	<p style="text-align: center;">Scope Of Work</p>	<p style="text-align: center;">Generation – Kriel Power Station</p>
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Title: Kriel Power Station Supply and Delivery of Medium Voltage Circuit Breakers on an as and when required basis for the period of five (5) years

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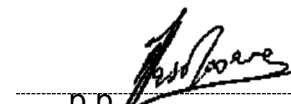
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1. Introduction

Kriel Power Station has various circuit breakers installed in the Medium Voltage Switchgears. To maintain continuity of electrical supply to various loads within power station auxiliaries, minimum stock levels of spares are required to minimise downtime in the event of component failure.

The system downtime depends on how soon one identifies the problem (that is, troubleshooting ability) and the availability of replacement spare components in case of a failure of component installed in the either at the equipment or server room. Replacement spares are thus required to ensure that system deterioration, defects and failures are timeously rectified through the guaranteed and optimised spares stock holding.

This document will outline the works information for the procurement of spare components of the above mentioned for 5 years. This will include, but not limited to, the scope for supplying spares technical information and supply of spares. The scope covered is for the supply of circuit breakers installed on MV electrical systems.

2. Supporting Clauses

2.1 Scope

The proposed scope of work is for the supply and delivery of various Medium Voltage Circuit Breakers for a period of 5 years on an “as and when” required basis for Kriel Power Station Main Stores.

2.1.1 Purpose

The scope of work outlined aims at maintaining adequate stock levels for Medium Voltage circuit breakers for replacement upon component failure in the plant.

2.1.2 Applicability

This document shall apply throughout Eskom Holdings Limited Divisions.

2.1.3 Effective date

This document is effective from the date of authorisation.

2.2 Normative/Informative References

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs.

2.2.1 Normative

- [1] ISO 9001 Quality Management Systems
- [2] 240-143485806 Medium Voltage Protection Standard
- [3] 240-76960420 Guideline for Spares Procurement Technical Evaluation and Quality Inspection.

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- [4] 240-56227573: AC metal-enclosed/clad switchgear and control gear for voltages above 1kV up to and including 52kV
- [5] 240-150642762 Generation Plant Safety Regulations
- [6] 474-59: Internal Audit Procedure
- [7] 32-1033 Eskom Procurement and Supply Chain Management Policy.
- [8] 32-1034 Eskom Procurement and Supply Chain Management Procedure.
- [9] 474-132 GBE Plant Engineering Baseline Change Management.

2.2.2 Informative

- [10] Kriel Power Station Supply of MV Circuit Breaker Technical Evaluation Strategy
- [11] 240-56227426: MV and LV Management of Power Station MV and LV Protection and Setting Standard
- [12] ISO 45001 Occupational Health and Safety Management
- [13] ISO 14001 Environmental Management System

2.3 Definitions

2.3.1 Classification

Controlled Disclosure: Controlled Disclosure to external parties (either enforced by law, or discretionary).

2.4 Abbreviations

Abbreviation	Explanation
AC	Alternating Current
DCF	Data Capturing Form
ACB	Air Circuit Breaker
OEM	Original Equipment Manufacturer
RFx	Request for Proposal, Information, Quotation
RFQ	Request for Quotation
QC	Quality Control
SHEQ	Safety, Health, Environment and Quality
WI	Works Information
CT	Current Transformer
DC	Direct Current
LV	Low Voltage
MV	Medium Voltage

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Abbreviation	Explanation
MCCB	Moulded-Case Circuit-breaker
MSB	Motor Start Breaker

2.5 Roles and Responsibilities

Supplier

- Supply procured spares as requested by the *Employer*
- Confirm correctness of the supplied spares information
- Provide spares technical information in accordance with this Works Information
- Timeously inform the *Employer* of any delays or when outstanding or additional information from the *Employer* is required
- Responsible to ensure that a quality product is delivered
- Responsible to ensure that every effort is made to keep to the agreed program and plan
- Provide all required technical datasheets and/or product brochures for all the spares supplied
- Conform to all the other requirements stipulated in this document
- Supply all the necessary test sheets/results, where applicable
- Invite the *Employer* or representative thereof three (3) working days in advance for witness/hold points, if applicable, as agreed

