



JAMAICA PUBLIC SERVICE COMPANY, LTD.

NORTH EAST COAST VOLTAGE SECURITY IMPROVEMENT PROJECT

Bid Document 940747

The Supply of -

**30 MVARs OF OPEN AIR RACK AND METAL ENCLOSED SUBSTATION
CAPACITOR BANKS**

Questions and Answer.

**May 2023
Engineering Services Department
Jamaica Public Service Company Ltd.
693A Spanish Town Road
Kingston, Jamaica**

Question and Answers.

The subsequent question was asked, and a corresponding response was given:

Question 1: Please confirm that for options B (Metal Enclosed Capacitor Bank) and option C (Hybrid Capacitor Bank) the metal enclosed container for the capacitors will be outdoor type or the enclosed container would be installed inside a substation control room. –

Answer Question 1: [Outdoor type placed in substation yard.](#)

Question 2: Please Confirm if it is required to provide the seismic study test report for the capacitors banks structures in accordance with point TS.04.4. –

Answer Question 2: [Yes seismic report along with wind and general loading.](#)

Question 3: Regarding Cardiff Hall Substation banks, please confirm that our understanding is correct:

- There are 24 existing capacitor tanks that will be replaced by new capacitors, the metal structures will not be replaced. –

Answer: [Correct](#)

- An additional 12 capacitors rated 300 kVAR each will be added including new structures similar to the existing ones. –

Answer: [Correct](#)

- Therefore, option A request will be: 24 existing capacitors to be mounted in existing structure + 12 capacitors including structures for a of $36 \times 300 \text{ kVAR} = 10.8 \text{ MVAR}$ capacitor bank –

Answer: [Correct](#)

- In case Option B or Option C is selected the existing infrastructures will be dismantled. –

Answer: [Correct](#)

Question 4: There is a bit of confusion within the document for this bid.

One clause states bid bond waived, while another section is stating amount of bond to cover the bid.

Please clarify

Answer Question 4: [No Bid Bond Required.](#)

Question 5: Confirm that 30MVAR is required in 3 Banks of 10MVAR

Answer Question 5: Confirmed, this is correct. 30 MVAR is required in sizes of 10 MVAR each. 10 MVAR at Ocho Rios, 10 MVAR at Roaring River and 10 MVAR at Cardiff Hall.

Question 6: Confirm that each Bank of 10MVAR will be formed by 2 steps of 5MVAR.

Answer Question 6: Confirmed, this is correct. 2 steps of 5 MVAR at each location.

Question 7: Confirm that 24kV is the phase-to-phase voltage level.

Answer Question 7: Confirmed, this is correct. 24 kV phase-to-phase, 13.8 kV phase-to-ground.

Question 8: Confirm that 3 options are outdoor type.

Answer Question 8: All 3 options will have the capacitor banks placed outside in the substation yard. Options 2 and 3 are metal enclosed.

Question 9: Confirm that option A is open rack type banks, option B all in one Cabinet and option C with the 34.5kV switch outside the Bank Cabinet.

Answer Question 9: Option A is open rack type, Option B has all the components in one cabinet including circuit breaker, Option C has all the components in one cabinet except the 38 kV circuit breaker which will be placed outside the bank cabinet.

Question 10: Confirm if the Control Cabinet is required for the 3 options, with a SEL 487V relay for the control and protection of the 2 steps for a 10MVAR bank.

Answer Question 10: Control Cabinet is required however SEL 487V is not to be supplied as part of the RFP. Only a knock-out with the SEL 487V form factor is required to facilitate the installation of the SEL 487V relay which will be sourced outside this RFP

Question 11: Confirm if it is required to consider the seismic study with its respective report according to point TS.04.4.

Answer Question 11: Yes, seismic study is required. Should also include wind and general loading.

Question 12: For option A, there are 2 existing structures that we assume will be occupied with 24 capacitors of 300kVAR @ 13.8kV and will be completed with another 12 capacitors. Please confirm.

Answer Question 12: Correct. For Cardiff Hall Substation, the 2 existing structures will be occupied with 24 capacitors provided by the supplier rated at 300 kVAR each. Supplier is to provide 3rd structure and another 12 capacitors rated at 300 kVAR each.

Question 13: For Option B and C there are totally new and could be 24 capacitors per bank of 10.8MVAR. Please confirm.

Answer Question 13: For Cardiff Hall, options B and C are totally brand new and supplier has the flexibility to provide a total of 10.0 MVAR utilizing the space available.

Question 14: Confirm that the degree of protection will be IP 54 or NEMA 3R for metal enclosed.

Answer Question 14: [NEMA 3R](#)

Question 15: Finally, the scope will be according to what is indicated in point TS.03

Answer Question 15: [Scope will be according to SCH-5 to SCH-14.](#)