	<b>TECHNICAL EVALUATION CRITERIA ADDENDUM FOR CENTRAL EAST CLUSTER FIXED PATTERN AND WITHDRAWABLE INDOOR SWITCHGEAR</b>	<b>CENTRAL EAST CLUSTER</b>
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## 1. INTRODUCTION

### IMPORTANT NOTE:

This document must be read in conjunction with:

- 240-56062752 - SPECIFICATION FOR 11 kV to 33 kV FIXED PATTERN METAL ENCLOSED INDOOR PRIMARY SWITCHGEAR STANDARD, Rev 2, Dated 2013;
- 240-56065131 -THE DX AND TX SPECIFICATION FOR 6.6 KV TO 33 kV WITHDRAWABLE INDOOR METAL-ENCLOSED SWITCHGEAR, Rev2, Dated 2013;
- PDRP\_2013-252-TECHNICAL EVALUATION CRITERIA FOR MV INDOOR PRIMARY SWITCHGEAR; and
- 240-56065202- SWITCHGEAR TRAINING REQUIREMENTS FROM ORIGINAL EQUIPMENT MANUFACTURERS STANDARD.

In order for prospective tenderers to understand what is required of them when submitting the technical evaluation criteria returnable items requested for the Eskom Central East Cluster (KZN and Free state) 11 kV to 33 kV Fixed pattern and withdrawable metal enclosed indoor primary switchgear standard, they should use this addendum together with the mentioned documents listed in a) to d) above.

## 2. ESKOM CENTRAL EAST CLUSTER MV FIXED PATTERN AND WITHDRAWABLE SWITCHGEAR SAP NUMBERS AND DESCRIPTIONS APPLICABLE FOR THE TENDER TECHNICAL EVALUATION

Table1 provides the Eskom Central East Cluster MV fixed pattern and withdrawable switchgear SAP numbers and descriptions applicable for the tender technical evaluation.

Table 1. Eskom Central East Cluster MV fixed pattern and withdrawable switchgear that will have a contract established.

No	Eskom DDT	Rev	SAP no	Description
1.	6259	0	0574919	SWITCHGEAR:FP FEEDER(A);11KV;630A;25kA
2.	6259	0	0574921	SWITCHGEAR:FP FEEDER(A);11KV;630A;31.5kA
3.	6259	0	0574922	SWITCHGEAR: FP FEEDER(B); 11KV; 1250A; 31.5kA
4.	6259	0	0574928	SWITCHGEAR: FP TFR;11KV;1250A;25kA
5.	6259	0	0574929	SWITCHGEAR:FP FEEDER(A);11KV;1250A;25KA
6.	6259	0	0574932	SWITCHGEAR:FP B/SECTION;11KV;1250A;25KA
7.	6259	0	0574934	SWITCHGEAR:FP TFR;11KV;1250A;31.5KA
8.	6259	0	0574935	SWITCHGEAR:FP FEEDER(A);11KV;1250A; 31.5kA
9.	6259	0	0574936	SWITCHGEAR:FP TFR;11KV;2500A;31.5KA

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10.	6259	0	0574937	SWITCHGEAR: FP FEEDER(B); 11KV; 630A; 31.5kA
11.	6259	0	0574938	SWITCHGEAR:FP B/SECTION;11KV;1250A; 31.5kA
12.	6259	0	0574939	SWITCHGEAR: FP B/SECTION; 11KV; 2500A; 31.5kA
13.	6259	0	0574940	SWITCHGEAR:FP TFR;22KV;1250A;25kA
14.	6259	0	0574941	SWITCHGEAR:FP FEEDER;22KV;630A;25kA
15.	6259	0	0574942	SWITCHGEAR:FP FEEDER;22KV;1250A;25kA
16.	6259	0	0574943	SWITCHGEAR:FP B/SECTION;22KV;1250A;25kA
17.	6259	0	0574920	SWITCHGEAR:FP TFR;11KV;2500A;25KA
18.	6258	7	0170209	BKR PANEL 11kV 2500A 25kA B/S D6258
19.	6258	7	0170210	BKR PANEL 11kV 2500A 25kA INCMR D6258
20.	6258	7	0170207	BKR PANEL 11kV 1250A 25kA INCMR D6258
21.	6175	11	0170208	BKR PANEL 11kV 800A 25kA FDR (A) D6258
22.	6175	11	0239687	VT PANEL 6.6kV/110V 50VA CL 0.2 (B)D6175
23.	6175	11	0237141	VT PANEL 11kV/110V 50VA CL 0.2 (A)D6175
24.				Mounting and technical quality assurance verification test of the on Board Protection and Control Scheme per panel (Eskom will free issue the protection and control schemes)
25.				Per panel, allow for a customised steel support frame/base shall be provided to allow the switchgear panels to be supported over the entire width of the cable trench as per Eskom DDT 5238.
26.				Per panel allow for a removable, custom-fitted non-slip steel trench cover plates (e.g. chequer plates) of minimum thickness 4,5 mm shall be provided and fitted by the supplier to close off the accessible cable trench once the cables have been terminated.
27.				Per panel, provision shall be made to bolt the steel support frame/base to the concrete floor.
				Room pressure simulation and report per installation
28.				Level 1 Training and Manuals per training session and will be per group of attendees of 30 people
29.				Level 2 Training and Manuals per training session on site and will be per group of attendees of 10 people
30.				Level 3 Training and Manuals per training session on site and will be per group of attendees of 10 people
31.				Level 4 Training and Manuals per training session on site and will be per group of attendees of 5 people
32.				Set of suitable and necessary tools for a switchboard assembly
33.				Transport 0 to 300 km
34.				Transport 0 to 600 km
35.				Transport 0 to 900 km
36.				Transport 0 to 1200 km

