

Amendment 1

Official Amendment to document 240-87340147 Rev 05 as from 2 October 2023
Technical evaluation criteria gas insulated substation equipment and mixed
technology switchgear.

Please ensure that amendment 1 below supersede point 3.1 and from
3.3 to end of 3.6.3 as well as the flow diagram of Rev 05 of 240-87340147

3.1 Scope of work

Unless otherwise stated by the Procurement documentation, the scope of work shall be the design, manufacture, testing, supply, delivery, off-loading, installation, commissioning and the providing of technical training (Basic and intermediate).

3.3 Desktop evaluation

This evaluation exercise is performed by the Eskom technical evaluators once Commercial Department has released the documentation received from the supplier which qualified against their set criteria. This technical part of the evaluation starts when the submissions are opened for the first time by this Eskom Technical evaluation team. This process of evaluation is started off with the Mandatory criteria Stage 1.

The Eskom technical evaluator will go through the details of the returnable submissions that are required and will ensure that Stage 1 qualification criteria are met. Stage 1 Returnable are the following: -

- a) Completed Technical A & B schedules
- b) Type test reports
- c) Drawings
- d) Operation and Maintenance Instruction Manuals
- e) GIS Service continuity of availability in relation to substation design (This is part of condition of contract awarding)
- f) An accurate and traceable list of reference(s), supported by satisfied client letters confirming the successful completion of design, manufacture, factory testing, supply, delivery, off-loading, installation, pre-commissioning testing and commissioning of GIS must be provided.

Note

- **If any of the above Six (6) Returnables is not available on each technical submission of that particular item tendered for, that technical submission is disqualified.**
- **The completed Technical A&B schedules for the GIS or MTS equipment, and the Individual components (i.e. circuit-breaker, disconnecter, instrument transformer, bushing, surge arrestors and secondary plant) shall be submitted in the following three (3) formats: –**
 - 1. Paper printed (Physical Technical File of the Tender,**
 - 2. Adobe PDF (Soft Copy)**
 - 3. The original electronic format in which it was issued by Eskom**

No format or chronological sequence changes on the returnable tender documents are allowed.

Failing to adhere to this will lead to tender to be deemed non-responsive.

Only the tender submission that has complied with the Stage 1 requirement shall be taken through to Stage 2 of the Desktop evaluation which refers to Annex A of this document. The full scoring that the technical submission can score under Stage 2 is 100%. The technical threshold for qualification is 75%, and only suppliers meeting these criteria shall be considered for further evaluation.

Any technical submission that scored below 75% is disqualified from any further evaluation.

3.3.1 The successful tender submissions which meets the threshold of 75%

The Eskom technical evaluators shall:

- a) Compile a list of technical deviations which could not be resolved and verified during the Stage 2 evaluation.
Note: It must be noted that when the Supplier has listed the technical deviations on an offered item, it does not mean that these deviations are already acceptable to Eskom.
- b) A list (in no specific order), of qualifying tenderers will be handed back to Eskom by the Eskom technical evaluators for them to identify the successful tenderer to continue with the project.

3.4 Factory and product assessment (items that meet threshold for qualification)

The Eskom confidential Desktop evaluation report which indicates the technical submission items that were evaluated and those that met the technical threshold for qualification will be used to determine the most successful tenderer.

A detailed planned factory visit will then be arranged by Eskom to this tenderer factory.

The purpose of the visit is to perform the factory assessment, to ensure the capability of the factory to deliver the requirements. The factory product assessment at the factory is to ensure if the product meets the technical requirements as specified. During this visit Eskom will also discuss the technical deviations that the technical evaluators found during the Desktop evaluation. The technical evaluators shall populate the applicable Product Assessment Check sheets (Annex B – D) for all findings, and these shall be raised with the Supplier and Factory Representatives and recorded under the Factory/Product Evaluation discussion (Annex E). An Eskom confidential report will be produced in this regard.

In summary to this issue, Eskom technical evaluators will visit the factory to assess the capabilities of the factory, machinery, skills and technical processes, to ensure the factory can deliver on the requirements. The following will be included: -

- Detail Design Review
- Manufacturing Methods
- Workshop Practices
- Design Practices and Application
- Testing Facility and Practices
- Raw material - Procurement, Storage and Sub-contractor practices
- Site and Other Services
- Manufacturing of selected components or sub-assemblies
- Discussion of detail requirements (Service continuity (SANS: IEC 62271-203 Annex F) and availability, extensions, replacement, etc.)
- Factory Performance (including the On Time Delivery (OTD) and Factory Failure Rate (FFR))

3.4.1 Factory product assessment

The Tenderer whose submission has been successful shall be subjected to the factory / product evaluation.

