, <u>Tariff – Lipower</u>

defer the need for transmission system reinforcements, and any other bulk power products or services offered in each Proposal.

- 1.2.3 This RFP is open to all energy storage technologies provided they are commercially viable, as explained more fully herein, and meet the technical criteria set forth in Appendix E. The energy storage must be electrically interconnected within the LIPA electrical grid service territory and separately metered from any other load or generation at the site. The minimum size project at a single location is 20.1 MW.
- 1.2.4 This RFP offers two contract model options, one of which must be chosen by a Respondent for its Proposal: A build-own-transfer ("BOT") contract model ("BOT Contract") or build-own-operate-transfer ("BOOT") contract model ("BOOT Contract").

1.2.5 BOT Contract

- 1.2.5.1. The first contract model is the BOT Contract, as set forth in the BOT Term Sheet. PSEGLI will post this term sheet on the PSEG Long Island Bulk Energy Storage Website⁵ (the "RFP Website") per the schedule shown in Section 4.0. Under the BOT Contract, the Respondent⁶ would design, engineer, develop, procure, finance, construct, and commission the Project and then sell the fully developed and constructed turn-key Project to LIPA⁷ upon satisfactory completion and achievement of Commercial Operation⁸ and satisfaction of other customary closing conditions. The Respondent, as the "Developer," would be responsible for all costs during development and construction of the Project, including interconnection of the Project to the grid in accordance with New York Independent System Operator's ("NYISO's") Large Generator Interconnection Process.⁹
- 1.2.5.2. For the BOT Contract, LIPA will engage an entity to operate and maintain (O&M) the Project (the "O&M Contractor"). This RFP encourages all Respondents to provide an optional Proposal with its responses to include pricing and a term sheet for such O&M services (the "2nd Proposal¹⁰"). In Proposal evaluation and scoring, Respondents who decline to submit a 2nd Proposal will not be penalized relative to Respondents who submit both a Proposal and 2nd Proposal. If a Respondent submits both a Proposal and 2nd Proposal, each document will be separately evaluated. PSEGLI reserves the right to select BOT Contract Proposals containing O&M services or conduct a

⁵ RFP Website: <u>www.psegliny.com/aboutpseglongisland/proposalsandbids/2021BulkEnergyStorageRFP</u>

⁶ Winning Respondent to be defined as the "Company" or "Seller" in the BOT Term Sheet.

⁷ Defined as the "Buyer" in the BOT Term Sheet.

⁸ As defined in the BOT Term Sheet.

⁹ The Respondent will execute the LGIA as the "Developer" and will assign the Developer responsibilities to LIPA upon transfer to LIPA.

¹⁰ See Section 5.6.1 for information on the proposal fee.

separate RFP at a later date for one or more O&M Contractors for Projects selected in the RFP and potentially other energy storage projects owned by LIPA.

1.2.6 BOOT Contract

- 1.2.6.1. The second contract model is the BOOT Contract, as set forth in the BOOT Contract. PSEGLI will post this agreement on the RFP Website per the schedule shown in Section 4.0. Under the BOOT Contract, the Respondent would design, engineer, finance, develop, procure, construct, commission, and operate the Project, including managing the NYISO interconnection process and completing the interconnection to LIPA's grid. Upon Project completion, the Respondent¹¹ will sell the Products¹² of the Project to LIPA¹³ under the terms of the BOOT Contract for seven years. Upon the expiration of the term, LIPA would pay the Respondent the Buyout Purchase Payment set forth in the BOOT Contract (and discussed further in Section 6.17.3 below)and would take ownership of the Project. Also, upon transfer of the Project to LIPA after the termination of the BOOT Contract, the Respondent would assign its responsibilities as the "Developer" in the NYISO Large Generator Interconnection Agreement ("LGIA") to LIPA.
- 1.2.6.2. For the BOOT Contract, LIPA will require an O&M Contractor to operate and maintain the Project following the expiration of the BOOT Contract term, including assigning any existing third-party O&M agreement to LIPA in connection with the transfer of ownership of the Project to LIPA at the expiration of the seven-year term. This RFP encourages all Respondents to provide a 2nd Proposal with its response to include pricing and a term sheet for such services. In Proposal evaluation and scoring, Respondents who decline to submit a 2nd Proposal will not be penalized relative to Respondents who submit both a Proposal and 2nd Proposal. If a Respondent submits both a Proposal and 2nd Proposal, each document will be separately evaluated. PSEGLI reserves the right to select Proposals containing O&M services or conduct a separate RFP at a later date for one or more O&M Contractors for Projects selected in the RFP and potentially other energy storage projects owned by LIPA.

1.2.7 Additional Notes

1.2.7.1. A Respondent may submit separate Proposals for the same Project using each of the two contract models.

¹¹ Winning Respondent to be defined as the "Seller" or "Contractor" in the BOOT Contract.

¹² As defined in the BOOT Contract.

¹³ Defined as the "Buyer" in BOOT Contract.

2.0 GENERAL TERMS

2.1 Threshold Requirements

- 2.1.1 The minimum capacity for each Project is 20.1-MW¹⁴ nameplate capacity (AC). Each Proposal must represent a Project at a single site with a single point of interconnection ("POI").¹⁵
- 2.1.2 Each Project must use a technology that is commercially viable that meets the Threshold Requirements for Commercial Viability set forth in Appendix D.
- 2.1.3 Projects must have a target commercial operation date ("COD") no later than December 31, 2025.
- 2.1.4 Each Proposal must use one of the two contract models set forth in the RFP as more fully described in Section 2.4.
- 2.1.5 Each Project must comply with Energy Storage Specifications set forth in Appendix E.

2.2 Other Requirements

- 2.2.1 A Respondent must install its Project on a site for which they can demonstrate control of the site through either fee ownership, a land lease, option to lease or purchase, or equivalent demonstration of site control. The Respondent shall provide evidence of such site control in its Proposal. Such evidence shall ensure that the site control is unconditional, e.g., that the site is not the subject of a dispute; not subject to sale or lease or right of first refusal to another party. Subject to availability, LIPA intends to offer Respondents the opportunity to lease certain sites that are owned or may be acquired through LIPA; however, seeking to obtain a site from LIPA will not be considered evidence of site control unless LIPA owns the site or is able to acquire the site (see Section 2.9 below).
- 2.2.2 Under the BOOT Contract, prior to the expiration of the contract term, Respondent would provide training to LIPA's O&M Contractor and to LIPA and/or its agent's technical staff to provide for an orderly transition. In addition, if a Respondent chooses to locate its Project on land owned or acquired through LIPA, the site would be leased to the Respondent under a ground lease having a term equal to the term of the BOOT Contract. "LIPA's Standard Form Preferred Lease Agreement," which would be used for this arrangement, will be posted on the RFP Website per the schedule shown in Section 4.0. If a Respondent chooses to locate its Project on land owned or leased by the Respondent, LIPA will purchase or lease that land at fair market value. LIPA strongly prefers to

¹⁴ All MW values are to be considered AC unless specifically noted as otherwise.

¹⁵ See Section 5.7.1 for a detailed definition of a Proposal.

purchase the land and any lease must be for at least 14 years after the transfer to LIPA. See requirements in 6.16.4.

- 2.2.3 If a Respondent proposes a site and selects a BOT Contract, LIPA strongly prefers Respondent sell the site to LIPA. Since LIPA prefers to own the site, if a Respondent cannot sell the site, then LIPA prefers a minimum 21-year lease with a purchase option or with one or more options to extend the lease. See requirements in 6.16.4.
- 2.2.4 Proposals should state whether the Project could be eligible for federal investment tax credits because of the Project being co-located with a related renewable energy projects owned by the Respondent, a third party, or LIPA.
- 2.2.5 All Respondents proposing a site and POI (other than a POI listed in Appendix G) must also include in its Proposals one or more energy storage use cases relevant to its proposed Project and site and describe in detail the quantitative and qualitative benefits of the Project to LIPA and its customers.
- 2.2.6 During the term of the BOOT Contract, LIPA will have the right and responsibility to bid and schedule the storage asset into NYISO's markets. LIPA will receive all associated NYISO revenues and LIPA will pay any NYISO charges. Winning Respondents with BOOT Contracts must become NYISO market participants. As part of the interconnection process, the Respondents must provide all information and support necessary to successfully complete asset registration in the NYISO markets and comply with all NYISO requirements.
- 2.2.7 All winning Respondents, whether with BOT Contracts or BOOT Contracts, must also provide the necessary staffing¹⁶, communications, metering, and telemetry required to participate in the NYISO markets for Products as defined in the agreement.

2.3 LIPA Tax Treatment of Purchase of Project Under BOT Contract

Based on the advice of counsel, LIPA intends to treat the transaction for federal tax purposes as the purchase of property that had not been used previously and Respondents must agree not to take a contrary position for federal income tax purposes without the consent of LIPA.

2.4 Firm Pricing Commitment

2.4.1 Proposed pricing shall be all-inclusive, including all necessary development, design, procurement, permitting, financing, construction, and O&M costs¹⁷ as further described in this RFP.

¹⁶ Does not apply to BOT Contracts

¹⁷ O&M costs, if applicable, would only pertain to the BOOT Contract.

- 2.4.2 Pricing must include any and all costs to fully meet the 30% NYS Certified Minority Business Enterprise (MBE) and Women Business Enterprise (WBE) (together, "MWBE") subcontracting goal and the 6% NYS Certified Service-Disabled Veteran-Owned Business (SDVOB) goal. This requirement for submitting pricing to meet these goals also applies to firms that are seeking full or partial waivers of the goals.
- 2.4.3 All proposed contract pricing must be firm and all terms and conditions must be open for acceptance by LIPA through the "Firm Pricing Required Through" date noted in the RFP Schedule (see Section 4.0 Table 4-1).
- 2.4.4 In the BOOT Contract, firm pricing may include fixed prices or prices that are subject to escalation based on a specifically identified escalation rate (in percent [%]).

2.5 Contracting – Form of Agreement

- 2.5.1 As indicated above, the selected Respondent(s) will be required to execute one of two contract models: BOT or BOOT. LIPA's BOT/BOOT Documents will be available per the schedule shown in Section 4.0 for downloading in Microsoft Word format from the RFP Website (see Section 1.1.1). Respondents are strongly encouraged to accept LIPA's BOT/BOOT Documents with no material exceptions. To the extent that a Respondent has any exceptions to LIPA's BOT/BOOT Documents, its Proposal shall provide a redline mark-up of any exceptions showing any insertions, deletions, or other proposed changes, which <u>must</u> include proposed text, as applicable in Microsoft Word, and which such the Respondent deems execution-ready. It must be emphasized that the nature and extent of any exceptions taken to the terms and conditions will be a major factor considered in the qualitative evaluation of Proposals. Respondents that demonstrate a willingness to accept LIPA's BOT/BOOT Documents with no material exceptions in the qualitative evaluation.
- 2.5.2 Additionally, for a Respondent selected in the RFP with a BOOT Contract for a Project on a site provided by LIPA, if LIPA is successful in acquiring the site as discussed in Section 2.9, LIPA would lease the site to the Respondent under the terms of "LIPA's Standard Form Preferred Lease Agreement," which will be available per the schedule shown in Section 4.0 for downloading in Microsoft Word format from the RFP Website. Respondents are strongly encouraged to accept "LIPA's Standard Form Preferred Lease Agreement" with no material exceptions. To the extent that a Respondent has any exceptions to "LIPA's Standard Form Preferred Lease Agreement," its Proposal shall provide a redline mark-up of any exceptions showing any insertions, deletions, or other proposed changes, which must include proposed text, as applicable in Microsoft Word, and which the Respondent deems execution-ready. It must be emphasized that the nature and extent of any exceptions to the terms and conditions will be a major factor considered in the

qualitative evaluation of Proposals. Respondents that demonstrate a willingness to accept "LIPA's Standard Form Preferred Lease Agreement" with no material exceptions will be given more favorable consideration in the qualitative evaluation.

2.5.3 For the avoidance of doubt, Projects proposing either a BOT Contract or a BOOT Contract on sites not provided by LIPA are eligible to participate in the RFP.

2.6 Technical Requirements

Respondents must agree to meet the technical requirements set forth in Appendix E without any material exception. If a Respondent has any non-material exceptions to these requirements, such exception must be described in detail in the Technical Specifications Compliance Statement as described in Section 6.19.

2.7 Interconnection Requirements

Respondents must agree to meet the interconnection requirements set forth in Appendix F without any material exception. If a Respondent has any non-material exceptions to these requirements, such exception must be described in detail in the Interconnection Requirements Compliance Statement as descripted in Section 6.20.

2.8 Credit Requirements

Respondents are hereby put on notice that if they are selected in this procurement and awarded a contract, they will be required, shortly after the contract becomes effective, to provide security in the form of a letter of credit in the amount of \$150,000 per MW.

2.9 Sites Owned or Potentially Controlled by LIPA

2.9.1 LIPA owns certain properties that may be suitable for energy storage. Also, under the Amended & Restated Power Supply Agreement between LIPA and National Grid Generation dated October 10, 2012, as well as Schedule F to the Agreement and Plan of Merger, dated June 26, 1997, among BL Holding Corp., Long Island Lighting Company, Long Island Power Authority and LIPA Acquisition Corp. ("Schedule F"), certain parcels owned by National Grid Generation LLC may be available for LIPA to acquire for development. With regard to such parcels, site control is uncertain at this time. PSEGLI will post additional information on the RFP Website on parcels owned by or that may be acquired through LIPA per the schedule shown in Section 4.0. If a Respondent is interested in using any of these parcels, they should follow the procedures stated on the RFP Website.

2.9.2 Sites to be acquired through LIPA

- 2.9.2.1. A Respondent proposing to use a site not currently owned by LIPA but that may be acquired through LIPA should include a good faith estimate of the amount of land (including easements and access rights) its Project would use at the site, along with drawings showing a proposed site layout for the Project. LIPA does not guarantee acquisition of the parcel(s).
- 2.9.2.2. Since LIPA cannot predict successful acquisition of such parcel(s), a separate Proposal Submittal Fee¹⁸ will not be charged for the first alternative Proposal. See Section 5.6.2 for additional details on the Proposal Fee.

2.10 Project Operation & Maintenance

All Respondents are encouraged to submit two Proposals for each Project offered in this RFP. One Proposal would not include O&M services. The 2nd Proposal (see Section 1.2.5.2) would include O&M services for the Project for a period of (i) 20 years for a BOT Contract or (ii) 14 years following the transfer of the Project to LIPA for a BOOT Contract. In the 2nd Proposal, the Respondent should include all items listed in Section 6.2.2 and a term sheet for these O&M services. It is expected that the O&M contract will have to comply with IRS guidelines for issuers of tax-exempt bonds related to "qualified management contracts." These guidelines may be found in IRS Revenue Procedure 2017-13.

2.11 Disadvantaged Communities

In accordance with the CLCPA, a Respondent should specify how its Project may be deployed to reduce the usage of combustion-powered peaking facilities located in or near disadvantaged communities and further discuss the extent to which disadvantaged communities would receive the benefits of spending on the Project.

¹⁸ As defined in Section 5.6.1 of this RFP.