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37.				Installation 0 to 300 km
38.				Installation 0 to 600 km
39.				Installation 0 to 900 km
40.				Installation 0 to 1200 km
41.				Commissioning 0 to 300 km
42.				Commissioning 0 to 600 km
43.				Commissioning 0 to 900 km
44.				Commissioning 0 to 1200 km
45.				Stand-off hand-held remote control unit for remote switching of circuit-breakers

### 3. TECHNICAL EVALUATION CRITERIA, EQUIPMENT, STRATEGY AND TRAINING CLARIFICATION NOTES

The Eskom national standard PDRP\_2013-252-TECHNICAL EVALUATION CRITERIA FOR MV INDOOR PRIMARY SWITCHGEAR shall be used by Eskom Central East Cluster to perform the technical evaluation.

Clarification notes on the above-mentioned standard and further upfront clarifications are listed below:

- a) The withdrawable and fixed pattern switchgear shall be fitted with "on-board" protection and control schemes in the LV compartments. The schemes shall be free issued by Eskom to the switchgear manufacturer. The switchgear manufacturer shall mount the schemes on the LV compartment doors, connect the scheme wiring to the LV compartment terminals, and install and connect the provided arc flash sensors where applicable.
- b) For withdrawable switchgear the Arc detection protection system equipment shall be installed as per clause 3.17 from 240-56065131;
- c) Technical quality assurance verification shall be done and witnessed by an Eskom resource at the appropriate time. The verification shall be where the supplier will need to confirm that the connections are done correctly as part of this activity. It is easiest to do this by sending controls from the protection scheme, and noting the switchgear response.
- d) For both fixed pattern and withdrawable switchgear, the manufacturer shall indicate if the IAC type tests were performed with the LV compartment doors/panels open or closed;
- e) The latest Eskom std for DSP 34-1658, Distribution Standard Part 4: Corrosion protection specification for new indoor and outdoor Distribution equipment manufactured from steel shall be used and this would be 240-75655504- CORROSION PROTECTION STANDARD FOR NEW INDOOR AND OUTDOOR ESKOM EQUIPMENT, COMPONENTS, MATERIALS AND STRUCTURES MANUFACTURED FROM STEEL STANDARD Rev 1;
- f) Room pressure simulation and report. The supplier will be required to complete this per order.
- g) Dimensions are dependent on the project;
- h) The supplier shall be responsible for the switchgear Installation, PRE-COMMISSIONING TESTS, and other pre-commissioning requirements as per Eskom 240-56062752 - SPECIFICATION FOR 11 kV to 33 kV FIXED PATTERN METAL ENCLOSED INDOOR PRIMARY SWITCHGEAR STANDARD, Rev 2, Dated 2013;
- i) Clause 4 of the Technical evaluation criteria PDRP\_2013-252 Rev 0 states the tenderer shall prepare an "exact replica factory sample". This means that an exact unit that would be produced in a normal production run shall be evaluated as a factory sample;