At the factory, the technical evaluators shall verify the type test records kept. Furthermore, the Eskom technical evaluators shall assess the product(s) using check sheets (Annexes B, C and D) and Factory/Product Evaluation discussion (Annex E). The check sheets are used to compare the compliance of the Eskom standard to the tender submissions. Any deviations to be raised with the Tenderer and factory and all those deviations that were found by Eskom during the Desktop evaluation shall be listed on the Factory/Product Evaluation discussion document (Annex E) and signed-off.

The technical evaluators, the Tenderer and factory representatives shall sign the completed Factory/Product Evaluation discussion (Annex E) document which is used to conclude the factory visit.

3.5 Prior to awarding of the final contract

Eskom shall meet with successful bidder prior to awarding of the contract. The following shall be discussed in detail with this Supplier: -

- Closing of the technical deviations
- Training
- Final Design Review
- Final design of the Controlled switching devices and/or Online condition monitoring devices
- Optional digital secondary plant interface (where applicable)
- GIS performance verification
- Final design of the Online condition monitoring devices – arc flash detection & online PD monitoring
- Integration of the substation onsite work
- GIS Service continuity of availability in relation to substation design (SANA/IEC 62271-203 annex f)
Are the arrangements of gas sections or compartments such that it is possible to extend and replace existing bus bars or circuits, replace faulted items, and perform maintenance without having to take out of service more than one bus bar or adjacent circuits at any one time throughout the entire service life?
- Discussion and agreement on Factory acceptance and site commissioning testing to be performed, testing protocols, test equipment to be used, format of test results and test plans to be supplied by supplier.
- Alignment of the GIS or MTS to the out-of-scope outdoor AIS yard details of the main earthing terminal and operating mechanism enclosure earthing terminal
- Final building design verification and discussion
- Spares and maintenance policy

If agreement on all the above points has been reached, the process will advance to the Final product acceptance post contract award and closing out of deviations. If not, the technical evaluators shall meet with the next ranked shortlisted Supplier.

3.6 Final product acceptance post contract award and closing out of deviations

3.6.1 Finalisation of the design/ pre-construction review (pre-manufacturing)

The following technical issues shall be addressed by the technical evaluators with the successful Supplier/ Tenderer prior to manufacturing and onsite works: -

- Final drawings – equipment, secondary control, and protection drawings (LCC, Breaker Marshalling Kiosk and where applicable the optional digital secondary plant interface) and GIS buildings
- The details of training levels rollout strategy
- Spares ordering