3.0 COMMUNICATIONS

3.1 Communications during the RFP Process

- 3.1.1 Pursuant to State Finance Law sections 139-J and 139-K, this RFP includes and imposes certain restrictions on communications between a Respondent and either PSEGLI or LIPA during the procurement process. The Respondent is restricted from making contact (i.e., an oral, written or electronic communications which a reasonable person would infer as an attempt to influence the award, denial, or amendment of a contract) with any PSEGLI or LIPA representative, other than as designated herein, from the date of issuance of this RFP through the final award and approval of the resulting BOOT and/or BOT contracts by LIPA and the Office of the State Comptroller (the "Restricted Period"). LIPA staff, the LIPA Board, and advisors are required to obtain certain information if contacted during the Restricted Period and make a determination of the responsibility of the Respondent pursuant to these two statutes. Certain findings of non-responsibility may result in rejection for contract award and immediate disqualification from the RFP process.
- 3.1.2 Respondents must direct any and all communications and questions regarding this RFP only to the listed designated contact (the "Designated (Contact") or through the RFP Website.
- 3.1.3 Designated Contact for the 2021 Bulk Energy Storage RFP:

Nayana Niglye Manager – Power Projects PSEG Long Island Nayana.Niglye@pseg.com

- 3.1.4 Designated Contact(s) may be updated and/or supplemented as needed and all such changes will be posted on the RFP Website.
- 3.1.5 Other than as provided for in this RFP, any contact with the LIPA Board, LIPA staff, PSEGLI staff, and consultants or advisors who are working on any part associated with the RFP regarding this RFP during its pendency may be grounds for disqualification from the RFP process and also barring from future procurements.
- 3.1.6 Further information about these requirements can be found in the section "Lobbying Guidelines Regarding Procurements, Rules, Regulations, or Ratemaking," which is posted on the RFP Website.

3.1.7 Assistance with Interconnection Issues

Respondents are encouraged to thoroughly investigate the feasibility and cost of interconnecting to each POI for which they intend to submit a Proposal. Respondents who have questions regarding interconnecting to the LIPA T&D system may refer to: www.psegliny.com/aboutpseglongisland/proposalsandbids/2021BulkEnergyStorageRFP

3.2 RFP Website

- 3.2.1 For further information, please refer to the RFP Website: ww.psegliny.com/aboutpseglongisland/proposalsandbids/2021BulkEnergyStorageRFP.
- 3.2.2 The RFP Website is a public site, accessible to anyone at any time. The RFP Website allows Respondents to download documents referenced in this RFP. Updates and additional information may be posted periodically on the RFP Website. It is the responsibility of the participants to periodically visit the RFP Website for potential updates.
- 3.2.3 After receipt of a Notice of Intent to Propose, described in Section 5.4, the Respondent will be provided credentials to login to the private RFP Website.

3.3 Questions about the RFP

- 3.3.1 All questions and requests for clarification concerning the RFP must be electronically submitted through the Private RFP Website by the RFP Question Submittal Deadline, as specified in the RFP Schedule, to be considered. The Respondent is required to populate and upload the form in Appendix J to submit a question or requests for clarification.
- 3.3.2 All questions, requests for clarification, and responses to them concerning this RFP will be available (on an anonymous basis) to all Respondents who submit a Notice of Intent to Propose and will be posted to the Private RFP Website in a folder titled "RFP Q&A" unless the questions or requests for clarification contain confidential information.

4.0 RFP SCHEDULE

The following RFP Schedule is based upon expectations as of the release date of this RFP. PSEGLI reserves the right to modify the RFP Schedule at its sole discretion at any time during the Restricted Period as defined in Section 3.1.1.

Activity	Target Date
Release of RFP	April 30, 2021
Posting of Additional RFP Related Documents	May 10, 2021
Recorded Webinar	Week of May 24, 2021
Question Submittal Window*	May 10, 2021–May 24, 2021
Notice of Intent to Propose Window**	June 1, 2021–July 23, 2021
Proposal Submittal Deadline	July 30, 2021
Proposal Selection(s) (planned)	January 2022
Execution of Contract(s) (planned)***	December 2022
Firm Pricing Required Through	At least June 30, 2023
Latest COD	December 31, 2025

Table	4-1	— F	RFP	Sche	dule
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* Window for submittal means start date (at 12:00 am) for acceptance of questions and end date (at 11:59 pm) for acceptance of questions.

** Window for submittal means start date (at 12:00 am) for acceptance of Notice of Intent to Propose and end date (at 11:59 pm) for acceptance of Notice of Intent to Propose.

*** NYS Environmental Quality Review Act (SEQRA) must be completed prior to Energy Storage Contract execution.

5.0 PROPOSAL PROCESS

5.1 General

- 5.1.1 The Proposal submittal requirements are set forth in Section 6.0. All RFP documents may be obtained from the RFP Website.
- 5.1.2 PSEGLI and LIPA assume no responsibility for errors or misinterpretations resulting from the use of incomplete sets of RFP documents.
- 5.1.3 Proposals must include, at a minimum, responses to each of the required elements set forth in Section 6.0.
- 5.1.4 Proposals submitted in response to this RFP must be submitted strictly in accordance with the proposal sections outline set forth in Section 6.2.2 in terms of format and sequence. A Proposal that does not follow the required proposal sections outline may not be evaluated.

5.2 Interpretation or Correction of RFP Documents

- 5.2.1 Any Respondent who discovers any ambiguities, inconsistencies, omissions, or errors or is in doubt as to the meaning or intent of any part of the RFP documents may request an interpretation from PSEGLI. Such request should be submitted via the Question-and-Answer process in this RFP. Requests must be made during the Q&A window.
- 5.2.2 If a Respondent fails to notify PSEGLI of a known error or an error that reasonably should have been known prior to the final filing date for submission, the Respondent shall assume the risk and shall not be entitled to alter its Proposal after the submission deadline.
- 5.2.3 Any modifications to the RFP documents will be furnished via the RFP Website.

5.3 Webinar

A recorded webinar will be held during the week of May 24, 2021 and posted on the RFP Website for downloading through the Proposal Submittal Deadline.

5.4 Notice of Intent to Propose

5.4.1 Each Respondent is required to submit a Notice of Intent to Propose via the RFP Website during the window from June 1, 2021 through July 23, 2021 (respondents have until 11:59 pm on July 23, 2021 for submission), which is one week prior to the Proposal Submittal Deadline in Section 4.0. The Notice of Intent to Propose form is provided in Appendix I.

5.4.2 Upon receipt of the Notice of Intent to Propose, login credentials for the Private RFP Website, as described in Section 5.7.7, will be provided.

5.5 Proposal Expenses

5.5.1 The Respondent shall bear any and all labor, materials and content costs and expenses required for or in connection with (i) preparation of its Proposal; (ii) subsequent actions taken by the Respondent up to the effectiveness of the Energy Storage Contract(s), including clarification of its Proposal and negotiation of the Energy Storage Contract(s); (iii) all taxes, duties, fees, and other charges that may be associated with completion of the Project; and (iv) compliance with all local, state, and federal laws and regulations that may affect the Project and the Energy Storage Contract(s).

5.6 Proposal Submittal Fee

- 5.6.1 Each Proposal shall be accompanied by a non-refundable Proposal submittal fee in the amount of \$1/kW (the "Proposal Submittal Fee") payable to Long Island Power Authority. The 2nd Proposal encouraged with each submittal containing O&M services, which will be identical except for the O&M services, will not require a separate Proposal Submittal Fee.
- 5.6.2 As discussed in Section 2.9, if a Respondent submits an alternative Proposal using a site to be acquired through LIPA, the Respondent would only be required to pay one Proposal Submittal Fee based on the Proposal containing the Project with the higher MW capacity. The alternative Proposal can be at the same or different POI than the one proposed on a site to be acquired through LIPA. For avoidance of doubt, proposals using LIPA owned land require a separate Proposal Submittal Fee.
- 5.6.3 A Respondent who submits more than one Proposal for the same POI or Project site must pay a separate fee for each Proposal.
- 5.6.4 Proposals shall be submitted with the applicable Proposal Submittal Fee in the form of a wire transfer in accordance with wiring instructions that will be provided upon receipt of the Notice of Intent to Propose. Proposals that do not include the required Proposal Submittal Fee will be returned to the Respondent(s) and such Proposals will not be considered or evaluated.

5.7 Proposal Submittal Requirements

5.7.1 For this RFP, a Proposal is defined as "a Project at a specific geographic location with a specified MW and duration (hours) amount (i.e., size), and using one of the two contract models (BOT Contract or BOOT Contract) required in this RFP." Any change to any of these elements requires

a separate evaluation and is a separate Proposal. For the avoidance of doubt, please note that each contract model is considered a different Proposal.

- 5.7.2 Each Proposal is limited to one Project. Multiple Proposals by a single Respondent are permitted but will require separate submissions for each Proposal and separate Proposal Submittal Fees, except as provided in Section 5.6.2.
- 5.7.3 A Respondent submitting multiple Proposals must identify if any are mutually exclusive from other Proposals from that Respondent.
- 5.7.4 A Proposal shall be submitted in the complete name of the party expecting to execute any resulting Energy Storage Contract. The Proposal must be executed by a person who is duly authorized to bind a Respondent to a contract.
- 5.7.5 A Proposal submitted in response to this RFP must be received by the Proposal Submittal Deadline. Any Proposal received after this deadline will not be opened and will be disqualified from further evaluation and returned to the Respondent.
- 5.7.6 After the Proposal Submittal Deadline, no material changes may be made to a Respondent's Proposal.
- 5.7.7 Proposals must be submitted through the Private RFP Website. Access and details for the Private RFP Website will be provided on the RFP Website.

6.0 PROPOSAL ORGANIZATION

6.1 General Requirements

- 6.1.1 A Proposal must include each of the required elements set forth herein. This applies to each Proposal submitted by a Respondent (i.e., each Proposal shall stand alone in satisfying these requirements).
- 6.1.2 Any Proposal that does not include the complete information required by this RFP will be deemed non-responsive and will <u>not</u> be evaluated. Such Proposal will be returned to the Respondent. A non-responsive Proposal includes one that:
 - is not in conformance with RFP requirements and instructions;
 - is conditioned on some other act or omission (other than as required by law) whether or not related to this procurement and the resulting contract. For example, a Proposal that is dependent on
 - or requests an extension of an existing contract;
 - cancellation of another contract;
 - not being selected in another RFP.
 - does not include the required Proposal Submittal Fee;
 - contains material omission(s);
 - includes material exceptions to the LIPA's BOT/BOOT Documents;
 - does not meet the submission requirements set forth herein.
- 6.1.3 The Respondent may submit complementary information not explicitly requested within the RFP documents. Such information shall be provided in addition to, not in lieu of, the requested information.
- 6.1.4 All documents, schedules, and similar items submitted as a part of a Proposal must be clearly labeled and organized in a fashion that facilitates easy location and review.
- 6.1.5 The Respondent must complete all data sheets, as further described in this section (Section 6.0), as applicable.

6.2 Proposal Outline and Content

6.2.1 Proposals submitted in response to this RFP should follow the proposal sections outline in Section6.2.2 in terms of format and sequence. A proposal checklist is provided for the Respondent's convenience in Appendix A to assist meeting the RFP's minimum submittal requirements. A

Proposal that does not follow the required proposal sections outline format and sequence may not be evaluated. Some proposal sections have corresponding appendices that provide either additional information and guidance about the proposal section or related, required information to complete the proposal section. Note that not all requirements listed within the proposal sections outline may be applicable to all Projects proposed. A Respondent should exercise its judgment when determining whether a requirement is applicable to its Proposal. In case of doubt, the Respondent should contact the Designated Contact(s) for this RFP. If the Respondent ultimately determines that a specific proposal section is not applicable to its Project, the Respondent should so indicate in its Proposal.

6.2.2 Proposal Sections Outline

- 1. Cover Letter
- 2. Table of Contents
- 3. Executive Summary
- 4. Disclosures
- 5. Pricing and Costs (Appendix C)
- 6. Company Data and Relevant Experience
- 7. Project Description
- 8. Technical Response (Appendix E)
- 9. Commissioning
- 10. Project Execution Plan
- 11. Financial Plan
- 12. Schedule and Development Plan
- 13. Permitting and Site Control Documentation
- 14. Description of Benefits to Disadvantaged Communities
- 15. Respondent's Markup of LIPA's BOT/BOOT Documents (on RFP Website)
- 16. Conditions Precedent for Energy Storage Contract
- 17. Technical Specifications Compliance Statement (Appendix E)
- 18. Interconnection Requirements Compliance Statement (Appendix F)
- 19. Procurement Forms (on RFP Website)
- 20. Confidentiality
- 21. Respondent Proposal (Appendix B)
- 22. O&M Pricing and Term Sheet (for 2nd Proposal only)

6.3 Cover Letter

- 6.3.1 The cover letter shall include highlights and special features of the Project.
- 6.3.2 The cover letter shall contain a statement clearly indicating the period during which the Proposal (including pricing) will remain effective. At a minimum, the Proposal must remain effective through the "Firm Pricing Required Through" date noted in the RFP Schedule.
- 6.3.3 The cover letter shall include contact information for the Respondent's primary point of contact, including name, title, address, telephone number, email address, and fax number.
- 6.3.4 The cover letter shall be signed by the Respondent's primary point of contact and the individual(s) who are duly authorized by the Respondent to make a binding offer.

6.4 Table of Contents

Proposals should include a table of contents that clearly lists all items submitted in response to this RFP (including appendixes, exhibits, tables, pictures) and is consistent with the proposal sections outline listed in Section 6.2.2.

6.5 Executive Summary

Proposals should include a summary, approximately two or three pages, of the Project's key features, characteristics, pricing, and distinguishable attributes with a focus on how the Proposal meets the objective(s) of the RFP.

6.6 Disclosures

6.6.1 The Respondent must complete the Vendor Responsibility Questionnaire and its disclosures. The form is available on the RFP Website (link to this form can be found in Appendix H).

6.7 Pricing and Costs

- 6.7.1 Appendix C contains a link to two pricing data sheets: the BOT pricing data sheet and the BOOT pricing data sheet. Each Proposal must use the pricing data sheet that corresponds with the contract model being proposed. The Respondent should return the completed pricing data sheet with its Proposal.
- 6.7.2 Proposed pricing for the BOT Contract as shown in the BOT pricing data sheet will consist of a lump sum payment upon the Project reaching COD, as stated in the BOT pricing data sheet and defined in the BOT Term Sheet.

- 6.7.3 Proposed pricing for the BOOT Contract as shown in the BOOT pricing data sheet shall include:
 - Pricing in (i) \$/kW-month for capacity and (ii) \$/MWh for variable O&M expenses (if applicable) for the seven-year term of the BOOT contract.
 - A Buyout Purchase Payment, as defined in Section 6.17, that LIPA would pay Respondent at the end of seven years to purchase the Project (see Section 6.17.3).
 - Pricing for ancillary services, if applicable.
 - Pricing for black start capability, if applicable.
 - All costs, including license fees and permitting fees, associated with the installation and delivery of the Project.
 - Any and all costs to fully or partially, as applicable, meet the 30% NYS Certified MWBE subcontracting goal and the 6% NYS Certified SDVOB goal.
- 6.7.4 During the seven-year term of the BOOT Contract, Charging Energy¹⁹ will be provided by the LIPA pursuant to the terms of that agreement.
- 6.7.5 All proposed pricing for the BOT Contract and BOOT Contract must be firm through at least the "Firm Pricing Required Through" date noted in the RFP Schedule.
- 6.7.6 Proposed pricing must be all-inclusive, except for the fair market value of any land to be provided by LIPA. The evaluation process will include the fair market value of land provided by LIPA in the quantitative evaluation.
- 6.7.7 The Respondent must provide a detailed description of the pricing terms, conditions, and assumptions. Please refer to the pricing data sheet in Appendix C.
- 6.7.8 The Respondent must incorporate in its pricing the cost of Developer Attachment Facilities (as defined in the LGIA), including a listing of the equipment comprising the Developer Attachment Facilities.
- 6.7.9 The Respondent must provide a separate estimated cost of (i) Connecting Transmission Owner's Attachment Facilities and (ii) System Upgrade Facilities²⁰ in its Proposal. The Respondent should also include separately the potential cost of filing an application for Capacity Resource Interconnection Service ("CRIS"); however, as discussed (see Appendix F), it should not file for CRIS unless and until instructed by PSEGLI or LIPA. All of these estimated costs should be included in the Respondent's pricing proposal.

