

# Battery Based Energy Storage System for the Fox Hills Sub Station Site

---

## Response to clarifying questions 16-Oct-2020

---

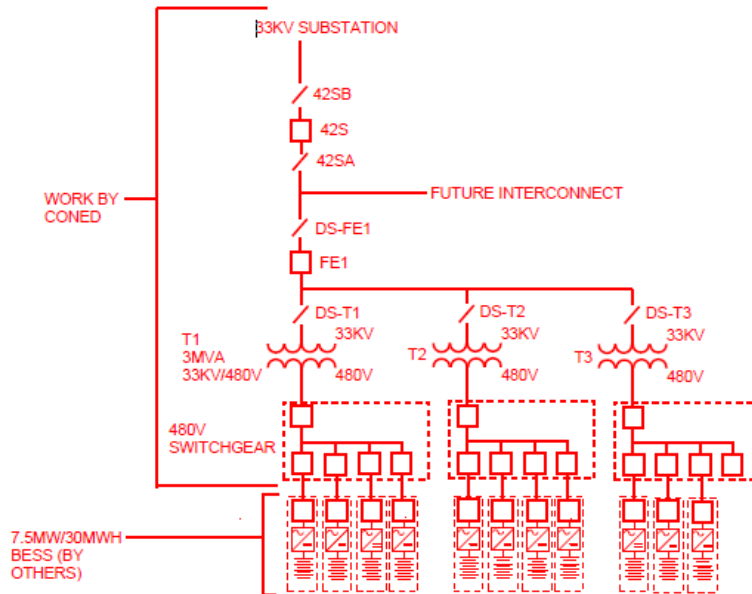
- Q:** Can Con Edison provide clarification on the project scope of work and the division of responsibility between Company and Vendor? RFP section 1.1 and section 2 indicates that Con Edison is procuring the turnkey installation of the BESS, but then also explains that “Con Edison will perform all civil and electrical work on the site.” If Con Edison is providing the entirety of the civil and electrical work, this would encompass most on-site construction and limit Vendor to supplying/commissioning the BESS equipment. This would also obviate the Vendor obtaining construction permits.

**A:** *Con Edison will provide the entirety of the civil and electrical work. Vendor will be responsible for supplying, installing, and commissioning the BESS equipment. Included in the Vendors work is any work that might have to be done inside a BESS module such as installing and connecting battery modules and connecting battery containers to PCS, installing internal fire suppression system if applicable, etc.*
- Q:** Please clarify the power factor requirements for the BESS. The RFP mentions 0.9 PF - 1.1 PF. Does this imply 0.9 leading / 0.9 lagging power factor?

**A:** *Yes, we are implying 0.9 leading to 0.9 lagging power factor*
- Q:** Please clarify whether the Point of Common Coupling at the 460 V bus is the same as the Point of Guarantee for the output of the BESS. If the Point of Common Coupling is not the same as the Point of Guarantee, can Con Edison please state the voltage at the Point of Guarantee?

**A:** *Yes, the Point of Common Coupling is the same as the Point of Guarantee*
- Q:** Our understanding based on section 2.4.6 is that the project will be connected at 460V (480V Nominal). This means that all electrical apparatus needed to interconnect to the substation distribution feeder will be provided by Con Edison. Could Con Edison provide a conceptual single line for the project to confirm or correct this understanding?

**A:** *Below is a conceptual 1-line diagram. The secondary side will be finalized based on input from the chosen Vendor; The primary side is still in the design phase*



5. **Q:** Please confirm if Con Edison will be responsible for all environmental, discretionary, and ministerial permitting associated with site preparation and civil work. If any of the above would be within the Vendor's scope, can Con Edison provide any land, geotech, or environmental surveys completed for the proposed site to date?
- A:** *Correct, Con Edison is responsible for all environmental, discretionary, and ministerial permitting associated with site preparation and civil work. Con Edison is not responsible for permitting of the actual energy storage system.*
6. **Q:** Please confirm if Con Edison will be responsible for civil and storm water management design required for expansion of facility and site civil work.
- A:** *Con Edison is responsible for civil and storm water management design. The Respondent should disclose in their response any special needs their solution would require.*
7. **Q:** Does Con Edison plan to install secondary containment for BESS area as part of civil works and/or connect the BESS to existing facility secondary containment system?
- A:** *Con Edison is responsible for any secondary containment for BESS area. The Respondent should disclose in their response any special needs their solution would require.*
8. **Q:** Please confirm which ministerial permits Vendor would be responsible for obtaining in support of battery installation.
- A:** *Vendor will be responsible for obtaining FDNY approval of their BESS. Vendor is expected to support the DOB certificate of Occupancy requirements and approval.*
9. **Q:** Per the RFP, noise levels of BESS are recommended to be less than 35 dBA at 10 m (33 ft) from the system. Is there a specific local noise threshold requirement separate from this recommended level (e.g., at property line or nearest sensitive receptor)?
- A:** *No*
10. **Q: Scope of Work** - In section 2, page 10 of 43, it states –“Con Edison is requesting a Turnkey installation, therefore all bid pricing shall include development, design of BESS, financing,

permitting, and construction in addition to installation at the site.” It is then mentioned that Con Edison will perform all civil and electrical work on the site, and ‘Vendor will not be responsible for certain work that will be performed by Con Edison, as specified in Section 2.1, and Vendor should exclude that limited work scope for its pricing proposal.

