

Bulk Power Energy Storage Scheduling and Dispatch Rights Request for Proposals

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APPENDIX C3

All projects must meet NYISO requirements for deliverability and permitting requirements, as well as other requirements that will enable CECONY and O&R to receive all market participation revenues as defined in relevant NYISO Tariffs¹.

Please provide the following Project information in the order requested. Indicate if a question is not applicable and do not leave responses blank. Please mark all confidential information accordingly.

Responses to these questions will be used to score project technical feasibility and reasonableness of the Project timeline.

Note: Items required for Phase Two response are indicated at each line item.

1. System Design

1. Please provide the following Project documents as attachments:
 - 1.1 Expected site layout with location of major equipment labeled²
 - 1.2 Single line diagram to the Interconnection Point³
 - 1.3 Communications equipment schematic (single line diagram) including connection to Owner NOC and CECONY's and O&R's system with key equipment labeled, expected communications protocols defined, and data sample and reporting rate
 - 1.4 List all UL certifications for key equipment including storage modules, power conversion system, and/or integrated product certifications
 - 1.5 OEM-provided reactive power curve (P-Q curve) for the proposed inverters at 35 degrees C and 1.0 pu voltage.
 - 1.6 OEM-supplied data sheets for all key equipment, including:
 - 1.6.1 Storage modules
 - 1.6.2 Power converter
 - 1.6.3 Fire suppression system
 - 1.6.4 BESS enclosure and cooling system
 - 1.6.5 Meters, and

¹ <https://www.nyiso.com/regulatory-viewer>

² Site layout should be consistent with Appendix C1 information

³ Single line diagram should be consistent with Appendix C2 information

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1.6.6 Communications equipment

2. Please complete the "Project Information" tab in the Phase 1 section of Appendix B - Offer Form.
3. Provide a description of project Station Use and Auxiliary loads indicated in the Project Information tab of Appendix B - Offer Form. This should include discussion of how HVAC, fire suppression, and data collection and control equipment are characterized between these two categories. Please specifically describe the power supply for each component and any backup power supply.
4. Provide information relating to the availability of and Bidder's access to the equipment⁴ and components utilized/proposed for construction and operation of the project, including:
 - 4.1 Completed Letter of Engagement according to the template (Appendix G) provided for each supplier of key equipment included in the proposal. If key equipment will be supplied through an integrator who will be responsible for the availability and delivery schedule of all key equipment, a single Letter of Engagement will suffice. See Appendix G for a template.
 - 4.2 A list of indicative quantities and timelines for the following items:
 - 4.2.1 Equipment availability
 - 4.2.2 Purchase lead times
 - 4.2.3 Anticipated time to clear US customs if applicable
 - 4.2.4 Total shipping time
5. Will the storage system include any components from the following companies - Huawei, ZTE Corp, Hytera Communications Corp, Hangzhou Hikvision Digital Technology Co., Dahua Technology Co.? If yes, please specify the exact component and provide a short description of its intended use. All components must be listed.

2. Operational Parameters

1. [PHASE 2] Please complete the Operational Information tab of Appendix B - Offer Form.
2. [PHASE 2] List which end points will be available and the sampling and reporting rate for system monitoring and control.

⁴ E.g. storage modules, BOS equipment, PCS, etc.

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3. [PHASE 2] Describe seasonal changes, if any, to the Dispatchable Capacity at the delivery point. If applicable, provide an example calculation of any changes in Dispatchable Capacity at the delivery point and transformer losses for both a typical winter and summer day.
4. [PHASE 2] List all Bidder or OEM-defined exclusions, assumptions, or restrictions for system operations. This should include any operating parameters that could impact the facility's ability to respond to the use cases defined in the RFP narrative.

3. Maintenance Practices

1. Please provide a copy of the following documents from the original equipment manufacturers of all key equipment, as attachments:
 - 1.2 suggested maintenance schedules
 - 1.3 maintenance manual
2. For the energy storage and power conversion system, provide an estimated average number of off-line maintenance hours per month. Please also detail any maintenance hours expected to be performed while the system is not offline or is derated.
3. [Phase 2] Provide an example Spare Parts list that includes part description, recommended quantity, and any special storage requirements, for parts to be store on-site. Please also indicate replacement part lead times for any spares not stored on-site.

4. Capacity Maintenance

1. Narrative - Provide a description of the intended plan to maintain the system's guaranteed storage capacity. This should clearly indicate whether the Bidder intends to perform capacity augmentation during the project term. The description should include the following information:
 - 1.1. Size of augmentation,
 - 1.2. Proposed augmentation schedule,
 - 1.3. Duration of expected system downtime during augmentation activities.
2. [Phase 2] Please provide an OEM-supplied degradation curve according to guidance in Appendix C9 Warranty, Performance Guarantees, and Maintenance Services.

5. Decommissioning Plan

1. Narrative - Please provide a Decommissioning Plan to be followed at end-of-life or post-fire event which includes the following details:
 - 1.1. Decommissioning procedures,
 - 1.2. Transportation requirements,

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- 1.3. Recycling or disposal of the system (in accordance with applicable US DOT hazmat regulations and other applicable laws, rules and regulations),
- 1.4. Cost allocations among project parties for decommissioning activities.

6. Safety

1. [Phase 2] Provide the following documentation from the Bidder and associated contractors for the previous three years as attachments.
 - 1.1 Occupational Safety and Health Administration (“OSHA”) 300 Form
 - 1.2 Signed copies of the OSHA 300A Form
 - 1.3 Experience Modification Rate, preferably via a letter from the Bidder’s insurance company
2. Provide a description of Bidder’s experience and awareness of NFPA 855. Please identify the steps, design choices, and schedule Bidder will employ to ensure NFPA 855 compliance.
3. Provide a specific action plan of both automated and manual measures to mitigate a thermal runaway event, if applicable.
4. [Phase 2] Please provide the following information for the proposed facility
 - 4.1 A Health and Safety Plan
 - 4.2 A site-specific Health and Safety Plan
 - 4.3 Community outreach plan to educate local Governmental Authorities and emergency services including local Fire Departments. Please also include a description of any signage that may be utilized on site.
 - 4.4 Education and outreach activities that have already been done with local Governmental Authorities and emergency services including local Fire Departments.
 - 4.5 Response plans for first responders on the scene (in case of a battery failure).