¹⁹ As defined in the BOOT Contract.

²⁰ As defined in BOOT Contract.

6.8 Company Data and Relevant Experience

The Respondent must provide the following information about its company and experience:

- Company name, address, and telephone number. Must also include the name, address, telephone number, and email address of the primary point of contact for the Respondent in connection with its Proposal.
- Legal status (e.g., corporation, partnership, Limited Liability Company), date formed, jurisdiction of organization, and identification of any relevant affiliates.
- Ownership status (e.g., privately held or publicly traded).
- Guarantor information, if applicable:
 - Company name, address, and telephone number. Must also include the name, address, telephone number, and email address of the primary point of contact for Guarantor.
 - Legal status (e.g., corporation, partnership, Limited Liability Company), date formed, jurisdiction of organization, and identification of any relevant affiliates.
 - Ownership status (e.g., privately held or publicly traded).
- If a consortium submits a Proposal in response to this RFP, the consortium will clearly
 provide information on its legal form and on each of its members. The consortium will
 identify the member responsible for providing all financial security, executing the Energy
 Storage Contract(s), and providing Products to LIPA.
- Company history and experience in the areas of development, financing, construction, and operation of grid-connected energy generation projects, including energy storage resources and transmission projects. Please note if any of these projects used contract models similar to a BOOT or BOT. The response should include project names, related capacity (in MW), technology, COD, and location.
- List of existing energy storage resources developed, owned, and/or operated by the Respondent.
- References for all listed projects, including contact name, company, telephone number, email address, and project name.
- Organizational chart that describes the reporting relationships of all the Respondent's key
 personnel and team members/partners along with resumes and team experience in
 developing similar projects.
- Details pertaining to proposed engineering, procurement, and construction (EPC) contractor's experience as applicable and available.
- Detailed description of the Respondent's familiarity and experience with NYISO requirements applicable to the energy storage resources.

6.9 Project Description

- 6.9.1 The Respondent must provide a full and complete detailed description of the proposed Project including technology and nominal capacity (both real and reactive).
- 6.9.2 The Respondent must provide a full and complete detailed description of the businesses, residences, and other pertinent land uses surrounding the location of the proposed Project site.
- 6.9.3 If the Project is located on a site provided by the Respondent, the Respondent must provide the site size (acreage), existing site conditions, adjacent land uses, nearby structures and facilities, and environmental conditions or requirements.

6.10 Technical Response

- 6.10.1 Technology Description
- 6.10.1.1. The Respondent must provide a full and complete detailed description of the technology being proposed and the reasons it is commercially viable.
- 6.10.1.2. The Respondent must include a listing of all similar projects in which it has previously incorporated the proposed technology, including the size (MW and time duration for which the full rate MW power can be sustained), location, and COD of each.
- 6.10.1.3. If the Respondent is proposing a BOOT Contract, it must provide the projected Equivalent Availability²¹ (%) for the Project for each year of the term.
- 6.10.1.4. The Respondent must provide a summary of planned outages, or the percent of time during a year, that the Project would be scheduled to be out of service for routine maintenance.
- 6.10.1.5. The Respondent should confirm that its Project will meet the Technical Specifications set forth in Appendix E. Any exceptions to these Technical Specifications should be clearly stated and will be reviewed in the evaluation. It must be emphasized the nature and extent of any exceptions taken will be a major factor in the qualitative evaluation of Proposals. Respondents that demonstrate a willingness to accept the Technical Specifications with no, or few, non-

²¹ As defined in BOOT Contract.

material exceptions will be given more favorable consideration in the qualitative evaluation. No further exceptions will be accepted after Proposal Submittal Deadline.

6.10.2 One-Line Diagram

- 6.10.2.1. The Respondent must provide a comprehensive one-line diagram describing all electrical equipment related to the Project associated with interconnecting with the T&D System. The one-line diagram must clearly show (i) the POI, (ii) the Point of Change of Ownership²², (iii) the Delivery Point, and (iv) all metering points. The one-line diagram should also clearly show which facilities (specifically identifying equipment, e.g., transformers, breakers, switches, cables) comprise the Developer Attachment Facilities and which facilities comprise the Connecting Transmission Owner's Attachment Facilities. Subsequent to being selected to receive an award, the Respondent may not make any changes to the one-line diagram unless otherwise approved by LIPA (or LIPA's agent) at its sole discretion.
- 6.10.2.2. If multiple Projects offered in the RFP are proposed to connect to the T&D System at the same POI, the interconnection feasibility for such Projects will be conducted on a portfolio basis.
- 6.10.3 Site Layout²³
- 6.10.3.1. The Respondent must provide a layout of the Project site using a white background, including site boundaries, access, location of equipment and buildings, and interconnection routing (showing all underground cables and overhead lines) from the Project to the POI.
- 6.10.3.2. The Respondent must provide a layout of the Project using an aerial background, including site boundaries, access, location of equipment and buildings, and interconnection routing from the Project to the POI.
- 6.10.4 Technical Criteria Data Sheet

The Respondent must complete the data form contained in Appendix B for its Proposal.

6.10.5 Energy Storage Equipment

The Respondent must provide the following information for its Project:

• Manufacturer name and model of the energy storage medium proposed.

²² As defined in the LGIA.

²³ If a Respondent is using a site subject to LIPA's Schedule F rights, the site layout will be considered subject to potential modification to avoid interference with National Grid operations per requirements of Schedule F (see Section 2.9).

- Equipment specifications for storage modules, power converter, meters, communication equipment, disconnect devices, and other related facilities.
- Description of any limitations to the operation of the Energy Storage Equipment.
- Information about any degradation of energy storage capacity expected as a result of age or utilization, including how the degradation will be addressed to maintain Project capacity.
- Dispatchable capacity rating.
- Number of cycles per year.
- Guaranteed round-trip-efficiency.
- Minimum and Maximum run times per charge and discharge.
- Guaranteed Ramp Rate.²⁴
- Preferred resting state of charge range.
- Description of communication systems incorporated into the resource for reasons of resource control and/or monitoring.
- Standby losses.²⁵

6.11 Commissioning

- 6.11.1 Description and expected duration of the proposed program for testing and commissioning.
- 6.11.2 Information about any PSEGLI support that will be required for performance of the commissioning tests (i.e., PSEGLI personnel in the substation during commissioning).
- 6.11.3 PSEGLI personnel must be permitted to witness all Commissioning tests.

6.12 Project Execution Plan

- 6.12.1 The Respondent must provide a detailed description of how they intend to complete the Project and how the Project will have the capability to deliver Products to the T&D System.
- 6.12.2 The Respondent must provide background information concerning the major contractors it intends to utilize. Describe the nature of the intended labor force and how it expects to complete the Project without labor delays.

²⁴ Guaranteed Ramp Rate is defined as the minimum response rate of the Project expressed as a percentage (%) of the Contract Capacity per minute that the Respondent agrees to provide for a specified time subject to liquidated damages for failure to perform.
²⁵ Standby losses are defined as the power consumption when the energy storage inverter is not injecting any real or reactive current and that when a non-zero MW command or VAR command is received, the energy storage would be in position to immediately follow the command. This includes auxiliary power, thermal management power, and power for all other equipment necessary.

- 6.12.3 The Respondent must describe the status of Project development and permitting activities as of Proposal submission date, including a detailed list of all permits received (including dates received), permits applied for, and all permits needed (including expected dates) to achieve commercial operation of the Project.
- 6.12.4 The Respondent will be required to keep PSEGLI informed of the Project's progress during the permitting and construction phases, including the timely provision of all updated Project development schedules. Accordingly, the Respondent shall provide a description of the process that would be used to periodically (bi-weekly during permitting phase and weekly during the construction phase) update PSEGLI on Project progress, including any impacts on the schedule for completing commercial operation.
- 6.12.5 The Respondent must provide a community outreach plan for its Project and evidence of community support. Evidence of community support can be in the form of correspondence from local elected officials and community groups. The community outreach, which must be performed by the Respondent, shall meet the community outreach standards of PSEGLI and LIPA.
- 6.12.6 The Respondent must specifically identify any NYS or Long Island based companies that will be involved in the development of its Project.
- 6.12.7 The Respondent must identify any certified MWBE or SDVOB that will be involved in the development, operation, and maintenance of its Project. If applicable, a Project may not receive a contract unless it meets the target goals for MWBE and SDVOB or receive a partial or full waiver. The Proposal should include completed and executed copies of all required MWBE Forms 100, 101, 102, 103, 104, and 105, as applicable. See Section 9.0 for additional information.

6.13 Financial Plan (for BOOT Contracts)

- 6.13.1 The Proposal must contain evidence of the Respondent's financial condition and financial capacity to complete and operate the Project as evidenced by a Financial Plan, the details of which must be included in the Proposal. The Proposal must provide:
 - A detailed description of proposed short- and long-term financing arrangements (including construction and permanent financing).
 - A list of all equity partners, sources of equity and debt, debt structure.
 - Demonstration that financial arrangements are sufficient to support the Project through construction and the Term.²⁶
 - Description of proposed capital structure for the Project.

²⁶ As defined in the BOOT Contract.

- A schedule showing all major projects financed by the Respondent or a financier in the past 10 years.
- Details of any events of default or other credit issues associated with all major projects listed above.
- Information concerning the Respondent's financial condition and evidence of creditworthiness including:
 - One of the following:
 - The audited financial statements for its three most recent fiscal years.
 - The audited financial statements from the Respondent's parent, if the Respondent does not have financial statements requested above.
 - A statement describing why the audited financial statements required above cannot be supplied and provide alternate information to demonstrate the Respondent's financial capacity to complete and operate the proposed Project.
 - Four financial references from prior projects developed by the Respondent that employed financing arrangements similar to the arrangements contemplated by the Respondent for the Project.

6.14 Financial Plan (for BOT Contracts)

- 6.14.1 The Proposal must contain evidence of the Respondent's financial condition and financial capacity to complete the Project as evidenced by a Financial Plan, the details of which must be included in the Proposal. The Proposal must provide:
 - Demonstration that financial arrangements are sufficient to support the Project through permitting, construction, and commission through COD.
 - A schedule showing all major projects financed by the Respondent in the past 10 years.
 - Details of any events of default or other credit issues associated with all major projects listed above.
 - Information concerning the Respondent's financial condition and evidence of creditworthiness including:
 - One of the following:
 - The audited financial statements for its three most recent fiscal years.
 - The audited financial statements from the Respondent's parent, if the Respondent does not have financial statements requested above.
 - A statement describing why the audited financial statements required above cannot be supplied and provide alternate information to demonstrate the Respondent's financial capacity to complete and operate the proposed Project.

 Four financial references from prior projects developed by the Respondent that employed financing arrangements similar to the arrangements contemplated by the Respondent for the Project.

6.15 Schedule and Development Plan

- 6.15.1 The Proposal must include a detailed Project schedule including:
 - Community outreach
 - Permitting
 - Environmental review
 - Financial milestones
 - Contracting milestones
 - Engineering and design milestones
 - Major equipment purchases
 - Construction milestones
 - Interconnection milestones
 - Testing
 - Commercial Operation

6.15.2 The following provisions/guidelines must be used in preparation of the Project schedule:

- Include the Respondent's name prominently on each page of the schedule.
- Utilize monthly timescales.
- Prepare the schedule in graphic format as horizontal bar charts (i.e., Gantt) in landscape orientation.
- Provide task name, duration, start date, completion date, and predecessors for each task.
- Clearly identify all critical path activities.
- Utilize sheet sizes no larger than 11x17 inches.
- Schedule needs to clearly account for the LIPA approval process described in Section 7.3.
- 6.15.3 The schedule should assume that Proposal selection by LIPA occurs on or about the planned Proposal Selection Date specified in Table 4-1 in Section 4.0. If such date is delayed, selected Respondents shall be permitted to modify its Project schedule to reflect the delay period. Otherwise, the Respondents will be required to adhere to the schedule incorporated in its Proposals.

- A Project schedule showing key milestones for the Project development must be included in the Proposal.
- The development plan includes a permitting plan, community outreach plan, and interconnection transmission plan (together, the "Development Plan"). The three components of the Development Plan and its respective requirements are as follows:
 - Permitting Plan—Including a list of all required environmental, regulatory, and other agency/municipal reviews, permits, and approvals.
 - Community Outreach Plan—Including a description of community benefits and evidence of community support.
 - Interconnection Transmission Plan—Plans for the development of any necessary transmission facilities from the generating resource to the POI, if applicable.

6.16 Permitting and Site Control Documentation

- 6.16.1 The Respondent shall list all permits required for the Project to obtain commercial operation and to operate successfully. If permits have already been obtained, the Respondent shall provide copies. If permits have not been obtained, the Respondent shall provide a plan and schedule for obtaining all permits required for achieving commercial operation.
- 6.16.2 If the Project is located on a site provided by the Respondent, the site must be controlled by the Respondent through either fee ownership, a land lease, option to lease or purchase, or equivalent demonstration of site control. The Respondent must provide evidence of such site control in its Proposal. Such evidence shall ensure that the site control is unconditional, e.g., the site is not the subject of a dispute; not subject to sale, or lease or right of first refusal with any party. The Proposal must include a map showing the location of the Project site.
- 6.16.3 If the Project is located on a site provided by the Respondent, the Respondent shall provide (i) a description of the site's characteristics, including identification of the zoning for the site and a description of whether the proposed Project is a permitted use under the local zoning code or has received or is reasonably expected to receive a zoning code waiver that will allow the Project to be built and operated; (ii) a discussion of any known sensitive environmental features on or adjacent to the site such as wetlands, historic properties, ongoing hazardous materials remediation, residences, or other sensitive noise receptors; and (iii) a discussion of storm-resistant features and other reliability features.
- 6.16.4 A Respondent who is offering a Project on a site that it owns or will control must propose to sell the site to LIPA and includes the price, terms, and conditions of the sale in its Proposals. For a Respondent who is offering a Project on a site that it leases from a third party, the lease term needs to be at least 21 years from the COD for a BOT Contract and 14 years from the transfer date for a BOOT Contract, both preferable with one or more options to extend or an option to purchase, and

the Respondent needs to be able to assign the lease to LIPA without consent or approval from any third parties at COD for a BOT Contract or at the transfer date for a BOOT Contract.