Will you please clarify the work Con Edison will be performing? As an example, will Con Edison’s electric crews install the batteries into the battery systems racks? Will the electric crew then connect the batteries to the PCS and transformers, or is this the responsibility of the Vendor?

**A:** *Con Edison will perform civil foundation work and connect 480V connection to BESS. The Vendor will be responsible for installation of batteries and battery systems in the racks, and all systems from the 480V from past the Con Edison 480V connection (breaker, inverter, battery etc).*

11. **Q: Major Equipment Suppliers and Subcontractors-** In section 5.7.6, page 32 of 43, it states – “Under both the BSCA and the BESS O&M, the Vendor may only use major equipment suppliers and qualified subcontractors that have been pre-approved by Con Edison.

Will you please provide us a list of pre-approved equipment vendors and subcontractors? If you are unable to provide a list, please describe the process to qualify suppliers and subcontractors.

**A:** *Please provide a list of your subcontractors and we will review/proceed with the qualification process if necessary.*

12. **Q: Proposal Response Format** –In Section 5.5 page 27 of 4, it states – the technical proposal response for this RFPO shall be submitted in either Word or a PDF document and shall be organized as follows:

Proposal Section 2 asks for:

- Project Description
- Project Schedule
- Detailed costs associated with the project(s)
- Risks, Challenges, and Community Impacts
- Professional Background and Experience with Projects

It is then mentioned in section 5.5.10 that a Separate Pricing proposal be developed. 5.5.10 states that the pricing proposal must be separate from the written proposal response. There appears to be a conflict with what is being requested.

Do we provide the detailed costs as requested in Section 2, or do we only address pricing in the Separate Pricing Proposal? Is there a specific format or template for the price proposal we are to follow?

**A:** *Please provide an unpriced proposal as well as a priced proposal. Currently, there is no template. Please price as you see fit.*

13. **Q:** RFP Section 2.3.1 - Should the BESS be designed such that no augmentations will take place during the 10-year project life?

- A:** *The Respondent should specify how they expect to fulfill the 10-year performance obligations. If they plan to add additional modules during the 10 year, it must be clearly stated, so that Con Edison can plan the civil work accordingly.*
14. **Q:** RFP Section 2.3.2.1 - Will the cumulative 10,500 annual MWh be dispatched evenly across any period of time (daily, weekly, monthly)?
- A:** *The system should be expected to be dispatched daily in the summer peak period based on utility needs and market participation.*
15. **Q:** RFP Section 2.3.2.1 - Do you have a desired daily or weekly average SOC for this dispatch? Any dispatch profile that you have in mind is welcomed.
- A:** *Con Edison does not have a desired daily or weekly average SOC for this dispatch. If the Respondents system requires a specific SOC intra-day or for longer periods of inactivity, it must be clearly stated in the Proposal.*
16. **Q:** RFP Section 2.3.1 – Is there any preferred or modeled BESS charge and discharge profiles that shall be considered for BESS design?
- A:** *There is not a preferred charge or discharge profile.*
17. **Q:** RFP Section 2.3.1 – Do the 10,500 annual MWh include the throughput dispatched as part of the capacity testing that is scheduled to take place at least twice a year?
- A:** *No*
18. **Q:** RFP Section 2.3.2.1 – One of the technical requirements listed is "Must provide VAR Support Service up to 50% of rated capacity." Can you clarify the real power requirements when using 50% of rated capacity as reactive power?
- A:** *Using a power factor of 0.94 for the site, the real power requirements at 50% VAR support is 7.04MW.*
19. **Q:** RFP Section 2.3.2.1 – Do you intend for this reactive power capability to be capacitive and inductive?
- A:** *Capacitive*
20. **Q:** RFP Section 2.3.2.1 - Can you confirm the rated capacity to be 7.5MVA?
- A:** *The minimum rated capacity is to be 7.5MW with a substation power factor of 0.94.*
21. **Q:** RFP Section 2.3.1 – Should the value measured at the point of common coupling net out the auxiliary load consumption? In other words, should the PCC power be --> PCC Power = BESS Power - Auxiliary Load Power?
- A:** *Yes, the value measured is the BESS output less Auxiliary load*
22. **Q:** RFP Section 2.3.2.1 – Can you confirm the stated power factor requirement of 0.9-1.1 is intended to be 0.9 lead - 0.9 lag?
- A:** *See answer to question 2 above*

23. **Q:** RFP Section 5.7.6 - Cl. 5.7.6 states that, "the Vendor may only use major equipment suppliers and qualified subcontractors that have been pre-approved by Con Edison."

QUESTION: Will you please provide us a list of pre-approved equipment vendors and subcontractors? If you are unable to provide a list, please describe the process to qualify suppliers and subcontractors.

**A:** *See answer to question 11 above*

24. **Q:** RFP Section 2.4.6 – Can you confirm the PCC voltage of 460Vac listed in this section?