Engineer

- Provide input and compile this Works Information
- Liaise with all relevant stakeholders for any input
- Ensure that the Works Information is in accordance with Eskom policies and procedures
- Provide all necessary information to assist in spares procurement
- Participate in technical evaluation of the tender documents
- Assist with the preparation of all the reports to different tender committees, where applicable
- Provide technical assistance to Materials Management and Procurement Departments during the execution of this Works Information
- Perform Quality Checks on procured spares and accompanying documentation
- Provide Materials Management with fully populated DCFs for cataloguing of spares and record keeping
- Verification and acceptance of all supplied documentation
- Responsible for QC at delivery of procured spares

Materials Management

- Catalogue the spares after completion of DCFs

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- Confirm that the information supplied by the engineer is enough for cataloguing
- Perform QC on all submitted DCFs
- Make provision for storage of procured spares
- Work together with engineering when accepting spares into stores

Procurement

- Perform all procurement processes outlined in this Works Information
- Issue RFQ's and/or RFI's for the procurement of spares
- Supply engineering with *Supplier* information for sole source justifications, where applicable.
- Set up clarification meetings between *Supplier* and *Employer*
- Act as communication link between *Supplier* and *Employer*
- Ensure all necessary payments are effected timeously and keep record thereof
- Arrange technical evaluation sessions
- Compile and present mandate to negotiate and arrange negotiation meetings if and when required and give feedback to relevant tender committee
- Keep record of all tender documentation

Maintenance

- Perform inspections and QC on spares upon delivery
- Ensure spare items are stored properly by Materials Management as per relevant storage recommendations by the specific manufacturers

2.6 Process for Monitoring

The following monitoring processes shall be implemented:

- Quality control inspections
- Safety audits
- Document control and updates

Progress shall be monitored through:

- Quality control checks
- Safety compliance audits
- Testing documentation

2.7 Related/Supporting Documents

N/A

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3. Engineering scope of work

3.1 General Requirements

The following are the *Supplier's* requirement:

- The *Supplier* will ensure that the correct spare is supplied and will replace or be liable for damage at his/her cost if the incorrect or defective spare/s is supplied. The costs may include, but not limited to, repairs and/or replacement as a result of a defective or incorrect spare.
- The *Employer's* (i.e. Eskom Holdings SOC) acceptance of delivered spare/s does not absolve the *Suppliers* of the liability to supply the correct and/or defect free spare.
- The *Supplier* may, at the *Employer's* discretion, be given access to the plant to verify the information of the installed spare.
- The spare must be exactly the same (i.e. same Part Number) as specified on this works information and the part number will also be used to perform quality control checks. ***Notwithstanding the stipulated condition that the Supplier is responsible for verifying the correctness of spares information provided by the Employer in relation to the existing installed spare. This may include the Supplier consulting the original supplier of the spare to ensure correctness of information provided by the Employer.***
- The *Employer* may at his/her discretion make the *Employer's* Engineer or employees or *others* available to the *Supplier* for the purpose of soliciting additional information or verifying information as the need arises.
- The *Supplier* will supply any additional information such as brochure, general arrangement drawing, certificates, detailed specification, etc.
- The *Supplier* provides the *Employer* with additional spares information and verifies information required in the attached data capturing forms (DCF) at least three months after order placement or conclusion of the contract or (where lead time is less than three months) a week before delivery of respective spare.
- The *Supplier* shall supply preservation and storage procedure/s, where applicable.
- The Spares Procurement limit over five (year) period, indicated by the *Employer* in the attached table as one of the subheadings, is the maximum number the *Employer* may require the *Supplier* to supply over the contract period. However the *Supplier* may only supply the quantity as specified by the *Employer* in the individual order instruction and does not imply that the *Supplier* is entitled to supply the total number indicated in the Spares Procurement Limit over five (year) Period.
- The *Employer* reserves the right to exclude the supply of some spares items included in the contract with the *Supplier* should the *Employer* become aware that National Supply Contract exists or is placed by the *Employer* with *Others* in respect to those specific spares items.
- If deemed necessary, the *Employer* may subject the *Supplier* to a quality assurance assessment at the *Supplier's* or *sub-Supplier's* premises as part of the technical evaluation or before the contract placement or at any time during the contract period.
- Where the spare requires testing, the *Supplier* will inform the *Employer* to invite or make available the *Employer's* System Engineer to witness the tests.
- Should the *Employer* be dissatisfied with all or certain aspects relating to a specific spare tests (including but not limited to suspected inferior quality or non-compliance) the *Supplier* will make good, rectify the faults or supply a new spare at his/her cost.
- Complete price breakdown must be supplied with the quotation and must include the cost of transport to Kriel Power Station. However, the *Employer* reserves the right to use the *Employer's* own transport.
- Spares will be opened for inspection, counting and quality control check at the *Employer's* stores.