- 6.16.5 A Respondent who is offering a Project on a site potentially available through LIPA needs to complete LIPA's Preferred Site Lease, which will be posted on the RFP's Website per the schedule shown in Section 4.0 and may take exceptions to this document by using a redline mark-up in Microsoft Word using "Track Changes" to show any insertions, deletions, or other proposed changes, which must include proposed text, as applicable and include this document in its Proposal.
- 6.16.6 Respondents are encouraged to negotiate and be able to transfer to LIPA agreements for payments in lieu of taxes (PILOTs) on Project sites. Respondents should identify and discuss any PILOTs that are part of its Proposals, including a breakout the cost of PILOTs in its pricing.

6.17 Respondent's Markup of LIPA's BOT/BOOT Documents

- 6.17.1 A Respondent must choose one of the two contract model options for its Proposal. LIPA's BOT/BOOT Documents associated with each contract model will be posted on the RFP Website per the schedule shown in Section 4.0.
- 6.17.2 As set forth in Section 2.5, to the extent that a Respondent has any exceptions to either of LIPA's BOT/BOOT Documents, the Proposal must include a "redline" of the document showing any insertions, deletions, or other changes, which must include proposed alternative text, as applicable. Alternatively, if the Respondent accepts LIPA's BOT/BOOT Documents "as is," provide a statement so indicating.
 - Redlines must be provided using "Track Changes" in Microsoft Word.
 - The Respondent's modifications that are not clearly identified using "Track Changes" will not be evaluated.
- 6.17.3 LIPA expects that the Respondents who select a BOOT Contract will structure its Proposals under arrangements that result in the selected Respondent being the owner of the Project during the contract term for federal income tax purposes and, as a result, obtaining Modified Accelerated Cost Recovery System ("MACRS") Accelerated Depreciation deductions for federal income tax purposes and the Investment Tax Credit (the latter if applicable). In this context, LIPA is seeking Proposals for an arrangement under which it will purchase the Project at the end of the contract term for a fixed price ("Buyout Purchase Payment") that is established at the time that the agreement is entered into by the parties based on the estimated fair market value of the Project at such time (the "Estimated Fair Market Value"). This arrangement should also include the sale of the Project site to LIPA or a lease of at least fourteen (14) years following the transfer to LIPA. The

Buyout Purchase Payment (see Section 6.7.3) shall represent the fair market purchase value of the Project determined at the end of the seven (7) year term. A Respondent shall include a financial model for purposes of determining the Buyout Purchase Payment with assumptions to be agreed to by the parties subject to the Respondent's tax counsel's opinion that the aggregate payments and buyout purchase payment will qualify under IRS rules to provide Respondent with MACRS Accelerated Depreciation treatment for the Project. The ultimate Buyout Purchase Payment, to be arrived at the end the term shall use the financial model and agreed upon assumptions, but shall be subject to a collar of \pm 10 percent of the Estimated Fair Market Value included in the Respondent's proposal.

- 6.17.4 If the Respondent selects a BOOT Contract and chooses to locate the Project on land owned or acquired through LIPA, the related ground lease to the Respondent will have a term that is co-terminus with the BOOT Contract. If the Respondent chooses to locate the Project on land that LIPA does not own, LIPA will again seek an arrangement under which it purchases that land in connection with its purchase of the Project. This would, for example, include a fixed price that is established at the time that the BOOT Contract is entered into by the parties.²⁷
- 6.17.5 If the Respondent selects a BOT Contract and chooses to locate the Project on land owned by LIPA or to be acquired through LIPA, LIPA would provide a license to the Respondent for the land during the development period and then the license would be extinguished upon the Project's transfer to LIPA.
- 6.17.6 For Respondents electing the BOT Contract, note that one of the appendices to be incorporated in the final BOT Contract (see Section 7.1.5) will be a draft Engineering, Procurement, Construction ("EPC") Term Sheet setting forth a summary of the terms and conditions that LIPA expects the selected Respondent to negotiate with the EPC contractor engaged by the Respondent to design and construct the Project. The EPC Form Term Sheet will be posted on the RFP Website per the schedule shown in Section 4.0.
- 6.17.7 In submitting a Proposal, the Respondent should consider and discuss whether its Project would be eligible for federal investment tax credits or any other favorable tax treatment.

6.18 Conditions Precedent for the Energy Storage Contract

For a proposed Project that is subject to the SEQRA, the LIPA Board cannot act to authorize execution of the Energy Storage Contract until the SEQRA review is complete. Any SEQRA application by the Respondent must ensure that LIPA is included as an "involved agency" and that LIPA shall be provided a

²⁷ See Section 6.17.3.

copy of the Respondent's SEQRA application and all related documents. The Respondent shall promptly provide LIPA with written evidence upon the completion of its SEQRA review.

6.19 Technical Specifications Compliance Statement

A Proposal for an energy storage resource submitted in response to this RFP must include a statement committing the Project to meeting all of the Technical Specifications for energy storage resources set forth in Appendix E. In the event the Respondent has exceptions to any of these requirements, each exception shall be identified, and the committed performance shall be described in detail. It must be emphasized that the nature and extent of any exceptions taken will be a major factor in the qualitative evaluation of Proposals. Respondents that demonstrate a willingness to accept the Technical Requirements with no, or few, non-material exceptions will be given more favorable consideration in the qualitative evaluation. No further exceptions will be accepted after Proposal Submittal Deadline.

6.20 Interconnection Requirements Compliance Statement

A Proposal for an energy storage resource submitted in response to this RFP must comply with all of the interconnection requirements for energy storage resources set forth in Appendix F.

6.21 Procurement Forms

Each Proposal must include signed and completed copies of the following procurement forms, which are available on the RFP Website (links to these forms can be found in Appendix H):

- Contingent Fee Certification
- Contractor Disclosure of Prior Non-Responsibility Determinations
- MacBride Fair Employment Principles
- Non-Collusive Bidding Certification
- NYS Vendor Responsibility Questionnaire/Certification
- Workforce Employment Utilization
- Equal Employment Opportunity Policy Statement
- Sexual Harassment Policy
- Staffing Plan

6.22 Confidentiality

6.22.1 As a corporate municipal instrumentality of the State of New York, documents provided to LIPA in response to this RFP are presumptively available to the public under New York's Freedom of

Information Law (FOIL), Public Officers' Law (POL) Article 6. Respondents are strongly encouraged to familiarize themselves with FOIL.

- 6.22.2 The Respondent shall indicate in its Proposal, consistent with Section 87(2) of the POL, what information, if any, should <u>not</u> be made publicly available by marking such information as "confidential."
- 6.22.3 Information marked "confidential" will be treated as such to the extent consistent with obligations under FOIL, other applicable law, regulation, or legal process and will not be disclosed except as required by law or as necessary for the evaluation of Proposals.
- 6.22.4 In the event that a FOIL request is received for any or all Proposals submitted in response to this RFP, notification of the FOIL request will be provided to the submitting Respondent pursuant to Section 89(5) of the POL.

6.23 Respondent Proposal

Appendix B contains a link to a Microsoft Excel file formatted so that the Respondent can provide a summary of its entire Proposal for easy reference. Please fill in this data form with all pertinent information regarding the Proposal.

6.24 O&M Pricing and Term Sheet (for 2nd Proposal only)

- 6.24.1 The Respondent is encouraged to provide a 2nd Proposal that includes pricing and a term sheet for O&M services for each Project submitted. These services are needed for 20 years for a Project with a BOT Contract and for 14 years for a Project with a BOOT Contract to correspond to LIPA's period of ownership.
- 6.24.2 The Respondent shall ensure that its pricing and term sheet for O&M services includes compliance with the O&M technical requirements set forth in Section E.22 of Appendix E.

7.0 PROPOSAL EVALUATION & SELECTION

7.1 Evaluation Process

- 7.1.1 The evaluation of Proposals will be conducted pursuant to the requirements of the "LIPA Procurement Guidelines," a public document that is available on the RFP Website.²⁸
- 7.1.2 PSEGLI utilizes a multi-phase evaluation process to evaluate Proposals. This evaluation process considers qualitative and quantitative attributes with the intent to ensure a fair and non-discriminatory evaluation process while simultaneously selecting the best projects through the procurement. The evaluation process is managed by the evaluation process that also considers interconnection feasibility and interconnection costs.
- 7.1.3 The evaluation process may request a Respondent to clarify its Proposal for the purpose of assuring a full understanding of its response to the RFP by asking the Respondent written questions during the evaluation process.
- 7.1.4 Interviews (and possibly site visits) may be scheduled with Respondents whose Proposals continue to be under consideration during the later portion of the evaluation process. Such Respondents are each referred to as a "Finalist."
- 7.1.5 Finalists that propose a BOT form of agreement will be provided a draft of LIPA's Preferred Build-Own-Transfer Contract ("BOT Contract") for review. Within fifteen (15) days of the receipt of the BOT Contract draft, a Finalist may provide any exceptions to the BOT Contract predicated on exceptions that may have been included in its Proposal pertaining to the BOT Term Sheet. Such exceptions will be included in the final evaluation of the Proposals prior to selection.
- 7.1.6 If designated as a Finalist, a Respondent may be requested to execute a "Key Terms Summary," which will be based on (i) Respondent's Proposal, (ii) Respondent's exceptions (if any) to LIPA's BOT/BOOT Documents, (iii) Respondent's replies to clarifying questions, and (iv) information provided by the Respondent during the interview. If the Respondent's Proposal is ultimately selected, the Key Terms Summary will represent the starting point for contract negotiations.
- 7.1.7 During the evaluation process more than one Finalist may be designated and each Finalist may be requested to submit a "best and final offer" prior to making selection recommendations.
- 7.1.8 Prior to final selection, LIPA will conduct a vendor responsibility determination and may require eligible Respondent(s) to answer questions and provide additional information to supplement the

²⁸ <u>https://www.lipower.org/about-us/proposalsbids/</u>

information provided in the NYS Vendor Responsibility Questionnaire to assist the evaluation process in making such a determination. Vendors should file the required Vendor Responsibility Questionnaire online via the NYS VendRep System. To enroll in and use the NYS VendRep System, see the VendRep System Instructions²⁹ or go directly to the VendRep System online.³⁰ Vendors must provide its NYS Vendor Identification Number when enrolling. To request assignment of a Vendor ID or for VendRep System assistance, contact the OSC's Help Desk:

Telephone: (866) 370-4672 or (518) 408-4672 Email: ITServiceDesk@osc.state.ny.us

7.1.9 LIPA reserves the right to waive non-material deviations in a Proposal. Non-material deviations are deviations and/or omissions the waiving of which, at LIPA's and PSEGLI's discretion, does not disadvantage LIPA customers, does not provide a competitive advantage to the Respondent, and/or will not prejudice other Respondents or potential Respondents.

7.2 Evaluation Criteria

- 7.2.1 The evaluation of Proposals will be done in accordance with the following quantitative and qualitative evaluation criteria. The criteria below are not necessarily listed in the order of importance.
- 7.2.2 The quantitative evaluation criteria include the all-in costs of the Proposal to LIPA customers. This evaluation includes an assessment of the net present value and annual costs that the proposed Project would impose on the customers, taking into consideration factors including:
 - Proposed pricing, including cost of land or lease.
 - Costs for required transmission and/or distribution reinforcements not included in the proposed pricing.
 - Savings from T&D deferrals, if any.
 - Mitigation of renewable energy curtailments.
 - Impacts on operational flexibility.
 - System impacts, including impact on operating reserve requirements, transmission transfer capability, NYISO capacity requirements, renewable generation curtailment benefits, deliverability, and ancillary services.
 - The financial impact of the Project on LIPA purchases and sales from the NYISO administered capacity and energy markets, including impact on operating reserve requirements for the Long Island electric system.

²⁹ VendRep System Instructions: <u>http://www.osc.state.ny.us/vendrep/vendor_index.htm</u>

³⁰ VendRep System: <u>https://portal.osc.state.ny.us/</u>

- Provisions for pass-through of costs: LIPA's BOT/BOOT Documents do not include provisions for pass-through of costs.³¹ Exceptions to the LIPA's BOT/BOOT Documents that create risks associated with pass-through costs will be assessed by the evaluation process and may economically disadvantage a Proposal.
- 7.2.3 The qualitative evaluation criteria include:
 - Conformance with/exception to the applicable technical specifications (Appendix E)
 - Development and schedule risk
 - Site control
 - Site characteristics
 - Terms of the lease (if any)
 - Accommodating LIPA's strong preference to purchase a site rather than lease or if Respondent is unable to sell the site to LIPA offering a suitable long-term lease
 - Ability to permit the Project
 - Community acceptance
 - Environmental impacts
 - Ability to meet the target COD
 - Exceptions to LIPA's BOT/BOOT Documents, if any
 - Financial plan
 - Financial qualifications
 - Experience with development on Long Island
 - Respondent's experience
 - Operating flexibility
 - Equipment selection and warrantees
 - History of equipment reliability over claimed lifetime
 - Feasibility, timing and cost of electric system interconnections and upgrades
 - Use of MWBE subcontractors and use of SDVOBs to the extent required by this RFP (see Section 9.0 for more information)
 - If applicable, firmness of property tax/PILOT agreements with governmental authorities and associated risks (only for BOOT Contracts)
 - Contributions to meeting CLCPA objectives
 - Benefits to disadvantaged communities

³¹ PILOT payments and Station Service Energy are exceptions.
- Consistency with LIPA's resource planning objectives, including enabling the retirement of peaking units and integration of offshore wind
- Enables the integration of offshore wind
- Risks imposed upon LIPA

7.3 Selection Process

- 7.3.1 As noted in Section 7.1, the evaluation process will be conducted in phases.
- 7.3.2 More than one potential final selection (each a "Finalist") to meet the same capacity need and may request each Finalist to submit a "best and final offer" prior to making its selection recommendation.
- 7.3.3 After a final selection(s) has been made, selected Respondent(s) will be notified. Each Respondent will be expected to submit its application for an interconnection request to the NYISO for its Project within 30 days of such notification, if they haven't already done so.
- 7.3.4 Following such notification, PSEGLI and the selected Respondent(s) will begin negotiations of either the BOT Contract or BOOT Contract, depending on which contract model was proposed by the Respondent(s). The final negotiated contract shall be subject to approval by the LIPA Board for execution upon completion of applicable environmental reviews. LIPA may disclose to the public the estimated total contract value of any contract submitted for approval to the LIPA Board.
- 7.3.5 Once the LIPA Board approves the contract for execution, an authorized LIPA officer will execute the Energy Storage Contract.
- 7.3.6 The Energy Storage Contract shall not be valid, effective, or binding until approved by the NYS AG and OSC and filed in the Comptroller's officer, in accordance with Section 112 of the NYS Finance Law. No payment for services may be made under the contract until the required approvals have been obtained.

7.4 Debriefing of Unsuccessful Respondents

- 7.4.1 Upon written request to the Designated Contact(s), an unsuccessful Respondent may request a debriefing. Debriefings will be scheduled after notice has been provided of selection of the successful Respondent(s).
- 7.4.2 Discussions during any such debriefing will be limited to an analysis of the evaluation of the Proposal submitted by the Respondent requesting the debriefing. Comparisons between Proposals or evaluations of the other Proposals will not be discussed.
- 7.4.3 Debriefings may be conducted, in person or by telephone, at PSEGLI's discretion.