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- j) If Eskom has previously performed (not more than 7 years ago from the date of issue of this tender) a factory evaluation and it was successful then the results will be accepted. The tenderer shall submit evidence of the Eskom factory evaluation and clear proof that the factory evaluation was passed;
- k) Where a foreign manufacturer supplies the switchgear not previously evaluated on any Eskom contract then the prospective local supplier to Eskom shall make a sample of the assembled switchgear locally available for evaluation;
- l) All technical information shall be submitted in hardcopy and electronic format. Electronic information shall be submitted on a USB;
- m) For each item offered the tenderer should submit all technical information required. For e.g., if the tenderer is offering eleven items there shall be eleven separate technical submissions. Items may not share or cross reference information. All technical information shall be completed per Eskom SAP no. and or description;
- n) The returnable information as stipulated by the Eskom std PDRP\_2013-252-TECHNICAL EVALUATION CRITERIA FOR MV INDOOR PRIMARY SWITCHGEAR shall be organised per SAP no and description and shall be clearly organised for evaluation as per each evaluation stage from the TEC and its associated category;
- o) Training requirements shall be as per the Eskom std 240-56065202- SWITCHGEAR TRAINING REQUIREMENTS FROM ORIGINAL EQUIPMENT MANUFACTURERS STANDARD, with the following points to be noted:
- 1) Level 1, 2 ,3, and 4 training shall be required as per the standard and the training material shall be available in electronic format on a USB and hardcopy to be assessed when the exact replica factory sample is assessed by Eskom;
  - 2) Consideration should be provided for Level1 training to be delivered by the OEM using online technology e.g., MS Teams (Eskom has standardised on using MS Teams). This requirement is necessary as a health risk mitigation measure as a result of the global Covid pandemic. All other conditions of the training shall apply, and the training material shall be provided in electronic format so it may be shared with Eskom staff as required by Eskom;
  - 3) Level 2 and 3 training shall be held in locations in Eskom KZN when a unit is installed in those locations. The locations shall be in Hibiscus, Ramsgate, Umkomaas, Bendigo, Shelly Beach, Sitilo, Madungela and Duckspound. The exact location shall be communicated based on the first installation of the switchgear in each area.
  - 4) Level 2 and 3 training shall be held in locations in Eskom Freestate when a unit is installed in those locations. The locations shall be in Afrex 88/6.6kV Substation, Thabong Bulk 132/11kV Substation and Thabong East 132/11kV Substation. The exact location shall be communicated based on the first installation of the switchgear in each area.
  - 5) Level 4 training shall be held in KZN and Freestate. The training is proposed to be on site and the locations shall be communicated once Eskom has confirmed them;
  - 6) The covering letter requested from Eskom standard PDRP\_2013-252 should have the format as prescribed in annexure A.
  - 7) In addition to all the switchgear panels, all the ancillary items without a SAP no in table 1 needs to be quoted for and there shall be no additional pricing of items allowed for outside the contract. If the tenderer is not making an offer for the full range of the switchgear panels then the tenderer shall indicate the quantity of ancillary items required for the panels offered. It is to be noted that during the negotiation stage of the contract the quantities will have to be agreed upon between Eskom and the successful tenderer.

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### Technical Team Approval

Name	Designation	Signature	Date
Riaz Asmal	KZN SI Manager		2022/06/20
Michael Govender	KZN Plant Manager Maintenance & Asset		2022/06/20
Neville Booyens	KZN SI Senior Engineer		2022/06/20
Jayant Raghubir	KZN NED Senior Engineer		2022/06/20
Rudi Kleinhans	FS SI Manager	 (Acting)	2022/06/21
Modiri Seate	FS NED Senior Engineer		2022/06/21
Teboho Mokheti	FS Plant Manager Maintenance & Asset		2022/06/21

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Annexure A

Covering letter template

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Add company logo here

Type title name and surname  
Type position  
Type company name  
Type address

Date:  
Type the date here in format:  
e.g. 11 February 2020  
Enquiries:  
Tel: +27 XX XXX XXXX

Dear Eskom KZN Commercial Department

**Eskom KZN OU: MV fixed pattern switchgear items offered for tender technical evaluation.**

The below table indicates the items that company XYZ would like to submit for technical evaluation in response to the Eskom KZN OU miniature substation tender.

Table 1. Items offered by Company XYZ (Modify the list to show only the miniature substations your company would like to offer)

No	Eskom DDT	Rev	SAP no	Description
1.	6259	0	0574919	SWITCHGEAR:FP FEEDER(A);11KV;630A;25kA
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19.	6258	7	0170210	BKR PANEL 11kv 2500A 25kA INCMR D6258
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23.	6175	11	0237141	VT PANEL 11kv/110V 50VA CL 0.2 (A)D6175

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24.				Mounting and technical quality assurance verification test of the on Board Protection and Control Scheme per panel (Eskom will free issue the protection and control schemes)
25.				Per panel, allow for a customised steel support frame/base shall be provided to allow the switchgear panels to be supported over the entire width of the cable trench as per Eskom DDT 5238.
26.				Per panel allow for a removable, custom-fitted non-slip steel trench cover plates (e.g. chequer plates) of minimum thickness 4,5 mm shall be provided and fitted by the supplier to close off the accessible cable trench once the cables have been terminated.
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32.				Set of suitable and necessary tools for a switchboard assembly
33.				Transport 0 to 300 km
34.				Transport 0 to 600 km
35.				Transport 0 to 900 km
36.				Transport 0 to 1200 km
37.				Installation 0 to 300 km
38.				Installation 0 to 600 km
39.				Installation 0 to 900 km
40.				Installation 0 to 1200 km
41.				Commissioning 0 to 300 km
42.				Commissioning 0 to 600 km
43.				Commissioning 0 to 900 km
44.				Commissioning 0 to 1200 km
45.				Stand-off hand-held remote control unit for remote switching of circuit-breakers

Yours sincerely

Name Surname

Insert your designation here

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