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- The *Employer* has provided the Bill of Material table and copies of individual spares DCF's in order to assist the *Supplier* to meet the requirements of the Work to be performed by the *Supplier*.
- The *Employer* may make clarification sessions available to either prospective *Supplier/s* in order to further assist the prospective *Supplier/s* to meet the requirements of the Work to be performed by the *Supplier*.
- *The Employer* reserves the right to exclude the supply of some spares items included in the contract with the *Supplier*, should the *Employer* become aware that the National Supply Contract exists or is placed by the *Employer* with others in respect to those specific spares items.

3.2 SPARES IDENTIFICATION

Appendix A lists all the spares to be procured under this works information. This list shall correspond to the provided hardcopy DCF's that will contain more information about required spares. Each spare is identifiable by means of component/part description, OEM and/or OEM part number. Where the information available on the spares list in Appendix A or that supplied by materials management as catalogued is not sufficient to positively identify the applicable spare, the *Supplier* shall notify the *Employer* such that the *Employer* can assist the *Supplier* in identifying the correct spare.

The spares to be provided to be the same as the original component, in all technical respects, as those utilised on the equipment it is intended for. This includes, but is not limited to, design (including dimensions and material specifications) and manufacturing (including manufacturing processes, standards and acceptance testing).

The *Supplier* shall be liable to replace a supplied spare that is found to be defective and/or wrong.

3.3 INFORMATION TO BE PROVIDED

Accompanying this Works Information is the DCF's with the information deemed enough to procure the correct spares as required. The DCF is required by the *Employer's* Material Management System to be able to book the item in the stores and the information should be sufficient enough to procure the goods in future. Where a field is populated, the *Supplier* needs to review and verify/correct the information against the OEM part number for correctness.

The following information to be provided with the spares:

- Documentation detailing the technical characteristics of the procured spare item. This may be in the form of data sheet or brochure. The *Employer* reserves the right to reject the documentation if it is not deemed sufficient
- Any other additional information that has not been specified on the DCF / WI but necessary for storage, installation and utilisation of spares where applicable
- Supply preservation and storage procedures of goods, where applicable
- Any spares information which has been omitted which is deemed relevant for spares identification, storage, maintenance, etc.
- In instances where the *Supplier* uses another company, other than the item OEM, to provide required information, this to be declared in advance to the *Employer*

3.4 SPARES QUANTITIES

The spares quantities to be provided as stipulated in APPENDIX A.

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3.5 REPLACEMENT PARTS UPGRADED/MODIFIED

Where equipment or spares, including the whole assembly, have been upgraded / modified the *Supplier* shall indicate this to the *Employer* as part of the tender. The *Employer* shall be made aware immediately where the upgrade/modification to the component is only identified subsequent to the tender being issued. The detailed compatibility to the existing component shall be indicated. This includes hardware, firmware and software upgrade/modification.

If the components to be supplied will be obsolete, or envisaged to be obsolete, in the 3 years subsequent to tender being issued, the *Supplier* shall indicate this to the *Employer* and indicate viable alternatives thereof.