8.0 RESERVATION OF RIGHTS

8.1 General

- 8.1.1 This RFP is issued to elicit responses to PSEGLI's/LIPA's inquiry and is not an offer. No contract or binding obligation on PSEGLI or LIPA may be implied from this RFP. No contract will be formed between any Respondent and LIPA unless and until a written contract is executed by a selected Respondent and LIPA on the terms and conditions acceptable to LIPA and reviewed and approved in accordance with state law (See Section 7.3.6).
- 8.1.2 All material submitted in response to this RFP will become property of LIPA, except those returned to the Respondent as described herein.
- 8.1.3 Following selection, a Respondent may be requested to participate in negotiations and to submit price, technical, or other revisions to its Proposal that may result from such negotiations.

8.2 Right to Reject

This RFP does not commit PSEGLI or LIPA for making a selection, awarding a contract, paying any costs associated with the preparation of a Proposal, or procuring or contracting for any Project whatsoever. PSEGLI or LIPA, based on consultation with PSEGLI, reserves the right, in its discretion, to accept or reject any or all responses to this RFP, to negotiate with any and all Respondents being selected for award, or to cancel this RFP in whole or in part and to pursue other resource alternatives, which may include negotiating with entities that were not Respondents.

8.3 Right to Bifurcate Proposal Selection

This RFP does not commit PSEGLI or LIPA to making all selections or awarding all contracts to Respondents at the same time.

8.4 Limitations on Changes

- 8.4.1 A Respondent may be requested to clarify information in its Proposal(s), but they may not alter its Proposal(s) or otherwise submit any additional information after the Proposal Submittal Deadline, except as permitted under Section 8.4.2. Prohibited changes include pricing increases, changes in the electrical output of a proposed Project, and significant changes in the design of a Project (such as change in the manufacturer of electrical equipment that results in different operating characteristics).
- 8.4.2 The following changes are allowed after the Proposal Submission Deadline:

- During the latter stages of the evaluation, PSEGLI may request all short-listed Respondents to provide a "best and final offer," which may involve one or more enhancements to its Proposals, including changes that provide greater benefits or lower cost to LIPA customers.
- PSEGLI may determine that it is beneficial for a proposed Project to be interconnected to a different location than identified in the Proposal. This may be due to overloading of a given substation or system upgrade cost considerations. In this case, the cost difference between the proposed interconnection and the preferred interconnection may be reflected in the Proposal pricing.
- Respondents may need to relocate its site boundaries due to unforeseen circumstances. This site relocation may be deemed to be a material change or a non-material change depending on the documented and verifiable reasons presented for this change. PSEGLI reserves the right to decide as to materiality.
- 8.4.3 PSEGLI has endeavored to supply useful information in this RFP and the associated RFP Website. However, no representation or warranty, express or implied is made as to the accuracy or completeness of any information contained herein or otherwise provided to any Respondent by or on behalf of PSEGLI. Respondents are encouraged to conduct its own investigation and analysis of any and all information contained herein or otherwise provided.

9.0 MWBE PARTICIPATION/EQUAL EMPLOYMENT OPPORTUNITY

9.1 NYS MWBE Participation/Equal Employment Opportunity

- 9.1.1 PSEGLI and LIPA are committed to diversity and equal employment opportunities among its contractors and encourage all firms, including firms that are MWBE certified, to submit Proposals in response to this RFP. All certified MWBE firms submitting Proposals to this RFP should be registered as such with the NYS Department of Economic Development. Firms that are not certified but have applied for certification shall provide evidence of filing, including filing date.
- 9.1.2 For purposes of this solicitation, PSEGLI and LIPA hereby establish an overall subcontracting goal of 30% (15% for MBE participation and 15% for WBE participation).
- 9.1.3 The Respondent shall include its MBE and WBE proposal data, including a utilization plan detailing how the 15% MBE and 15% WBE participation goals will be met, and include the names of MBE/WBE firms to be utilized.
- 9.1.4 The Respondent shall provide a copy of the arrangement(s) made with the MBE or WBE (MWBE Form 103).³²
- 9.1.5 If a Respondent is certified as a NYS MBE or WBE, they shall provide evidence of this certification in its Proposal. The Respondent is to complete LIPA's Diversity Questionnaire, which incorporates MWBE Forms 101 and 102.
- 9.1.6 For full or partial waiver requests, the Respondent must document and certify its good faith efforts to meet or partially meet the MWBE utilization goals. Page 2 of MWBE Form 104 provides the instructions and steps for firms to document good faith efforts.
- 9.1.7 If there is an endorsement of the certification of the good faith efforts of a full or partial waiver request during the process of evaluating a Proposal, the waiver request will then be submitted to the NYS Executive Chamber requesting its concurrence of the full or partial waiver.
- 9.1.8 Proposal documents should include completed and executed copies of all required MWBE Forms 100, 101, 102, 103, 104, and 105, as applicable.

³² NYS M/WBE Directory: <u>https://ny.newnycontracts.com/FrontEnd/VendorSearchPublic.asp</u>

- 9.1.9 All forms noted in this RFP section (Section 9.0) are available on the RFP Website. Respondents are encouraged to visit the Division of Minority and Women's Business Development's website.³³ For more information, Respondents may contact the following:
 - Empire State Development
 - General Contact: (212) 803-3100
 - Certification Helpline: (212) 803-2414
 - Department of Economic Development's Division of Minority and Women's Business Development
 - General Contact: (518) 486-9284

9.2 NYS SDVOBs

- 9.2.1 This RFP has a NYS SDVOB goal of 6%. The Respondent shall identify how they intend to achieve the NYS SDVOB goal of 6%.
- 9.2.2 If a Respondent is certified as a NYS SDVOB, they shall include evidence of this certification in its Proposal.
- 9.2.3 For more information regarding NYS SDVOBs, Respondents are encouraged to visit the NYS Office of General Services webpage.³⁴

³³ Division of Minority and Women's Business Development website: <u>http://esd.ny.gov/MWBE.html</u>

³⁴ NYS Office of General Services webpage: <u>http://www.ogs.ny.gov/Core/SDVOBA.asp</u>

APPENDIX A. RESPONDENT CHECKLIST

Please check the following boxes to indicate that the Proposal is complete and meets the minimum requirements for the RFP Proposal Sections. This completed checklist should be submitted with the proposal; however, it remains the Respondent's responsibility to ensure the completeness of its Proposal.

Proposal Sections

- Documentation of Proposal Fee Submittal
- □ Cover Letter
- □ Table of Contents
- □ Executive Summary
- □ Disclosures
- □ Pricing and Costs (Appendix C)
- □ Company Data and Relevant Experience
- Project Description
- □ Technical Response (Appendix E)
- □ Commissioning
- Project Execution Plan
- Financial Plan
- □ Schedule and Development Plan
- □ Permitting and Site Control Documentation
- Description of Benefits to Disadvantaged Communities
- □ Respondent's Markup of LIPA's BOT/BOOT Documents (on the RFP Website)
- □ Conditions Precedent for Energy Storage Contract
- □ Technical Specifications Compliance Statement
- □ Interconnection Requirements Compliance Statement (Appendix F)
- □ Procurement Forms (on RFP Website)
- □ Confidentiality
- □ Respondent Proposal (Appendix B)
- □ O&M Pricing and Term Sheet (for 2nd Proposal only)

APPENDIX B. RESPONDENT DATA FORM

Please complete the Excel file and submit the information in the Excel file. The Excel file is available on the RFP Website at

www.psegliny.com/aboutpseglongisland/proposalsandbids/2021BulkEnergyStorageRFP.

APPENDIX C. ENERGY STORAGE PRICING

Please complete the Excel file and submit the information in the Excel file. The Excel file is available on the RFP Website at www.psegliny.com/aboutpseglongisland/proposalsandbids/2021BulkEnergyStorageRFP.

APPENDIX D. THRESHOLD REQUIREMENTS FOR COMMERCIAL VIABILITY

Respondent must demonstrate that its proposed technology has been in continuous commercial operation (except for routine maintenance) for a minimum of three years in energy storage projects connected to the bulk power systems of electric utilities in the United States with such projects having an aggregate dispatchable capacity of at least 20.1 MW and 80 MWh.

APPENDIX E. ENERGY STORAGE SPECIFICATIONS

E.1. ENERGY STORAGE RESOURCES

This RFP solicits Proposals for energy storage resources that will be interconnected to the Long Island electric grid. Proposals will be evaluated against the objectives of this RFP by adaptation of the specifications contained herein.

E.2. APPLICABLE RULES AND STANDARDS

E.2.1. NYISO and LIPA Interconnection Rules

All proposed Projects must adhere to the NYISO's Large Generator Interconnection Procedures and all NYISO Rules & Tariffs. Respondents are encouraged to seek information about potential POIs in accordance with LIPA's Interconnection Requirements.^A

E.2.2. LIPA's Non-Synchronous Performance Generator Requirements

Inverter-based energy storage resources shall follow LIPA's Non-Synchronous Performance Generator Requirements for Bulk Power System^B – Connected Inverter-Based Resources.

E.3. SYSTEM DISPATCH AND RESOURCE BIDDING

For some use cases and the BOOT Contract, Projects will be bid into NYISO by PSEG Energy Resources and Trade. The Respondent shall provide all information required to allow PSEGLI to bid the Project and must agree to provide all information required by NYISO. The Respondent shall operate the Project in a manner that complies with NYISO rules and requirements.

E.4. LOCATIONAL REQUIREMENTS AND INFORMATION

E.4.1. General Security

Any LIPA energy storage facility must be a separately fenced facility with a separate gate and considered a separate LIPA facility with unique call letters. This will facilitate O&M by a third party without an escort.

E.4.2. Storm-Resistant Location and Facilities

Energy storage resources and interconnection facilities shall comply with the requirements of the NYS Building Code, ASCE 7-16 edition. Wind loads shall be for a NOAA Category III Hurricane consisting of a sustained wind of 129 MPH for 60 seconds and converted to a 3-second wind gust over land of 159 mph

^A LIPA's Interconnection Requirements: <u>https://www.psegliny.com/aboutpseglongisland/legalandregulatory</u>

^B LIPA's Non-Synchronous Performance Generator Requirements for Bulk Power System: https://www.psegliny.com/aboutpseglongisland/-/media/787F7080CA8843B482B8F40F69A8C8FD.ashx

(VASD – allowable) or 201 mph (VULT – ultimate). The conversion factor shall consider Risk Category IV structures and based upon Exposure Category C.12.

E.4.3. Resource Interconnection Point

Energy storage resources shall be connected to the LIPA T&D System at a POI greater than or equal to 69 kV.

E.4.4. Environmental Conditions

The environmental conditions used for design and performance calculations shall be no less severe than the values listed in Table E-1.

Environmental Conditions			
Category	Requirements		
Maximum Ambient Dry-Bulb Temperature	105°F		
Maximum Ambient Wet-Bulb Temperature	80°F		
Minimum Ambient Air Temperature	-20°F		
Maximum Daily Average Ambient Air Temperature	90°F		
Minimum Daily Average Ambient Air Temperature	10°F		
Maximum Relative Humidity	100%		
Minimum Relative Humidity	10%		
Average Annual Rainfall	45 inches		
Extreme Rainfall	3 inches/hour		
Ice Loading Conditions	3/4 inches		
Maximum Ground Snow Depth	24 inches		
Maximum Frost Depth	3 feet		
Flood Preparation (Design)	Ability to withstand 1 in 500 years Flood Zone concerns		
Keraunic level (number of thunderstorm days per year)	30 days/year		
Contamination Level	Salt Laden Atmosphere within 1,000 feet of ocean and seaways (HEAVY per IEEE C57-19-100, Section 9.1.1, Table 1)		
Seismic Data	NYS Building Code Z = 0.18 (The Z numerically corresponds to effective peak acceleration in g on rock/stiff soil S1 conditions—shear wave velocities of about 2,500 feet/second.		

Table E-1 — Assumed Environmental Conditions

E.5. BATTERY ENERGY STORAGE SPECIFIC TECHNICAL REQUIREMENTS

This section applies to Proposals for Projects employing battery energy storage systems and covers specific technical requirements for battery energy storage systems devices that interconnect to the T&D System via inverters. All specifications listed in this document still apply in addition to the requirements in this section.

E.5.1. Design Life

The battery energy storage systems shall have a design life of 20 years. All equipment shall have a minimum 20-year design life unless otherwise specified or required by applicable codes, standards, and regulations. Details on the program to meet the 20-year design life will be provided in the contract section.

The Respondent shall provide a description of programs and plans supporting a design life of 20 years. These programs and plans include monitoring, inspections, testing, specifications, thresholds for taking actions, and anticipated schedules for said actions. Examples of specific actions include augmentation, replacement, oversizing, or a combination thereof.

The Respondent shall provide battery degradation curves including a table of the estimated annual MWh output of battery energy storage systems for Year 0 through Year 20.

E.5.2. Electrical Losses and Parasitic Loads

The Respondent shall provide documentation in its Proposal of the electrical losses of the bulk energy storage system (BESS) as a function of power in the charging and discharging modes in increments of 10% of power rating, including identification of the parasitic loads the BESS will need during the charging and discharging cycles. The BESS discharge power rating shall be net of these parasitic loads and electrical losses that are present in the system up to the POI.

E.6. SYSTEM LOSSES

The Respondent is to provide the following as a function of power level starting at 10% intervals for both charging and discharging modes and show values from 10% up to 100%:

E.6.1. Auxiliary Losses (Idling/Standby)

- HVAC
- control power
- transformer no load losses

E.6.2. Load Losses

- transformer
- inverter
- cabling
- batteries

E.6.3. Electrical Studies

- E.6.3.1. The following studies will be required to demonstrate the adequacy and design and performance of the battery energy storage systems:
 - **Circuit Design**—A report and single-line diagrams will need to be presented to describe the main circuit design of the battery energy storage systems. In this report, the analysis for the rating of the main low- and medium-voltage components shall be presented. Power system characteristics shall be clearly stated, and a summary of the rating of the battery energy storage systems components shall be given.
 - **Control Strategy Documentation**—In this report, the control strategies implemented in the control system shall be described in detail.
 - Arc Flash Analysis—In this report, the battery energy storage systems arc flash incidence levels, appropriate approach distances, and required personal protective equipment levels should be identified.
 - Harmonic Analysis.
 - Short Circuit and Load Flow Analysis Reports.
 - Grounding Analysis.
 - Loss Evaluation—In this report, the total battery energy storage systems losses shall be calculated and compared with guaranteed values. Explanations to discrepancies, if any, shall be given. The final Loss Evaluation report shall be based on component loss data obtained from factory tests as available from equipment suppliers.
- E.6.3.2. The Respondent shall submit the complete UL 9540a report for the Project. UL 9540a testing shall be conducted on the proposed battery at the cell, module, and unit level. The full test report shall be provided for each of these tests at the time of proposal submission. Batteries that require installation level testing due to results in the cell, module, or unit level tests shall be considered unacceptable for this RFP. A sufficient number of cells shall be forced into thermal runaway to create a condition of a cell-to-cell propagation within the module during the tests. UL9540a testing and testing for characteristics of the offgas (constituents, burning velocity, PMax, etc.) shall be conducted in the United States.

E.7. FUNCTION CHARACTERISTICS

E.7.1. Autonomous Functions

The charging and discharging of the battery energy storage systems can be scheduled at a given power setpoint and duration or for a total energy amount. The Respondent shall submit a detailed description of the functionality of the proposed control.