**A:** *Confirmed. The PCC voltage will be 460Vac (nominal 480Vac)*

25. **Q:** RFP Section 2.4.6 – Can you confirm this is where all power and energy guarantee values shall be measured?

**A:** *See answer to question 3 above*

26. **Q:** RFP Section 2.4.6 – Are there any other acceptable AC voltages to which the BESS can interconnect (600Vac, 630 Vac, 660Vac)?

**A:** *The site is currently being designed for 460Vac, which is a Con Edison standard. Additional voltages are possible but it would require a revision to the conceptual design.*

27. **Q:** RFP Section 2.4.6 - Can you confirm no 7.5MVA (as mentioned in RFP) medium-voltage transformer or switchgear is needed as part of the BESS scope?

**A:** *Yes, Con Edison will provide the transformers and switchgear and it is not part of the BESS scope*

28. **Q:** RFP Section 2.4.6 - If Con Ed is providing a medium-voltage transformer or switchgear, can you share the device's specification to confirm it is compatible with our PCS selection?

**A:** *Please provide your technical solution and any special requirements, and we will check for compatibility*

29. **Q:** RFP Section 2.4.7 - There is a reference to THD requirement while islanding. Can you confirm Islanding is NOT in scope for this project?

**A:** *Islanding is not in the scope for this project.*

30. **Q:** What duration UPS (uninterruptible power source) do you require for the control equipment on-site?

**A:** *Minimum 24 hours*

31. **Q:** RFP Section 2.4.6 - Cl. 2.4.6 States, "The BESS shall follow the latest revision of Con Edison specification EO-2115 "Handbook of General Requirements for Electrical Service to Dispersed Generation Customers." " D\_\_\_\_\_ has not received a copy of the specification along with RFP, please share the latest revision of the specification.

**A:** *This document is public available on Con Edison's web site: <https://www.coned.com/-/media/files/coned/documents/save-energy-money/using-private-generation/specs-and-tariffs/eo-2115.pdf?la=en>*

32. **Q:** Is there a requirement to make structures corrosion-proof via coatings or otherwise?

**A:** *Yes, structures must be made corrosion-proof*

33. **Q:** RFP Section 2 - In section 2, page 10 of 43, it states –"Con Edison is requesting a Turnkey installation, therefore all bid pricing shall include development, design of BESS, financing, permitting, and construction in addition to installation at the site." You then mention that Con Edison will perform all civil and electrical work on the site, and 'Vendor will not be responsible for certain work that will be performed by Con Edison, as specified in Section 2.1, and Vendor should exclude that limited work scope for its pricing proposal.

QUESTION: Will you please clarify the work Con Edison will be performing? As an example, will Con Edison's electric crews install the batteries into the battery systems racks? Will the electric crew then connect the batteries to the PCS and transformers, or is this the responsibility of the Vendor?

**A:** *See answer to question 10 above*

34. **Q:** Storage Rating Test - Can you confirm the desire from the FAT tests?

**A:** *Yes, we would like to do a Factory Acceptance Test*

35. **Q:** Storage Rating Test – Are you ok with vendors testing individual components and calculating theoretical system-level values rather than measured system values?

**A:** *In order for the system to pass Substantial Completion, the BESS must be tested as laid out in Exhibit C of the RFP and pass the minimum requirements as given in Exhibit B.*

36. **Q:** Storage Rating Test - Is this considered to be Exhibit B or Exhibit C? The doc itself is called Exhibit C, but there are references to Exhibit B in the body and footing.

**A:** *The test procedures are given in Exhibit C, and the minimum specifications are given in Exhibit B*

37. **Q:** RFP Schedule 1.4 – It is possible to receive an extension on the bid due date?

**A:** *No*

38. **Q:** Risks and Challenges – Can Con Ed add more specifics to which risks and challenges do you see as part of delivering this project? e.g. Battery Technology, Long lead items, etc.

**A:** *The main challenge for Vendors will be the approval of their BESS by the local fire department, FDNY. The Vendor shall be familiar with the requirements, and if their BESS is not pre-approved, they must present a detailed plan to achieve such approval.*

39. **Q:** Terms and Conditions - What is the contract structure that Con Ed would like to have for this ESS project?



- A:** *Con Edison contemplates two contracts for this BESS project: a Battery Storage Commissioning Agreement to cover the work scope through commissioning of the BESS and a BESS Operations and Maintenance Agreement to cover the BESS warranty and maintenance work for a 10 year term after commissioning. If a bidder has a proposed form for either or both of these agreements, the bidder may include the form(s) in its RFP response for Con Edison's consideration. However, Con Edison reserves the right, in its sole discretion, to accept or reject a bidder's proposed form(s), in whole or in part. Please see Section 5.7 of the RFP for further detail about contract structure.*
40. **Q:** Terms and Conditions - Will there be an EPC Agreement to be followed by a Long-Term Service Agreement (LTSA)? Or is Con Ed's intention to handle all scope in one contract (Main EPC Agreement), which will include Extended Warranties, Preventative Maintenance and Performance Guarantees?
- A:** *See answer to question 39 above*