3.6 PACKAGING

All supplied spares shall be packaged in such a manner that they may be transported and stored for an extended period of time without resulting in damage to the packaged components. This includes preventing damage due to moisture ingress, especially for electronic components. Where possible, silica gel/desiccant may be included to ensure protection against moisture for at least 3 months. However, this inclusion should not lead to damage to the component.

Different spare types shall be packaged separately such that each spare type can be stored separately. Packaging shall be such that the spare can be identified without opening the packaging. Packaging shall be of material that will not be damaged, to an extent possible, by harsh weather conditions during transportation. If that is not possible, then the packaging shall be protected against such conditions.

Where possible, packaging to be such that procured spares can be positively identified through the packaging. Where this is not possible, the packaging to be such that it allows opening and closing of packaging and still maintain the packaging integrity thereafter.

Delivery packaging to have the following details on it:

- Order number
- Physical address of Kriel Power Station
- Delivery note number

3.7 EXCLUSIONS

The following shall be noted as exclusions as per this works information:

- The *Supplier* shall not supply offloading facilities during delivery of spares
- The *Supplier* shall not be responsible for the storage of spares after acceptance at delivery by *Employer*
- Subcontracting shall not be permitted, unless declared and accepted prior to contract placement

3.8 ACCEPTANCE OF SPARES

- No incorrect, damaged or faulty spares will be accepted.
- All the spares will be inspected before payment could be processed.
- Data capturing forms information must be supplied and must meet an acceptable level.
- Where applicable; test certificates, material certificate, manuals, data sheet and signature shall be provided as required.

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- The *Supplier* must provide references of the companies that they have supplied similar spares to, and include the respective supply order/contract value, the contact name, physical address and telephone number.

3.9 CONSTRAINTS ON HOW THE SUPPLIER PROVIDES THE GOODS

3.9.1 WORK TO BE DONE BY THE DELIVERY DATE

A clarification meeting to be held 3 weeks subsequent to the issuing of the enquiry to confirm the scope of the Works and to confirm spares identification. All questions can be forwarded to the *Employer* during this meeting. Where more than one *Supplier* is available, all responses from the *Employer* will be forwarded to all *Suppliers*, regardless of which *Supplier* required the clarification.

All required spares to be delivered to the *Employer* 4 weeks from the day the purchase order is placed by the *Employer*. In instances where design reviews are necessitated, the 4 weeks will be from the day of design freeze. The *Employer* may request, in writing, that a spare be expedited quicker if its delivery in 4 weeks may lead to a delay that may result in undesirable consequences (loss of production, loss of revenue and/or safety to personnel or environment) to the *Employer*.

3.9.2 DOCUMENTATION CONTROL

The information for spares to be provided will either be in electronic format or hard copy. Other information provided with each spare to be either in electronic format or hard copy. Information provided to be documented in such a manner that the information for each spare will be easily identifiable. All documentation supplied shall bear the OEM's official name and logo.

3.9.3 QUALITY ASSURANCE REQUIREMENTS

The spares to be provided shall conform to all quality assurance requirements that will be defined at contracting phase.

3.9.4 PROGRAM CONSTRAINTS

The following shall be included in the *Supplier's* program:

- The delivery date as stipulated to be provisional. This date may change prior to delivery. The *Supplier* to indicate standing time and storage costs should the *Employer* delay the delivery date. Proof of actual costs to be provided.
- Provision to be made for delays that may be caused owing to items being sourced from outside The Republic of South Africa.

3.9.5 INSURANCE OF THE GOODS

The Insurance of spare components is the responsibility of the *Supplier* until delivery and acceptance by the *Employer*.

3.10 SHEQ

The *Employer* reserves the right to request certification from the *Supplier* that proves compliance to relevant SHEQ legislations, standards and procedures. If, during procurement, the *Supplier* is found guilty of

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contravention of any SHEQ legislations, the *Employer* shall, at *Employer's* discretion, cancel the contract and the *Supplier* shall be liable to all the costs incurred therein.