E.7.2. Energy Storage System Limits

The Respondent is responsible for providing the following information to cover energy storage system (ESS) limits and self-protection:

- A description of all self-protection functions.
- The quantified threshold/limits of protection.
- The consequence of limits/protection functions taking action.
- The process of recovery after entering limits of protection functions asserting.
- The alarms associated with all limits and protection functions.
- The controls in place design to avoid activating protections that cause de-rates or shutdown of the equipment.

E.7.3. Battery Management System

- E.7.3.1. The Respondent is responsible for providing a battery management system (BMS) that will ensure the health and safety of the battery energy storage systems, independent of all outside environmental conditions, controls, and charge/discharge commands.
- E.7.3.2. The Respondent is responsible for providing an overview of the function and operation of its BMS. It is expected the following values will be measured, calculated, recorded, and/or available for review:
 - rack voltage
 - rack current
 - cell voltage
 - cell temperature
 - module voltage
 - rack state of charge (SOC) estimation
 - system SOC estimation
 - rack state of health (SOC) estimation
 - system SOH estimation

- Ensure that the battery is following charge and discharge algorithms.
- Identification of anomalous data points or trends and alarms for impending failure and alarms as provided from the BMS.
- E.7.3.3. The BMS shall provide the following control functions:
 - Battery string balancing to equalize the state of charge among the different strings.
 - Isolation of a string or module, if required.
- E.7.3.4. The Respondent shall provide an overview of battery energy storage systems self-protection functions and limits. The overview shall include:
 - A description of all self-protection functions.
 - The quantified threshold/limits of protection.
 - The consequence of protection functions taking action.
 - The process of recovery after entering limits of protection functions asserting.
 - The alarms associated with all limits and protection functions.
 - The controls in place designed to avoid activating protections that cause derating and/or shutdown of equipment.
- E.7.3.5. The BMS shall be capable of communicating with a central control system.

E.8. HVAC SYSTEM

- **E.8.1.** The Respondent shall provide adequate heating and cooling capacity to ensure that the battery equipment can be maintained within battery OEM temperature specifications for the life of the battery energy storage systems when operated at the base use case.
- **E.8.2.** Supplying two independent power supplies for the HVAC system is the Respondent's responsibility.
- E.8.3. The Respondent shall provide documentation including conceptual design of the thermal management system, quantification of HVAC loads (in terms of electrical power consumption for average and peak HVAC operation), temperature regulation bands, approach to system design (including which components are water-cooled and which are air-cooled), HVAC maintenance requirements (i.e., filter replacement, coolant replacement), and periodicity of HVAC maintenance.

E.9. ENERGY MANAGEMENT SYSTEM

E.9.1. Each battery rack is typically comprised of multiple battery modules and one BMS module. The BMS is designed to ensure autonomous, fundamental, and critical safety at the most basic level

of the entire ESS. The BMS continuously monitors voltage, temperature, and current readings. If the BMS senses a deviation from normal operating conditions, it will send a signal to upstream controllers and eventually will independently isolate the rack to prevent hazardous conditions from developing.

E.9.2. The Respondent shall submit a detailed description of the functionality of the proposed control. Operational function and operating modes can be configured as needed per the application of the battery energy storage systems. The charging and discharging of the ESS can be scheduled at a given power setpoint and duration or for a total energy amount, as described in the "Control Modes" section of Table E-2.

Control Modes			
Auto SOC	Commands the ESS to charge or discharge at a defined power to reach and maintain the desired SOC.		
Auto Export	Commands the ESS to export at a defined power level for either a given time or a given total energy amount.		
Auto Import	Commands the ESS to import at a defined power level for either a given time or a given total energy amount.		
SOC Management Modes			
None	No SOC Management. The power is limited if the SOC is outside of the battery/PCS limits.		
Automatic	When the global SOC is outside of the SOC high and SOC low limits, the power shall be curtailed to 0 kW unless the Control Mode Setpoint is moving the SOC away from the triggering SOC limit.		
Power Limit	Automatic charge or discharge for a set time or to an SOC Level when trigger by reaching the SOC high/low limit		
P/Q Management			
Voltage Control	Further information on these control modes can be found in LIPA's Non-Synchronous Performance Generator Requirements.*		
Ramp Rate Limit	Further information on these control modes can be found in LIPA's Non-Synchronous Performance Generator Requirements.*		
Power Factor	Further information on these control modes can be found in LIPA's Non-Synchronous Performance Generator Requirements.*		

Table E-2 — Control Modes and Functions

* Available at https://www.psegliny.com/aboutpseglongisland/-/media/787F7080CA8843B482B8F40F69A8C8FD.ashx

E.10. BATTERY ENERGY STORAGE SYSTEMS SAFETY REQUIREMENTS

Any structure or container enclosing lithium-ion cells must be constructed of non-combustible material and must meet or exceed the fire rating requirements defined in the following sections.

E.10.1. BMS Requirements

- E.10.1.1. The individual BMS shall be interconnected to the fire and gas detection and alarm system. Upon detection of smoke or flammable gas vapors exceeding the flammability level established by the Project during detailed engineering, the fire and gas detection and alarm system shall initiate isolation and shut down some or all battery systems installed within the affected container. The final design shall determine if the normal mechanical ventilation system shall be shut down, and an audible and visual signal at the main fire and gas detection and alarm panel will be initiated at exterior appliances at the impacted container and a constantly attended location. If flammable gas vapors exceeding the flammability level established by the Project during detailed engineering are detected, the fire and gas detection and alarm system shall activate the emergency exhaust mechanical ventilation system.
- E.10.1.2. The BMS shall be rated to operate in temperatures of at least 120°F. The power supply for the BMS shall come from a source other than the installed batteries. Upon detection of a thermal runaway event by the BMS or fire detection system, the BMS shall activate the ventilation system within the cabinets and enclosure to remove flammable gasses. The power and communication cables for the BMS located inside of the container shall be a minimum of two-hour rated cable in accordance with UL 2196 and shall be routed away from the battery stacks prior to exiting the enclosure.
- E.10.1.3. The primary source of auxiliary power for the energy storage resource shall be from auxiliary power taken from the distribution system and procured by the Respondent. The Respondent may use internal energy as a backup power source.

E.10.2. Hazard Mitigation Analysis

- E.10.2.1. A hazard mitigation analysis shall be conducted by a professional engineer with proficiency in fire protection engineering and provided to PSEGLI for review and approval. The qualified individual must possess a valid license in the state of installation of the battery energy storage systems. This analysis is an evaluation of potential battery energy storage systems failure modes and the safety-related consequences attributed to the failures. At a minimum, the analysis shall evaluate the consequences of the:
 - thermal runaway conditions;
 - failure of the BMS and energy storage management system as a whole;
 - failure of the required ventilation or exhaust system; and
 - failure of the required systems (fire, gas, smoke, exhaust or ventilation, and deflagration).

E.10.2.2. The hazard mitigation analysis shall also include a design basis that describes all of the mitigations to these events (including all active and passive system described in this specification) and any associated assumptions and/or calculations.

E.10.3. Fire Detection System

- E.10.3.1. An approved fire detection system in accordance with NFPA 72 shall be provided. The spacing of the smoke detectors shall consider the airflow within the container per requirements in NFPA 72. The addressable fire panel shall report to a remote fire panel to allow for the fire department or other first responders to monitor the conditions within the enclosure. All signals shall also be transmitted individually to an off-site monitoring center for 24/7/365 monitoring.
- E.10.3.2. The remote fire panel shall have the ability to monitor and activate the ventilation system. The power and communication cables for the fire panel located local to the container shall be a minimum two-hour rated cable in accordance with UL 2196. The fire alarm system shall have relays installed to send signals to the BMS for ventilation system activation.

E.10.4. Gas Detection System

A UL-listed/FM-approved gas detection system compliant with NFPA 72 shall be provided to detect hydrogen off-gas. The gas detection system shall alarm both the BMS and fire alarm panels. The gas detection system shall provide a numerical value (percent of LEL) at the local and remote fire alarm panels for first responders. These values shall also be transmitted to an off-site monitoring center for 24/7/365 monitoring. The gas detection system shall consist of multiple detectors whose placement shall account for the airflow within the container. The power and communication cables for the gas detection system located inside of the container shall be two-hour rated cable in accordance with UL 2196.

E.11. CAPACITY REQUIREMENTS

E.11.1. Site Continuous Power Capacity (Valid for T&D Deferral Use Cases Only)

E.11.1.1. Please see the requirements for the two deferral use cases in Appendix G.

E.11.2. Reactive Power Capacity

Each energy storage resource shall follow LIPA's Non-Synchronous Performance Generator Requirements with respect to reactive power capacity.

E.12. INTERCONNECTING TRANSMISSION SYSTEM CHARACTERISTICS

The following describes the electrical system characteristics at the POI when the system is interconnected with the greater transmission system. In addition to the electrical system characteristics

described below, the Respondents shall adhere to all requirements listed in LIPA's Performance Requirements for Transmission-Connected Resources Using Non-Synchronous Generation.^C

E.12.1. Maximum & Minimum Short-Circuit Current

For the POIs specified in Appendix G, ultimate short-circuit capacity is the value to be used for substation design short-circuit withstand calculations and switchgear rating. Maximum capacity is the short-circuit level in the present system with all generation on Long Island in service. Minimum short-circuit capacities is the lowest level to be normally encountered, without any lines or transformers out of service. The minimum contingency level is the most severe line outage condition for which the energy storage resources are required to remain in unrestricted operation, while synchronized with the T&D System.

E.12.2. Steady-State Electrical Characteristics

The steady-state (continuous) electrical characteristics of the transmission system at a typical POI are specified in Table E-3. Voltages are specified in per unit and percent of the nominal voltage, respectively. Energy storage resources shall operate without restriction over these ranges.

System Parameters		Values	
Normal Continuous AC System Voltage Range		0.95–1.05 p.u.	
Maximum Continuous Negative-Sequence Voltage Component		2% of nominal voltage	
Maximum Zero-Sequence Voltage Component		1% of nominal voltage	
Ambient Voltage Distortion	2nd harmonic	1.0%	
	3rd harmonic	0.6%	
	4th harmonic	0.6%	
	5th harmonic	3.5%	
	7th harmonic	2.0%	
	6th, 8th, 9th, 10th, 12th harmonic	0.3%	
	11th, 13th harmonic	0.5%	
	Harmonics n > 13	0.2%	
	Total Harmonic Distortion	4.0%	
Nominal Frequency		60.0 Hz	
Normal System Frequency Range		59.95 Hz–60.05 Hz	

Table E-3 — Transmission System Steady-State Characteristics

^C LIPA Performance Requirements: <u>https://www.psegliny.com/aboutpseglongisland/-</u>

[/]media/787F7080CA8843B482B8F40F69A8C8FD.ashx

This document may be updated during the course of the RFP process. Respondents should monitor the RFP Website for a notice regarding any updates.

E.12.3. Fault Clearing Times

The fault clearing times for the 69-kV and 138-kV LIPA transmission systems are provided in Table E-4. The primary clearing time is the sum of the time required for relay reaction to the initial fault condition and the local breaker clearing time. The backup clearing time is the duration of the primary relay breaker failure timer and the backup breaker clearing time.

Voltage Level	69 kV	138 kV
Primary Clearing	7 cycles	5 cycles
Backup Clearing	22–54 cycles	9–35 cycles
Reclose Delay	3 to 120 cycles (instantaneous to 2 seconds).	3 to 120 cycles (instantaneous to 2 seconds).

Table E-4 — LIPA Transmission System Fault Clearing and Reclose Delay Times

E.13. INTERCONNECTION PROTECTION

- E.13.1. This battery storage facility would have its own control power and alternate control power (street feed). The only electrical connection to a LIPA substation would be the transmission/distribution primary connection and any related protection fiber communications.
- E.13.2. The Project shall contain protective relaying features, circuit breakers, or fuses that will self-protect the Project in the case of internal electrical faults.
- E.13.3. All protective relays must be SEL relays and the model numbers and firmware must be approved by PSEGLI. Each SEL relay shall have FT test switches. The SEL relays and FT test switches must be wired to the PSEGLI standard. All switchgear protection-related equipment must use ABB FT switches. FT-1 switches for relays and meters are to have lamacoids placed above them describing the use of FT blades for that switch.
- E.13.4. All relay settings and coordination studies must be provided by the vendor and the settings should be provided to PSEGLI. In addition, the following requirements must be met by the Respondent:
 - Provide one line, relay functional, three-line AC, DC schematics, and wiring drawings. All drawings including wiring must be to PSEGLI standard and must be approved by PSEGLI. PSEGLI will provide sample drawings that must be used as a basis for developing site-specific drawings. Sample drawings can be provided upon request.
 - Provide redundant SEL protective relays at interconnection breaker. For line relaying, the LIPA standard is for a SEL-311L and SEL-411L both using 87L, 21P, 21G, and 67N. For a 138-kV Project, relay and panel separation with two batteries is required. Two diverse fiber routes are also required.

- All relay, breaker close, and trip circuits must be monitored by loss of DC relay that alarm to supervisory control and data acquisition (SCADA).
- Provide visual indicating light showing the "open" and "close" status of the breaker. A green light must be used to indicate an open breaker and red light must be used to indicate a closed breaker. The red light would be wired in series with the trip coil.
- Provide an Electro Industries Shark 200 meter for voltage and current monitoring. The ABB FT switches must be provided for all voltage and current inputs to the Electro Industries Shark 200 meter.
- Provide control handle (Electroswitch CSR model 8857DC) to electrically close and open the interconnection breaker.
- All switchboard AC and DC control wiring must-have ring lung terminations.
- All CTs must be terminated on a CT shorting terminal block (Marathon type 1512) at first termination from CT.
- All terminal blocks for control wiring must be Marathon Type 1512.
- Switchgear protection-related equipment must use yellow CT wiring.
- Provide inverter short circuit characteristics and ASPEN model.
- 13-/69-/138-kV breaker shall be wired to be tripped open by LIPA SCADA.
- Terminal and shorting blocks shall be barrier type with marker strip down the center. Only the GE EB25 terminal block is acceptable, Catalog #EB25-12 for 12 point, EB27A06S for shorting blocks (multiratios), and EB27A08S (single ratio). They shall not be located within 10 inches of the floor. Each terminal shall be numbered or marked in a clear, easy to read manner, with wire identifications that refer to the designations used on wiring diagrams.
- No. 14 AWG stranded tinned copper conductor with minimum 600-volt flame resistant insulation Type SIS or equivalent shall be used for the general small wiring. No. 14 AWG, 41-strand wire or No. 12 AWG, 65-strand wire shall be used across all door or panel hinges. Wires shall be bundled according to function. Communications cables shall be #18 shielded twisted pair. Control, CT, and communications wires shall be physically separate.
- All microprocessor devices shall be grounded with 105-strand, Type SIS #10 wire to ground bar, Rockbestos Catalog # A83-0116. All six leads from all sets of current transformers shall be brought out to shorting type terminal blocks. PK-2 type test blocks are not acceptable as shorting terminal blocks. If the set of CTs is to be connected in WYE, the three neutrals will be jumpered together at the shorting terminal block. This will facilitate future testing of individual CTs. Any delta connections that are required shall be made at the shorting terminal blocks. Differential circuits shall first go to the shorting terminal block, then to a standard terminal block in series. This is to allow any differential CT to be isolated from the differential circuit by shorting the shorting terminal block and lifting the leads off of the standard terminal block. Using this system, other CTs in the differential circuit will not have to be disturbed. Grounding of the CTs should not be done in the primary breaker

compartment. If the CT ground needs to be lifted during testing, the ground connection must be accessible in the "secondary" compartment.

