

TENDER 172Q/2024/25: 145 KV GIS SWITCHGEAR AND ASSOCIATED EQUIPMENT FOR WOODSTOCK SWITCHING STATION

TENDER CLARIFICATION MEETING

Date: 2025-02-21

Time: 11:00

Venue: Woodstock Switching station

1 DISCUSSION POINTS

- 1.1 The clarification meeting was a compulsory meeting. Each tenderer was therefore requested to sign the attendance register.
- 1.2 It was an opportunity to emphasize certain key aspects of the tender and the existing building into which the switchgear need to fit. Thus it was not a comprehensive discussion of the tender document.
- 1.3 Unless a formal notice is issued by the CCT, the tender document is to be viewed as correct. Anything stated at the clarification meeting that could alter the tender document is therefore not enforced unless it is contained in a formal notice to tenderers.
- 1.4 Hard copies of the presentation slides and technical drawings were available for tenderers.

2 Implementation program

- 2.1 The existing switchgear will be removed in two phases to ensure there is no supply interruption to the loads currently supplied from the switching station.
- 2.2 Once the equipment is delivered, the contractor needs to make allowance for the cable contractor on site (approximately 2 weeks), for disconnection of the existing cables.
- 2.3 The contractor will get access to the existing switchgear to remove approximately five (5) existing bays & accessories, interlocking & earth switches. The existing buscoupler bay shall not be removed during this first phase. The contractor must reinstate the interlocking and buszone protection schemes and reinstall the two existing earth switches, such that the remaining half of the board remains energised and supplying all existing load currently supplied from this switching station. At no stage will there be a complete shutdown at the switching station.
- 2.4 The new switchgear design must allow for the installation of a buscoupler, seven (7) feeder bays and the bussection in the available space as per the switchgear layout shown of the tender drawings during the first phase of the installation. The minimum space between the new switchgear and the roller shutter door shall be such that the existing equipment can be removed safely

and without damage to, or de-energising the new switchgear. The minimum distance from the roller shutter door shall be 3m.

- 2.5 The contractor will then leave site for approximately twelve (12) weeks for the aperture modifications.
- 2.6 Once the floor modifications are completed, the contractor will return to site to install and commission the first half of the new switchgear.
- 2.7 The contractor shall then leave the site for the HV cable termination, approximately eight (8) weeks. However, the commissioning engineer and other relevant personnel shall be available during this period for the individual feeder protection schemes (end-to-end tests and on-load tests) and energisation, as per the Contractor's scope of works. Any equipment or tools left on site shall remain the responsibility of the Contractor.
- 2.8 The first half of the switchgear will be energised, and suitable safety precautions shall be put in place.
- 2.9 Site access will be given for delivery of the Section B switchgear approximately 64 days after Section A were installed and cold commissioned.
- 2.10 The same sequence will be followed for the second phase: i.e. first the cable contractor needs to disconnect the cables, then the switchgear contractor needs to remove the switchgear, then the building contractor needs to complete floor modifications, and only then can the switchgear contractor proceed with the installation of the new GIS equipment.
- 2.11 The new switchgear will be installed in phases, but all switchgear and relay panels should be shipped to Cape Town before starting with the removal of the first phase. An advance payment will be made for all the switchgear and relay panels once it is in storage in Cape Town strictly in accordance with Sub-Clause 14.2 Advance Payment and 14.5 Plant and Materials intended for the Works. Storage cost for contractor delays will not be paid.
- 2.12 Design fees will be paid once ALL the required design drawings have been submitted and approved by the Engineer as specified in the advertised tender document.
- 2.13 The contractor should ensure that there is sufficient space between the new switchgear and new relay panels, for the old switchgear to be removed from the building. If there is not sufficient space, this needs to be highlighted by the contractor at tendering stage.
- 2.14 Only one busbar shall be extended at a time, and provision shall be made for interruption required for switching operations.
- 2.15 This tender goes hand in hand with a building tender (for floor modifications) and HV cable tender (for new terminations). This building contract requires the final design of the switchgear platform.

3 Items highlighted

3.1 Eligibility:

- Compulsory clarification meeting
- CIDB Grading of at least 8EP
- Compliance with CCT SCM Policy and Procedures
- Good standing with Bargaining Council
- Functionality
 - Key Personnel
 - Track Record (OEM and tenderer)
- Type test certificates

3.2 The City will only accept equipment that meets the specification, with a proven track record. Tenderers should provide track record for equipment manufactured in the same factory as the equipment offered. The track record of equipment manufactured in one country cannot be used as evidence of equipment manufactured in another country.

3.3 Track record requires evidence of projects completed with similar scope and complexity. This may be AIS or GIS projects.

3.4 The specified requirements and level of competency for each of the listed key personnel is a necessity, not an option. Schedule 12: Key Personnel is to be completed in FULL. CVs appended to the schedule is only considered supplemental and does not replace Schedule 12.

4 General

4.1 The tender must be completed in non-erasable black ink, by hand. The only exception is the Schedule of Rates, which may be completed electronically. If the tenderer wishes to complete these documents electronically, the electronic copy must be an EXACT replica of the tender document.

4.2 Every item included in the Schedule of Rates must be priced. No partial submission will be accepted. Any partial submission will be deemed non-responsive.

4.3 No local content applicable

4.4 Estimated quantities are set out in the Schedules of Rates. The final Contract Price shall be computed from the actual quantities of work done.

4.5 Schedules of Quantities Optional Work: Tenderers are required to price for all the items listed under optional work.

4.6 Tenderers must note that wherever this document refers to any particular trade mark, name, patent, design, type, specific origin or producer, such reference shall be deemed to be accompanied by the words "or equivalent".

- 4.7 Where cover letters contradict the tender conditions, these contradiction of the tender conditions will result in the tenderer being ruled as non-responsive.

5 Technical items highlighted

5.1 Pressure relief

5.2.3 Overpressure created by arcing in an enclosure shall be relieved by means of bursting discs venting into the atmosphere. Pressure relief by collapse of internal gas barriers is not acceptable.

☞ The specification asks for a **pressure relief (vent) on each enclosure**, not only the circuit breaker enclosure.

5.2 DC

- (a) Schedule 4: 4.4; 110V DC for Lead Acid Planté allowed in bill:
- (b) SCS is supplied @ 110V DC
- (c) RTU is supplied by 110V DC
- (d) If the RTU offered cannot be supplied by 110V DC, then also price separately for 48V DC system.
- (e) DC system sizing will need to be done by the supplier as only they can determine this based on the equipment supplied.

5.3 Earthing

The substation earth mat is not part of this tender. There is an existing substation earth mat. The Contractor shall supply and install an earthing system to connect all new equipment in the substation to the existing earth bars. Earthing connections to equipment included in this contract shall be provided under this contract.

5.4 Relays & SCADA

- (a) Remote RED's model & versions, to ensure whether existing remote relays can communicate with new relays for inter-tripping: RED 670 version 2.2.1
- (b) Existing remote MicroSCADA details: MicroSCADA Rev 9.3
- (c) Control centre details: ABB Network Manager
- (d) Tenders should take note where Inter-tripping schemes (as per specification) are required on the Main substation feeders and Transformer Panels.
- (e) Please ensure to comply to the requirements for relay inputs as per Volume 1A

5.5 Testing: The site tests include a PD test.