4. Acceptance

This document has been seen and accepted by:

Name	Designation
Rofhiwa Nelwamondo	Engineering Manager
Kgosi Ntsheroa	Electrical Maintenance Manager
Godfrey Mthombene	Electrical Plant Engineering Manager
Reshoketswe Kgobe	Materials Manager

5. Revisions

Date	Rev.	Compiler	Remarks
September 2025	1	M.W. Phetha	Initial Draft

6. Development Team

The following people were involved in the development of this document:

- Nkosi Phetha
- Motlokwa Mokabane
- Gcina Dlamini

7. Acknowledgements

The development team acknowledges the contributions of all stakeholders involved in the compilation of this consolidated scope of work document, including the Electrical Maintenance Department, Engineering Department.

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Appendix A

A.1 Spares list

VD4 CIRCUIT BREAKER 17.20.32 P210

The following circuit breakers are installed in 11kV Maintenance Isolator Boards, 11kV Unit Boards A and B from Units 1 to 6.

Item No	Description	Stock Item No.	Unit	Qty	Rate	Amount
	BREAKER, CIRCUIT: SWITCHGEAR DESIGN: ZS1; POTENTIAL: 175 KV; CURRENT: 2000 AMP; SHORT TIME CURRENT: 315 (3SEC) KA; POLE: 3; CONTROL VOLTAGE: 110 V; CREEPAGE: 455 MM; BASIC INSULATION LEVEL: 95 KV; INSULATION MATERIAL: VACUUM; OPERATING CONTROL TYPE: ELECTROMAGNETIC; POLLUTION CLASS: IP2X; APPLICATION: 11KV UNIT BOARD A&B; SPECIFICATION: IEC 62271-100; TEMPERATURE RATING: -5 TO +40 DEG C; WIDTH: 570 MM; LENGTH: 424 MM; HEIGHT: 475 MM; COLOR: WHITE; TYPE: VACUUM; MOUNT: WITHDRAWABLE; PHASE SPACING: 210 MM; INTERRUPT CAPACITY: 315 KA; MANUF P/N: 1VCF337123R0552; VD4 CB 17 20 32 P150	706411	each	6		

VD4 CIRCUIT BREAKER 17.06.32 P150

The following circuit breakers are installed in 3.3kV Service Boards C & D from Unit 1, 4, 5 and 6.

Item No	Description	Stock Item No.	Unit	Qty	Rate	Amount
	BREAKER, CIRCUIT: SWITCHGEAR DESIGN: ZS1; POTENTIAL: 12 KV; CURRENT: 630 AMP; SHORT TIME CURRENT: 31.5 (3SECS) KA; POLE: 3; CONTROL VOLTAGE: 110 V; CREEPAGE: 455 MM; BASIC INSULATION LEVEL: 95 KV; INSULATION MATERIAL: VACUUM; OPERATING CONTROL TYPE: ELECTRONIC CARD; POLLUTION CLASS: IP2X; APPLICATION: FEEDERS; SPECIFICATION: IEC 62771-100; TEMPERATURE RATING: -5 TO +40 DEG C; WIDTH: 570 MM; LENGTH: 424 MM; HEIGHT: 475 MM; COLOR: WHITE; TYPE: VACUUM; MOUNT: WITHDRAWABLE; PHASE SPACING: 150 MM; INTERRUPT CAPACITY: 31.5 KA; MANUF P/N: 1VCF337123R0552; VD4/P CB 17.06 32 P150	706419	each	15		

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VD4 CIRCUIT BREAKER 17.12.32 P150

The following circuit breakers are installed in 11kV Maintenance Isolator Boards, 11kV Unit Boards A and B from Units 1 to 6.