- All wiring in the CT circuit shall be full length yellow jacketed. Wiring utilizing yellow sleeving or markings at terminations is not acceptable.
- All wiring shall have compression-type, uninsulated, tinned copper, barrel ring tongue lug terminations only, Burndy Type YAV uninsulated ring tongue lugs only.
- No fuses, terminal blocks, relays, or other devices are to be mounted on the removable panels supplied as access to high-voltage bus compartments or at locations that impede the panel removals.
- All wires are to be furnished with distinct wire marker sleeves. Wire markers are to be placed on each end of the wire and shall indicate the from/to destination and wire identification. Wire marker nomenclature shall be consistent with the wiring drawings.
- No meter, instrument, or relay shall be mounted on panels closer than 10 inches to floor without notifying PSEGLI and/or LIPA. The control handle shall be located 48–52 inches from the floor of the cubicle.
- Control panel indicating lamps shall be of the low-burden, GE Company Type ET-16 or equivalent. Receptacles shall be satisfactory for use with General Electric Catalog 116B6708G43 or equivalent LED bulbs. Where a blue light is required, vendor shall supply Cat. 1168B6708G43B53B4 and replace the amber lens cap with a blue lens cap, Part No. 286A5443P.
- Additional protection requirements can be found in the LIPA transmission interconnection guide.
- E.13.5. Refer to *E-100058 Part 2 REV General Requirements for Fabrication of Relaying Control* panels.doc, *E-100058 Part 1 Rev 2016 Control panel Design fabrication and wiring requirements.doc*, and Appendix B of *Relay BOM.xls* for panel and wiring standards for all relaying panels. Typical part numbers of the control and protection equipment that must be used are provided in the bill of materials.

E.14. INTERCONNECTION FACILITIES

E.14.1. Cybersecurity Requirements

E.14.1.1. Respondents must comply with the NERC cybersecurity requirements, which can be found on the RFP Website (and in Appendix H), as applicable.

E.15. OPERATING MODES (VALID FOR T&D DEFERRAL USE CASES ONLY)

The energy storage resource will be dispatched by PSEGLI via SCADA in order to secure the system for local limiting contingencies.

E.16. OPERATING MODE TRANSITIONS

The energy storage resource will be dispatched by PSEGLI via SCADA to secure the system for local limiting contingencies.

E.17. DATA & COMMUNICATION SYSTEM, SCADA, EMS INTERFACE, ALARMS, MONITORING, AND OPERATIONS REQUIREMENTS

E.17.1. Monitoring

Monitoring requirements to include voltage, current, real power, and reactive power. The data acquisition system shall have 30 days of on-site data storage and the capability access remotely and download data.

E.17.2. Data Acquisition

- E.17.2.1. The data acquisition/monitoring/alarm system or procedures shall have a minimum of the following capabilities:
 - Alert PSEGLI, via SCADA, when the number of failed or inadequately performing cells or other respondent-determined conditions indicate that preventative maintenance should be performed to keep the Project at the specified performance levels.
 - The Project is in imminent danger of failing to meet specified performance levels or potential safety hazards exist.
 - The Project can no longer meet the specified performance criteria or safety hazards exist.
 - The Respondent shall have the capability to remotely monitor the Project and independently and automatically be alerted to alarm conditions without relying on PSEGLI personnel to communicate such an alarm condition exists. The Respondent shall have the capability to respond to alarm conditions and provide required service to correct such alarm conditions within four hours from the inception of the alarm condition.
 - The Respondent shall include, in the Operation and Maintenance Manual, the recommended corrective action and maintenance procedures for each alarm level or observed condition provided.
 - Monitor points shall include AC voltage, current, power factor, kW, kVA, kvar, and DC-DC voltage. Points of monitoring are to be determined during design. Also, the data acquisition system temperature shall be monitored at a minimum of four points.
 - The data acquisition system should have the ability to remotely access and monitor the data as well as have a 30-day on-site memory storage capacity.
 - Data points shall have the ability to be recorded at a minimum of 1 minute, with the capability for instantaneous collection of data when data is outside of set parameters.

- E.17.2.2. The ramp rate of charging and discharging of the Project shall be programmable or set to a defined value by manually entering a value into the HMI or by the PSEGLI SCADA system communicating a ramp rate set point.
- E.17.2.3. The Project control system shall be designed to provide for automatic, unattended operation. The control system design also shall provide for local manual operation, remote operation, or dispatch from PSEGLI's SCADA system or remote access point. All modes of operation and operational set-point functionality shall be remotely adjustable from the PSEGLI offices to allow change in settings and to turn on/off all controls or modes when appropriate.

E.17.3. SCADA Integration

- E.17.3.1. The SCADA design and Project control system interface shall be integrated with PSEGLI's existing SCADA system via Verizon TLS/MPLS communication network. The Project remote terminal unit (RTU) will remain in constant communication with the LIPA-owned EMS system in Hicksville.
- E.17.3.2. The engineering tasks shall include the following:
 - DNP 3.0 serial protocol is to be utilized for all communications between the Project control system interface and SCADA RTU.
 - DNP 3.0 map of all I/O points and controls on local Project control system HMI must be available and inclusive to the SCADA system for monitoring and control.
 - Additional and identifiable points or controls, if not provided initially through Project control system interface base offering, must be programmed into the interface with SACAD RTU (e.g., fire system activation and integrity, building entry, breaker status).
 - A provided SCADA points list shall be prepared by the Respondent and submitted to PSEGLI for review and approval.
 - The Project control system interface will have the ability to accept control set point signals from the SCADA master station via RTU.
 - Respondent shall facilitate and ensure all sensor calibrations and system testing to PSEGLI SCADA.
 - Provide monitoring access and control access to all modes of operation, SOC, available duration at various output levels, kW/kvar set points, kW/kvar flow, local/remote control, and alarms/status.
 - Work items shall include all labor, materials, test equipment, and engineering required to complete SCADA communication integration.
 - The respondent shall provide complete testing procedures for the equipment and control system and provide commissioning of the SCADA RTU integration. The prepared testing procedures shall be submitted to PSEGLI for review and approval

before any testing work is done. A final report detailing the work completed, all test forms, and any marked-up drawings shall be submitted to PSEGLI.

E.17.4. EMS Interface

E.17.4.1. Remote Terminal Unit

EMS interfaces (SCADA RTU) shall be provided by the Respondent and shall be located at the energy storage resource site and interconnected with the energy storage resource controls to facilitate dispatch of the energy storage resource by the PSEGLI System Operator. Refer to Appendix B of *E-100001 Part 3 RTU Specification for LIPA interconnection.doc* for details on specifying Telvent RTU.

E.17.4.2. Interoperability

The EMS interface with the energy storage resource shall provide full interoperability as defined in IEEE 1547-2018.

E.17.4.3. Operator Human Interface

The human interface for the T&D System Operator will be via the EMS SCADA RTU. Separate terminals, display units, or consoles for the energy storage resource will not be used.

E.17.4.4. System Operator Inputs^D

The following control inputs for each energy storage resource shall be available to the T&D System Operator via the SCADA interface:

- initiation and deactivation of the standby mode
- dispatched power level
- AVR voltage reference
- AVR voltage droop
- frequency regulation setpoint
- frequency regulation droop setting

E.17.4.5. SCADA Monitoring Points

The following system states shall be measured and available for monitoring by the T&D System Operator via the SCADA interface:

- POI voltage
- real power output

^D More points may be required to be monitored during design stage discussions.

- reactive power output
- frequency
- Operating mode status
- available energy (for discharge) and available energy headroom (for charge)

E.18. METERING

The revenue metering requirements for each energy storage resource will be consistent with the latest applicable version of LIPA's Revenue Metering Requirements for Independent Power Producers.

E.19. OTHER REQUIREMENTS

E.19.1. Audible Noise

The maximum sound level generated from the Project and any associated equipment supplied by Respondent under any output level within the Project operating range shall be limited to 65 dBA during the daytime and 55 dBA at night at the Project site boundary.

E.19.2. Grounding

- E.19.2.1. A suitable equipment grounding system shall be designed and installed for the Project. The grounding system shall provide personnel protection for step and touch potential in accordance with IEEE 80. The system also shall be adequate for the detection and clearing of ground faults within the Project.
- E.19.2.2. This system shall be bonded to the substation grounding system at two separate location points, as agreed between the Respondent and PSEGLI. The Respondent shall determine, design, and install the required interconnections between the Project and the substation grounding systems.
- E.19.2.3. PSEGLI shall self-perform the alterations needed to the substation grounding grid and install the connections from the existing ground grid to the external grounding locations points of the Project.

E.19.3. Structural/Foundation Pads/Conduit

E.19.3.1. The Respondent shall furnish the design for the structural components of the Project, concrete pads/foundations as required, and buried conduit required for the Project. All foundations and structures, if required, shall be designed by an engineering firm, having a Certificate of Authorization to provide Engineering and/or Land Surveying Services in New York State, and a qualified registered professional engineer licensed in the State of New York. All final (Issued for Construction) drawings, specifications, and calculations shall be

stamped by a registered civil/structural engineer licensed in the State of New York. The Respondent is responsible for geotechnical engineering investigation and land surveying as required.

E.19.3.2. PSEGLI will self-perform the installation of the concrete pad/foundation and buried conduit installation for any facilities required inside the substation. The Respondent will be responsible for installing conduits and cables from the PMH gear (demarcation between PSEGLI and Project) to the switchgear at the substation. This work will be conducted under the guidance and oversight of the PSEGLI project manager.

E.19.4. Safety Certifications

- E.19.4.1. The energy storage system must be certified to meet minimum safety requirements by a Nationally Recognized Testing Laboratory as evidenced by applicable UL listings.
- E.19.4.2. These UL listings must be received by the time the system enters Commercial Operation.

E.19.5. Spill Containment

The Project design shall mitigate against electrolyte spills that are credible for the types of cells used. The design shall include features that contain electrolyte spills (to be emptied by a contracted chemical disposal company in the event of a spill) and prevent discharge to surrounding site soils.

E.19.6. Personnel Safety

The Project shall include eyewash stations in the battery area as applicable. Eyewash stations must be selected and installed in accordance with the latest OSHA-applicable codes. The Project shall be designed with personnel safety as the top priority.

E.19.7. Spare Parts

Identify, obtain, and store adequate spare parts for the Project.

E.20. SYSTEM VERIFICATION AND TESTING

E.20.1. Respondent shall perform system verification and testing as necessary and prudent to demonstrate proper operation of the energy storage resource in conformance to these specifications. The testing program shall be described by the Respondent in its Proposal and the scope and content of this program will depend on the technical characteristics of the energy storage resource solution proposed. The testing program shall include field-testing in the T&D System and simulator or other testing, as necessary. Field-testing shall not include any staged faults or other severe disturbances of the T&D System.

- E.20.2. Respondent shall perform commissioning tests to verify the proper installation, connection, and functional performance of the energy storage resource including all control modes and protection systems.
 - Detailed commissioning test plans and a preliminary test schedule shall be submitted to PSEGLI for review and approval 60 calendar days prior to commencement of any commissioning tests that involve interconnection with the T&D System, exclusion of the provision of auxiliary power. This test plan shall include at least the following:
 - a full cycle of the cells;
 - verification of balance of rack voltages within agreed tolerances;
 - verification of energy capacity by a full on-site cycle of the BESS; and
 - verification of losses within agreed tolerances of the specification as part of the full on-site cycle of the BESS.
 - PSEGLI will be promptly informed by the Respondent of any changes to the commissioning tests or schedule.
 - PSEGLI shall be provided documentation of commissioning test results within 30 days of the completion of commissioning.
 - Any on-line testing will be coordinated through the T&D System Operator.

E.21. TRAINING

The Respondent shall provide the number of hours and price quote for training PSEGLI employees on the specifications, capabilities, and operation of the installed energy storage system upon completion of the Project. The training will be conducted both on-site and off-site. The respondent shall provide a price quote on the training package offered on energy storage. The package shall include both training on site, off-site and shall cover specifications, capabilities, and operations of the installed battery. This effort shall include further guidance on providing transmission operations and planning on the modeling of energy storage in its respective simulation models.

E.22. O&M TECHNICAL REQUIREMENTS

The Respondent's 2nd Proposal, if submitted, must include the following specific technical requirements:

- Preventive maintenance and corrective/demand maintenance for relay protection systems including protection system DC supply, substation equipment not specific to the bulk energy storage (e.g., transformers, breakers, switchgear), and bulk energy storage-specific equipment (e.g., batteries, inverters, cooling equipment, control systems for operating bulk energy storage).
- A complete program for NERC CIP and PRC compliance of bulk energy storage equipment that is classified as bulk electric system equipment or bulk electric system cyber systems including documentation for the compliance program and evidence of compliance.

- A complete program for NERC CIP Compliance and maintenance of all NERC CIP documentation and evidence and preparation of appropriate RSAWs on a yearly basis for submittal and review to PSEGL NERC Compliance Group.
- Provision of all laptops for battery storage equipment and if the battery storage facility is considered BES (low or medium impact) the service provider must provide and maintain a Transient Cyber Asset and a NERC CIP Compliant Transient Cyber Asset program for LIPA and provide all required Transient Cyber Asset NERC CIP documentation for review to LIPA's designated internal compliance group.
- A program for NERC PRC Compliance (PRC-002 [if required], PRC-004, PRC-005, PRC-018, etc.) and maintenance of all NERC PRC documentation and evidence and preparation of appropriate RSAWs on a yearly basis for submittal and review to LIPA's designated NERC compliance group.
- Maintenance and storage of all preventive and demand maintenance test records and making them available for inspection and for transfer to LIPA at any time.

APPENDIX F. INTERCONNECTION REQUIREMENTS

- F.1. Respondents proposing a Project in this RFP that would connect to the LIPA T&D system (POI at 69 kV or higher) must follow and adhere to the NYISO Large Generator Interconnection
 Procedures as applicable and must execute the NYISO LGIA as the "Developer."
- F.2. Respondents are encouraged to seek information about potential points of interconnection in accordance with LIPA's interconnection procedures, which are available on the RFP Website.
- F.3. Projects connecting to the T&D System must be in compliance with (i) the Large Generator Interconnection Procedures requirements, (ii) LIPA's Long Island T&D Design Criteria as set forth on PSEGLI's website, and (iii) all other applicable interconnection requirements set forth in Appendix F.
- F.4. Respondents must submit interconnection applications through the NYISO interconnection process within 30 days after the receipt of notification of Project selection from LIPA. Respondent must remain active in the applicable interconnection queue for a proposed Project until that Project has been interconnected.
- F.5. Project interconnection requests should be submitted as energy-only requests; however, at the discretion of LIPA, selected projects may be required, at LIPA's option and expense, and with timing subject to LIPA's discretion, at any time after selection and during the contract period to apply for Capacity Resource Interconnection Service ("CRIS"). It should be noted that LIPA has certain options to acquire CRIS rights that may be available for transferring to Project(s) selected in this procurement pursuant to NYISO rules. If a Respondent is selected and LIPA decides that CRIS rights are beneficial for the Project, PSEGLI/LIPA will work cooperatively with Respondent to attempt to transfer such CRIS rights to the Project; however, PSEGLI/LIPA make no representation that such attempt will be successful and assume no liability for the outcome.
- F.6. Each Project must have a single exclusive NYISO point of interconnection, be able to send/receive the electronic signals of PSEGLI/LIPA and meet NYISO communications requirements to enable participation in NYISO Markets. Respondents will be responsible for all activities and costs associated with NYISO and/or PSEGLI/LIPA communications requirements to enable participation in NYISO Markets.
- F.7. All Projects connecting to the T&D System must include direct transfer trip and SCADA in its design.
- F.8. All Project facilities and associated interconnection facilities must be designed and constructed to be compliant with the applicable provisions, including those related to wind loads, of the American

Society of Civil Engineers (ASCE) Standard 7-16 ("Standard 7"), Minimum Design Loads and Associated Criteria for Buildings and Other Structures, or Standard 7's latest revision at the time of RFP issuance. Project facilities and interconnection facilities are deemed Essential Facilities in Risk Category IV and Exposure Category C, as defined in the Standard 7. An illustrative approximation, the applicable provisions of ASCE's Standard 7-16 for wind loads approximately corresponds to loads that likely would be experienced during a Category 3 hurricane as defined on the Saffir-Simpson Hurricane Wind Scale, with 3-second gust speeds over land of between 122 and 142 miles per hour.

