APPENDIX C3 – Technical Information

Projects must meet most recent NYISO requirements for deliverability, as well as other requirements that will enable NYSEG and RG&E to receive all market participation revenues as defined in relevant NYISO Tariffs[1].

Please provide the following Project information in the order requested. Indicate if a question is not applicable and do not leave responses blank. Responses to these questions will be used to score project technical feasibility and reasonableness of the Project timeline. Please mark all confidential information accordingly.

Note: Items required for Phase II responses are indicated at each line item.

System Design

1. Please provide the following Project documents as attachments:
   - 1.1 Expected site layout with location of major equipment labeled[2]
   - 1.2 Single line diagram to the Interconnection Point[3]
   - 1.3 Communications equipment schematic (single line diagram) including connection to Owner's Network Operator Center (NOC) and NYSEG or RG&E system with key equipment labeled, expected communications protocols, 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.
2. Describe and provide equipment specifications of the proposed energy storage facility, including OEM supplied data sheets, model, number of devices anticipated, and key ratings for the following:
   - 2.1 Storage modules
   - 2.2 Power converter, please include integrated system ratings/curves for both MW and MVAR
   - 2.3 Fire suppression system

[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

2.4 BESS enclosure and cooling system

2.5 Meters

2.6 Communications equipment

3. Provide a description of project Station Use 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 related to Bidder's access to the equipment[4] and components utilized/proposed for construction and operation of the project, including:

   4.1 Equipment availability

   4.2 Purchase lead times

   4.3 Anticipated time to clear US customs (if applicable)

   4.4 Total shipping time

   4.5 Commissioning, equipment transportation to the site, and operational guidelines.
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. Any and all components must be listed.
6. Please complete the Project Information tab of Appendix B – Offer Form.

Operational Parameters

1. *[Phase II]* Complete the Operational Information tab of Appendix B – Offer Form.
2. *[Phase II]* List which end points will be available and the sampling and reporting rate for system monitoring and control.
3. *[Phase II]* 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 II]* 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.

[4] E.g., storage modules, BOS equipment, PCS

Maintenance Practices

1. Please provide a copy of suggested maintenance schedules and maintenance manuals from the original equipment manufacturers of all key equipment, as attachments.

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 II]* 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.

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 II]* Please provide an OEM-supplied degradation curve according to guidance in Appendix C9 Warranty, Performance Guarantees, and Maintenance Services.

Decommissioning Plan

1. Provide Narrative- Please provide a Decommissioning Plan to be followed at the end-of-life or post-fire event which includes the following details:

   1.1 Decommissioning procedures,
   1.2 Transportation requirements,
   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.

Safety

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 II]* Provide the following documentation from the Bidder and associated contractors for the previous three years:

   4.1 Occupational Safety and Health Administration ("OSHA") 300 Form

   4.2 Signed copies of the OSHA 300A Form

   4.3 Experience Modification Rate, preferably via a letter from their insurance company

5. *[Phase II]* Please provide the following information for the proposed facility

   5.1 A Health and Safety Plan

   5.2 A site-specific Health and Safety Plan

   5.3 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.

   5.4 Education and outreach activities that have already been done with local Governmental Authorities and emergency services including local Fire Departments.

   5.5 Response plans for first responders on the scene (in case of a battery failure).