Item No	Description	Stock Item No.	Unit	Qty	Rate	Amount
	BREAKER, CIRCUIT: SWITCHGEAR DESIGN: ZS1; POTENTIAL: 175 KV; CURRENT: 1250 AMP; SHORT TIME CURRENT: 31.5 (3SECS) KA; POLE: 3; CONTROL VOLTAGE: 110 V; CREEPAGE: 455 MM; BASIC INSULATION LEVEL: 95 KV; INSULATION MATERIAL: VACUUM; OPERATING CONTROL TYPE: ELECTROMAGNETIC; POLLUTION CLASS: IP2X; APPLICATION: 33KV SERVICE BRDS C&D FEEDERS; SPECIFICATION: IEC 62271-100; TEMPERATURE RATING: -5 TO +40 DEG C; WIDTH: 450 MM; LENGTH: 424 MM; HEIGHT: 461 MM; COLOR: WHITE; TYPE: VACUUM; MOUNT: WITHDRAWABLE; PHASE SPACING: 150 MM; INTERRUPT CAPACITY: 315 KA; MANUF P/N: 1VCF337123R0552; VD4/P CB 17.12 32 P150	706418	each	15		

VM1 CIRCUIT BREAKER 17.06.32 P150

The following circuit breakers are installed in 3.3kV Service Boards C & D from Unit 1, 4, 5 and 6.

Item No	Description	Stock Item No.	Unit	Qty	Rate	Amount
	BREAKER, CIRCUIT: SWITCHGEAR DESIGN: ZS1; POTENTIAL: 175 KV; CURRENT: 630 AMP; SHORT TIME CURRENT: 315 (3 SEC) KA; POLE: 3; CONTROL VOLTAGE: 110 V; CREEPAGE: 455 MM; BASIC INSULATION LEVEL: 95 KV; INSULATION MATERIAL: VACUUM; OPERATING CONTROL TYPE: ELECTROMAGNETIC; POLLUTION CLASS: IP2X; APPLICATION: 33KV SERVICE BRDS C&D FEEDERS; SPECIFICATION: IEC 62271-100; TEMPERATURE RATING: -5 TO +40 DEG C; WIDTH: 450 MM; LENGTH: 424 MM; HEIGHT: 589 MM; COLOR: WHITE; TYPE: VACUUM; MOUNT: WITHDRAWABLE; PHASE SPACING: 150 MM; INTERRUPT CAPACITY: 31.5 KA; MANUF P/N: 1VCF336123R0151; VM1 CB 17 06 32 P150	706404	each	30		

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VD4EL CIRCUIT BREAKER 17.12.40 P210

The following circuit breakers are installed in 3.3kV Service Boards A & B from Unit 1 to 6.

Item No	Description	Stock Item No.	Unit	Qty	Rate	Amount
	BREAKER, CIRCUIT: SWITCHGEAR DESIGN: ZS1; POTENTIAL: 175 KV; CURRENT: 1250 AMP; SHORT TIME CURRENT: 40 (3SECS) KA; POLE: 3; CONTROL VOLTAGE: 110 V; CREEPAGE: 555 MM; BASIC INSULATION LEVEL: 95 KV; INSULATION MATERIAL: VACUUM; OPERATING CONTROL TYPE: ELECTROMAGNETIC; POLLUTION CLASS: IP2X; APPLICATION: 33KV SERVICE BRDS A&B FEEDERS; SPECIFICATION: IEC 62271-100; TEMPERATURE RATING: -5 TO +40 DEG C; WIDTH: 570 MM; LENGTH: 424 MM; HEIGHT: 589 MM; COLOR: WHITE; TYPE: VACUUM; MOUNT: WITHDRAWABLE; PHASE SPACING: 210 MM; INTERRUPT CAPACITY: 315 KA; MANUF P/N: 1VB7002617R1136; VD4/P CB 17.12 40 P210	706413	each	20		

VD4EL CIRCUIT BREAKER 17.25.40 P210

The following circuit breakers are installed in 3.3kV Service Boards A & B from Unit 1 to 6.

Item No	Description	Stock Item No.	Unit	Qty	Rate	Amount
	BREAKER, CIRCUIT: SWITCHGEAR DESIGN: ZS1; POTENTIAL: 175 KV; CURRENT: 2500 AMP; SHORT TIME CURRENT: 40 (3SEC) KA; POLE: 3; CONTROL VOLTAGE: 110 V; CREEPAGE: 555 MM; BASIC INSULATION LEVEL: 95 KV; INSULATION MATERIAL: VACUUM; OPERATING CONTROL TYPE: ELECTROMAGNETIC; POLLUTION CLASS: IP2X; APPLICATION: 33KV SERVICE BRDS A&C INCOMERS AND BUS SECTION; SPECIFICATION: IEC 62271-100; TEMPERATURE RATING: -5 TO +40 DEG C; WIDTH: 700 MM; LENGTH: 424 MM; HEIGHT: 616 MM; COLOR: WHITE; TYPE: VACUUM; MOUNT: WITHDRAWABLE; PHASE SPACING: 275 MM; INTERRUPT CAPACITY: 40 KA; MANUF P/N: 1VB7002617R1136; VD4/P CB 17 25 40 P275	706410	each	20		