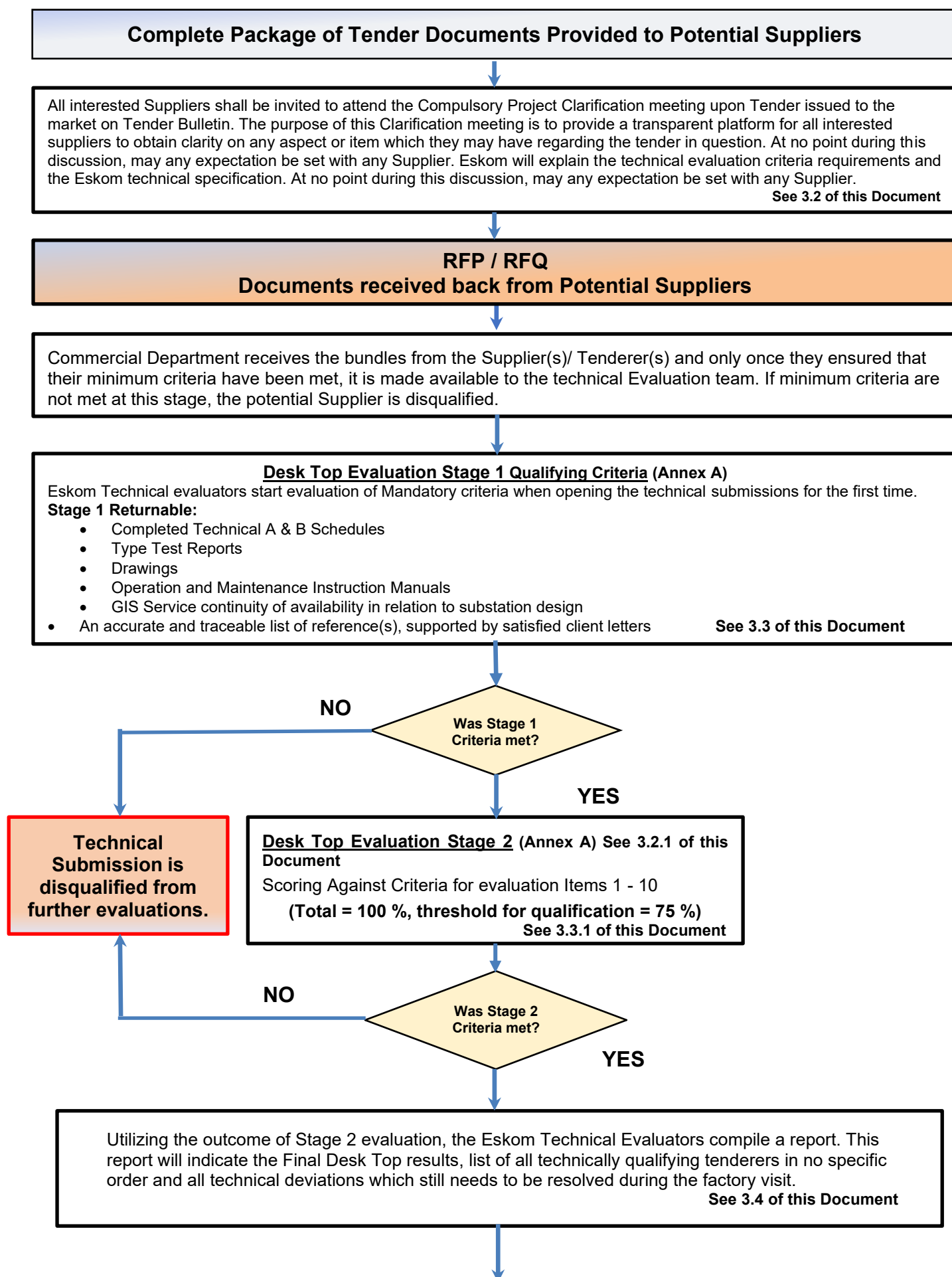
3.6.2 Factory Acceptance Tests and witnessing of Routine testing (manufacturing)

Eskom shall witness factory and routine testing. During this visit all the Controlled switching devices and/or online Condition monitoring devices and secondary control and protection devices (including the optional digital secondary plant interface) shall be inspected, and their designed functionality witnessed.

3.6.3 Inspection of the first installations and final closing out of deviations

All outstanding deviations and/ or factors that the Supplier/ Tenderer agreed to rectify as per the signed Factory/Product Evaluation discussion document (Annex E), Desktop evaluation findings and Final product acceptance stages shall be closed out within the agreed time frames. The technical evaluators shall make the follow-up assessment to ensure closeout post contract award. Also, the first-off installations shall be inspected by both parties.

Annex A – Technical Evaluation Criteria Flow Diagram



Eskom will then on receiving the technical evaluation report/list from the Eskom evaluator, make an informed decision on the successful supplier and arrange for this Factory to be visited by the appropriate Eskom team

During this visit, a detail design review, the delivery capability of the factory, if the product meets all the technical requirements and product assessment are evaluated and documented on Annex B - D. All technical deviations will be discussed and documented on Annex E during the visit. After consensus has been reached, Annex E will be signed off by all parties.
See 3.4.1 of this Document

The technical evaluators compile a final confidential report to confirm the technical compliance of the supplier and the successful resolving of all technical issues in agreement with Eskom and the supplier.

Prior to contract awarding:

Eskom studies the composite report and ensure that the supplier is fully aware of all agreed issues discussed like the closing of the technical deviations, training, final design review, final design of the controlled switching devices and/or online condition monitoring devices, spares, and maintenance policy, etc.
See 3.5 of this Document

Was consensus reached?

NO

YES

Eskom to arrange for the technical evaluators to visit the next qualified supplier.

The last process is the final product acceptance post contract award and closing out of deviations. This includes:

- Finalization of the design/pre-construction review
- Factory acceptance tests and witnessing of Routine testing
- Inspection of the first installations and final closing out of deviations.

See 3.6.1 to 3.6.3 of this Document

Amendment 1

Drafted and implemented by:



Frik Schoeman
Senior Technologist, SED

Date: 25 September 2023

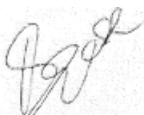
Seen and supported by:



Sphiwe Nkosi
Chief Technologist, SED

Date: 25 September 2023

Seen and supported by:



Bheki Ntshangase
Senior Manager, SED

Date: 25 September 2023