- F.9. Project facilities and interconnection facilities must be designed and constructed to be compliant with the applicable provisions ASCE's Standard 24-14 (Standard 24), Flood Resistant Design and Construction. Project facilities and interconnection facilities are deemed Essential Facilities in Flood Design Class 4, as defined by Standard 24.
- F.10. All Projects must comply with all applicable state, county, town or local municipality laws, ordinances, or regulations in effect as of the effective date of the contract, and as any such laws, ordinances or regulations may be promulgated or amended during the Term.

F.11. TREATMENT OF INTERCONNECTION COSTS

- F.11.1. LIPA will own and construct all Project related Connecting Transmission Owner's Attachment Facilities, System Upgrade Facilities, and System Deliverability Upgrades (jointly referred to as "Interconnection Costs" in the BOOT Contract). Pursuant to the LGIA, Respondent is responsible for reimbursing LIPA for such costs. If Respondent proposes a BOOT contract and seeks to treat Interconnection Costs as pass-through costs, LIPA in its sole discretion, may elect to waive reimbursement in lieu of including such costs in BOOT pricing. The projected impact of the interconnection cost on LIPA ratepayers will be considered in the evaluation of the Proposal.
- F.11.2. Costs associated with the O&M of any interconnection facilities associated with the Project shall be borne by the Respondent during the term of the BOOT Contract (i.e., such costs shall not be a pass-through to LIPA).
- F.11.3. Respondents will assign its responsibilities under the LGIA as the "Developer" to LIPA (i) upon the Project's Commercial Operation for BOT Contracts and (ii) at the expiration of the term for BOOT Contracts. After such assignment, Respondents will have no further cost responsibility associated with interconnection.

APPENDIX G. DEFERRAL REQUIREMENTS

G.1. OVERVIEW

- G.1.1. PSEGLI has identified two POIs, Southold 69-kV and Glenwood 138-kV substations, for the deferment of transmission lines discussed below. In the following sections, information is provided on the background of the transmission need in these locations and the battery energy storage systems solution recommendations to meet the need.
- G.1.2. These two POIs and a summary of the requirements being sought in this RFP at these POIs are shown on an interactive Google map.^E

G.2. DEFERRAL POINTS OF INTERCONNECTION

G.2.1. POI: Southold Substation – Greenport, New York

The "East End" of Long Island consists of two geographical areas referred to as the "North Fork" and the "South Fork." Southold acts as an electrical focal point that connects both areas. It is located at the northeastern tip of Suffolk County in Long Island. The substation is fed by two 69-kV circuits, one that interconnects the nearby National Grid combustion turbine and the other interconnecting the Global Common combustion turbine. It also includes a 69-kV interconnection to the Peconic Substation and a 23-kV interconnection to the Orient Point Substation. This portion of LIPA's T&D System is semi-isolated with a highly constrained sub-transmission and distribution system. LIPA is seeking to utilize a new ESS to help mitigate thermal issues in the area. See solution requirements specific to the Southold location in Table G-5.

^E POI Interactive Google Map: https://www.google.com/maps/d/u/0/edit?mid=1aniPK7RueTlkFVuZ6N_99HQcUyc0l4jz&usp=sharing

Solution Objective	Provide N-1 load relief and voltage support			
Minimum MW Requirement	6 MW			
Minimum Duration	3 hours			
Maximum MW Requirement	24 MW			
Maximum Duration	8 hours			
Interconnection Voltage	69 kV			
VAR (PF) Leading and Lagging	Please refer to "Performance Requirements for Transmission- Connected Resources for Non-Synchronous Resources."*			
Estimated Annual MWh Charge/Discharge Throughput	69,936 MWh per year			
Estimated Phase Imbalance (%)	Please refer to "Performance Requirements for Transmission- Connected Resources for Non-Synchronous Resources."*			
			3-Phase	1-Phase
Estimated Fault Current Contribution	Ultimate		31.5 kA	
	Maximum		9.13 kA	6.49 kA
	Minimum		5.33 kA	4.91 kA
	Minimum contingency	N-1	3.54 kA	3.58 kA
		N-1-1	3.02 kA	3.2 kA

Table G-5 — Southold Solution Requirements

* Available at https://www.psegliny.com/aboutpseglongisland/-/media/787F7080CA8843B482B8F40F69A8C8FD.ashx

G.2.1.1.Use Case

The primary use case of this ESS is to maintain system reliability during design contingency conditions through injection of active power (MW). The ESS will be scheduled to output at peak days to mitigate the potential exposure to thermal violations and function as an alternative to the traditional wired solution of adding a new circuit, deferring its need. Minimum values captured above represent the minimum requirements for achieving any deferment. Maximum values captured above represent values correlating to maximum deferment. Sizing of energy storage can be greater than these requirements but will not provide additional deferment value and must not be greater than the respective hosting capacity.



Figure G-1 — Southold Substation Simplified One-Line Diagram

Arrows represent typical power flow direction during normal system configuration. Ideal locations for the storage system are anywhere close to the Southold Substation.

G.2.1.2. Point of Interconnection

The POI will be at a spare 69-kV breaker at the substation located in Greenport, New York, with a new underground 69-kV cable dedicated to the Project. Respondent shall be responsible for the installation of the cable (see Figure G-2).



Figure G-2 — Southold Substation POI

G.2.2. POI: Glenwood Substation – Glenwood Landing, New York

Glenwood (4YH) 138-kV substation is located at the northwestern portion of the LIPA's transmission system in Nassau County, Long Island. This substation is fed by a single 138-kV circuit from the nearby Glenwood 4XH Substation (which is fed by two 138-kV circuits from the Shore Road Substation). The substation also feeds the East Garden City Substation via a single 138-kV circuit through the Roslyn Substation. LIPA is seeking to utilize an ESS to mitigate thermal violations under design criteria contingencies.

Table G-6 offers insight to requirements specific to the Glenwood location:

Solution Objective	Provide peak load relief			
Minimum MW Requirement	63 MW			
Minimum Duration*	9 hours			
Maximum MW Requirement	72 MW			
Maximum Duration*	10 hours			
Interconnection Voltage	138 kV			
VAR (PF) Leading and Lagging	Please refer to "Performance Requirements for Transmission- Connected Resources for Non-Synchronous Resources."**			
Estimated Annual MWh Charge/Discharge Throughput	239,760 MWh per year			
Estimated Phase Imbalance (%)	Please refer to "Performance Requirements for Transmission- Connected Resources for Non-Synchronous Resources."**			
			3-Phase	1-Phase
Estimated Fault Current Contribution	Ultimate		63 kA	
	Maximum		41.7 kA	38 kA
	Minimum		36.08 kA	34.78 kA
	Minimum contingency	N-1	10.06 kA	10.09 kA
		N-1-1	9.43 kA	8.88 kA

Table G-6 — Glenwood Solution Requirements

*Respondents are encouraged to propose cost effective Projects to satisfy this requirement that may consist of multiple sets of ESSs.

** Available at https://www.psegliny.com/aboutpseglongisland/-/media/787F7080CA8843B482B8F40F69A8C8FD.ashx

G.2.2.1.Use Case

The primary use case of this ESS is to maintain system reliability under contingency conditions. The ESS will be scheduled to output at peak days to mitigate the potential exposure to thermal violations and function as an alternative to the traditional wired solution of adding a new 138 kV circuit, deferring its need. Minimum values captured above represent the minimum requirements for achieving any deferment. Maximum values captured above represent values correlating to maximum deferment. Sizing of energy storage can be

greater than these requirements but will not provide additional deferment value and must not be greater than the respective hosting capacity.



Figure G-3 — Glenwood 4YH Substation Simplified One-Line Diagram

Arrows represent typical power flow direction during normal system configuration. Ideal locations for the storage system are anywhere close to the Glenwood 4YH Substation.

G.2.2.2.Point of Interconnection

The POI would be at a 138-kV breaker at the substation located in Glenwood Landing, New York, with a new underground 138-kV cable dedicated to the Project. Respondent shall be responsible for the installation of the cable. Such breaker position is expected to become available upon the retirement of one of the Glenwood gas turbines No. 2 or 3 by 2023.



Figure G-4 — Glenwood 4YH Substation POI
APPENDIX H. RFP LINKS

Item	Targeted Activation Date	Link
BOOT Contract— LIPA's Preferred Bulk Energy Storage Build- Own-Operate-Transfer Contract	May 10, 2021	www.psegliny.com/aboutpseglongisland/proposalsan dbids/2021BulkEnergyStorageRFP
BOT Term Sheet — Energy Storage Project Build, Own and Transfer Term Sheet	May 10, 2021	www.psegliny.com/aboutpseglongisland/proposalsan dbids/2021BulkEnergyStorageRFP
Energy Storage Project EPC Contract Term Sheet	May 10, 2021	www.psegliny.com/aboutpseglongisland/proposalsan dbids/2021BulkEnergyStorageRFP
Lease Agreement	May 10, 2021	www.psegliny.com/aboutpseglongisland/proposalsan dbids/2021BulkEnergyStorageRFP
Contingent Fee Certification	April 30, 2021	www.psegliny.com/aboutpseglongisland/proposalsan dbids/2021BulkEnergyStorageRFP
Contractor Disclosure of Prior Non-Responsibility Determinations	April 30, 2021	www.psegliny.com/aboutpseglongisland/proposalsan dbids/2021BulkEnergyStorageRFP
MacBride Fair Employment Principles	April 30, 2021	www.psegliny.com/aboutpseglongisland/proposalsan dbids/2021BulkEnergyStorageRFP
Non-Collusive Bidding Certification	April 30, 2021	www.psegliny.com/aboutpseglongisland/proposalsan dbids/2021BulkEnergyStorageRFP
Cybersecurity Requirements	April 30, 2021	https://www.nerc.com/pa/stand/Pages/ReliabilityStan dardsUnitedStates.aspx?jurisdiction=United States
Excel file for Appendix B – Data Form	April 30, 2021	www.psegliny.com/aboutpseglongisland/proposalsan dbids/2021BulkEnergyStorageRFP
Excel file for Appendix C – Energy Storage Pricing	April 30, 2021	www.psegliny.com/aboutpseglongisland/proposalsan dbids/2021BulkEnergyStorageRFP
Interconnection Assistance	April 30, 2021	www.psegliny.com/aboutpseglongisland/proposalsan dbids/2021BulkEnergyStorageRFP
NYS Vendor Responsibility Questionnaire/Certification	_	Electronically via https://portal.osc.state.ny.us or http://www.osc.state.ny.us/vendrep/
Packet of Information for Schedule F Sites and LIPA Owned Property	May 2021	www.psegliny.com/aboutpseglongisland/proposalsan dbids/2021BulkEnergyStorageRFP
M/WBE Utilization Plan	April 30, 2021	www.psegliny.com/aboutpseglongisland/proposalsan dbids/2021BulkEnergyStorageRFP
Service-Disabled Veteran-Owned Business	April 30, 2021	www.psegliny.com/aboutpseglongisland/proposalsan dbids/2021BulkEnergyStorageRFP
Diversity Questionnaire	April 30, 2021	www.psegliny.com/aboutpseglongisland/proposalsan dbids/2021BulkEnergyStorageRFP
Workforce Employment Utilization	April 30, 2021	www.psegliny.com/aboutpseglongisland/proposalsan dbids/2021BulkEnergyStorageRFP
Equal Employment Opportunity Policy Statement	April 30, 2021	www.psegliny.com/aboutpseglongisland/proposalsan dbids/2021BulkEnergyStorageRFP
Sexual Harassment Policy	April 30, 2021	www.psegliny.com/aboutpseglongisland/proposalsan dbids/2021BulkEnergyStorageRFP
Staffing Plan	April 30, 2021	www.psegliny.com/aboutpseglongisland/proposalsan dbids/2021BulkEnergyStorageRFP

APPENDIX I. 2021 BULK ENERGY STORAGE RFP NOTICE OF INTENT TO PROPOSE

Company Name		
Company Mailing Address		
Primary Contact Information		
Name		
Title		
Phone		
Email		

Respondent's Signature

Date

APPENDIX J. RESPONDENT CLARIFICATION REQUEST FORM

Company Name				
Company Mailing Address				
Primary Contact Information				
Name				
Title				
Phone				
Email				
Clarification Request #1				
Clarification Request #2				
Clarification Request #3				

APPENDIX K. ADDITIONAL REFERENCE LINKS

ltem	Reference Section	Link
LIPA Website	1.1.3	www.lipower.org
PSEGLI Website	1.1.3	www.psegliny.com
RFP Website	1.2.5.1, 3.2.1, Appendix B	www.psegliny.com/aboutpseglongisland/proposalsandbi ds/2021BulkEnergyStorageRFP
Reference for questions on interconnecting to the LIPA T&D system	3.1.7	www.psegliny.com/aboutpseglongisland/proposalsandbi ds/2021BulkEnergyStorageRFP
VendRep System Instructions	7.1.8	http://www.osc.state.ny.us/vendrep/vendor_index.htm
VendRep System	7.1.8	https://portal.osc.state.ny.us/
NYS M/WBE Directory	9.1.4	https://ny.newnycontracts.com/FrontEnd/VendorSearchP ublic.asp
Division of Minority and Women's Business Development Website	9.1.9	http://esd.ny.gov/MWBE.html
NYS Office of General Services Website	9.2.3	http://www.ogs.ny.gov/Core/SDVOBA.asp
LIPA's Interconnection Requirements	E.2.1	https://www.psegliny.com/aboutpseglongisland/legalandr egulatory
LIPA's Non-Synchronous Performance Generator Requirements for Bulk Power System	E.2.2.	https://www.psegliny.com/aboutpseglongisland/- /media/787F7080CA8843B482B8F40F69A8C8FD.ashx
LIPA "Performance Requirements for Transmission-Connected Resources for Non-Synchronous Resources"	Table E-2, E-12, Table G-2	https://www.psegliny.com/aboutpseglongisland/- /media/787F7080CA8843B482B8F40F69A8C8FD.ashx
POI Interactive Google Map	G.1.2	https://www.google.com/maps/d/u/0/edit?mid=1aniPK7RueTlkF VuZ6N_99HQcUyc0I4jz&usp=sharing
LIPA Procurement Guidelines	7.1.1	https://www.lipower.org/about-us/proposalsbids/