VD4-1212-25ZSIM CIRCUIT BREAKER

The following circuit breakers are installed in 3.3kV Service Boards C & D from Unit 2 and 3.

CONTROLLED DISCLOSURE

Item No	Description	Stock Item No.	Unit	Qty	Rate	Amount
	BREAKER, CIRCUIT: POTENTIAL: 3.3-6.6 KV; CURRENT: 1.25 KA; TYPE: VACUUM; INTERRUPT CAPACITY: 25 KA; REFERENCE NO: GCE7002612R0193; ABB, TYPE VD4-1212-25ZS1M, SHORT CIRCUIT BREAKING SYMM 27.3KA, SHORT CIRCUIT MAKING CURRENT (PEAK) 63KA, SHORT CIRCUIT DURATION 3S, ALL CONTROL EQUIPMENT IS 110V DC	183680	each	15		

V7-ZC CONTACTOR

The following circuit breakers are installed in 3.3kV Service Boards C & D from Unit 2 and 3.

Item No	Description	Stock Item No.	Unit	Qty	Rate	Amount
	BREAKER, CIRCUIT: SWITCHGEAR DESIGN: UNIFLEX; POTENTIAL: 7.2 KV; CURRENT: 400 A; SHORT TIME CURRENT: 31.5 (3SECS) KA; POLE: 3; CONTROL VOLTAGE: 110 V; CREEPAGE: 455 MM; BASIC INSULATION LEVEL: 95 KV; INSULATION MATERIAL: VACUUM; OPERATING CONTROL TYPE: ELECTRONIC CARD; POLLUTION CLASS: IP2X; APPLICATION: 3.3 KV; SERVICE BOARD C&D; SPECIFICATION: IEC62771-100; TEMPERATURE RATING: -5 TO +40 DEG C; WIDTH: 570 MM; LENGTH: 424 MM; HEIGHT: 475 MM; COLOR: WHITE; MOUNT: WITHDRAWABLE; PHASE SPACING: 150 MM; INTERRUPT CAPACITY: 31.5 KA; MANUF P/N: AB00030226; IVCF68140850075; CONTACTOR V5C7/P	716878	each	15		

VMAL CB 17 12 32 P150 CIRCUIT BREAKER

The following circuit breakers are installed in 3.3kV and 11kV common plant switchgears.

CONTROLLED DISCLOSURE

Item No	Description	Stock Item No.	Unit	Qty	Rate	Amount
	BREAKER, CIRCUIT: SWITCHGEAR DESIGN: ZS1 (550); POTENTIAL: 17.5 KV; CURRENT: 1250 AMP; SHORT TIME CURRENT: 315 KA; POLE: 3; CONTROL VOLTAGE: 110 V; CREEPAGE: 455 MM; BASIC INSULATION LEVEL: 95 KV; INSULATION MATERIAL: VACUUM; OPERATING CONTROL TYPE: ELECTROMAGNETIC; POLLUTION CLASS: IP2X; APPLICATION: INCOMERS; FEEDERS; SPECIFICATION: IEC 62271-100; TEMPERATURE RATING: -5 TO +40 DEG C; WIDTH: 461 MM; LENGTH: 416 MM; HEIGHT: 665 MM; COLOR: WHITE; TYPE: VACUUM; MOUNT: WITHDRAWABLE; PHASE SPACING: 150 MM; INTERRUPT CAPACITY: 315 KA; MANUF P/N: 1VCF327133R052; VMAL CB 17 12 32 P150	716878	each	25		

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