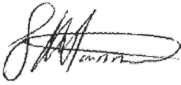

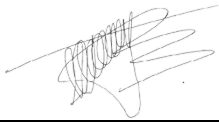


	Procurement SOW	Technology
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Title:	Contract Title: Ash Brake Motors	Revision:	0
	3PR – (Ash Brake motors does not form part of the existing National Contract)	Total Pages:	
		Disclosure Classification:	CONTROLLED DISCLOSURE

Compiled by	Authorised by Responsible Manager	Accepted By Electrical Maintenance Line Manager
		
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Date: 30/05/2024	Date:15/09/2025	Date: 08.10.2025

Accepted by Quality	Accepted by Procurement	
		
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Quality Manager		
Date: 2025/10/09	Date:	

Note: Engineering compiled using the NEC template (Part 3) and are responsible for the applicable engineering related inputs. For the purpose of submitting to procurement for initiating the contract process. The contract document completion will be completed by procurement with sign off by the cross functional team.

EMPLOYER'S SERVICE INFORMATION

Contents

EMPLOYER'S SERVICE INFORMATION	1
1 Description of service	3
1.1 Executive overview	3
1.2 Description of the <i>works</i>	3
1.2.1 Manufacturing, Tests and inspections required and commissioning	3
1.2.2 The following abbreviations are used in this Service Information:	4
2. Manufacture & fabrication	4
3. Specifications	4
4. Constraints on how the <i>Contractor</i> Provides the Works	6
4.1 Marking, packing, transport and offloading of the goods	6
4.2	6
4.2.1 Marking	6
4.2.2 Offloading	6
4.3 Meetings	6
4.4 Documentation control	6
5. Detailed Scope of Work of items to be supplied:	7

1 Description of service

1.1 Executive overview

The scope of this contract relates to design, manufacture and supply of Ash Brake motors to Majuba Power Station. The Purpose is for Ash Brake motors design, manufacture and supply. The *Supplier* is required to have an approved quality management system in place.

The *Employer's* objectives for this contract include security of design, manufacture, supply, competitive pricing, encouraging a long-term commercial relationship with the *Original Equipment Manufacturer (OEM)* based on mutual trust, commitment to common goals and understanding of each Party's expectations and values.

1.2 Description of the works

Design, manufacture and supply of Ash Brake motors to Majuba Power Station, on an "as and when" required basis. The scope of work is summarised as follows:

- Site inspection to ensure that the motors are mechanically and electrically interchangeable (Direct replacement)
- Design, manufacture, test supply of Ash Brake motors.
- Ash Brake Motors must be supplied with data packages on delivery, i.e. QCP's, check sheets and test results, etc.
- Ash Brake Motors must be delivered at Majuba Power Station Store

1.2.1 Manufacturing, Tests and inspections required and commissioning

Manufacturing commences only after Power station system engineer has accepted the detail design and QCPs/ITPs. The manufacturing is done in accordance with the design and construction requirements stated in the Eskom standard **240-57617975** for New Low Voltage Induction motors procurement standard Section 3.1.

Eskom system engineer conducts manufacturing inspection where necessary as part of technical assurance during manufacturing

The motors are tested in accordance with the testing requirements stated in the Eskom standard **240-57617975** for New Low Voltage Induction motors procurement standard Section 3.2.1.1

Performance/Type test are conducted and witnessed per motor design type to validate the design and manufacturing process. Each motor is routine tested and witnessed before dispatched to site. Final dispatch inspection is conducted by power station personnel. New motors are not accepted on site without manufacturing and testing documents and dispatch approval from the station.

The Original Equipment Manufacturer (OEM) must submit a Quality Control Plan (QCP), indicating inspection interventions during manufacturing and all the test that will need to be conducted, this will give a Purchaser an opportunity to add intervention and tests required on the DCP compressor motors. QCP must be submitted as soon as contract is in place. QCP must be submitted to the Purchaser before manufacturing of items.

Requirements for installation and commissioning at Site are conducted by Eskom in accordance with the Eskom standard 240-50237155 Rev-4 for Induction motors, Commissioning Work Instruction 240-100457684 and other site-specific procedures. The Supplier is required to witness Site installation and commissioning as requested by Eskom and defined in the contract.

1.2.2 The following abbreviations are used in this Service Information:

Abbreviation	Meaning given to the abbreviation
OEM	Original Equipment Manufacturer
SOW	Scope of work
QCP	Quality Control Plan

2. Manufacture & fabrication

Manufacturing commences only after Power station system engineer has accepted the detail design and QCPs/ITPs. The manufacturing is done in accordance with the design and construction requirements stated in the Eskom standard **240-57617975** for New Low Voltage Induction motors procurement standard Section 3.1.

Eskom system engineer conducts manufacturing inspection where necessary as part of technical assurance during manufacturing

3. Specifications

Title	Date or revision	Tick if publicly available
<u>General Specifications:</u>		
Occupational Health and Safety Act, 85 of 1993		Act 85 of 1993
Programming and Progress Monitoring Service-Equipment Supply Contractor		NWS 1065
Plant Safety Regulations		OPR 3305
SABS Quality Standards		SABS ISO 9001
Safety, health and environmental requirements to be met by Contractors		BIA/RM/STD/01
Supplier Quality Management Specification	Latest	240-105658000
<u>Technical specifications:</u>		
Eskom Transport of Power Station Electric Motor Standard	Latest	240-56361435
New Low Voltage Induction motors procurement standard	Latest	240-57617975
Eskom New LV Motor Technical Schedule A&B	Latest	240-77100923
IEEE Guide for Testing Turn Insulation of Form-Wound Stator Coils for Alternating-Current Electric Machines.	Latest	IEE Std 522
IEEE Standard Test Procedure for Polyphase Induction Motors and Generators.	Latest	IEE Std 112
Recommended Practice for Testing Insulation Resistance of Rotating Machinery.	Latest	IEE Std 43

Thermal evaluation and classification of electrical insulation.	Latest	IEC 60085
Rotating electrical machines Part 1: Rating and Performance.	Latest	IEC 60034-1
Rotating electrical machines Part 2: Methods for determining losses and efficiency of rotating electrical machinery from tests (excluding machines for traction vehicles).	Latest	IEC 60034-2
Rotating electrical machines Part 4: Methods for determining synchronous machine quantities from tests.	Latest	IEC 60034-4
Rotating electrical machines Part 5: Degrees of protection provided by the integral design of rotating electrical machines (IP code) - Classification.	Latest	IEC 60034-5
Rotating electrical machines Part 6: Methods of cooling (IC code).	Latest	IEC 60034-6
Rotating electrical machines Part 7: Classification of types of construction, mounting arrangements and terminal box position (IM code).	Latest	IEC 60034-7
Rotating electrical machines Part 8: Terminal markings and direction of rotation.	Latest	IEC 60034-8
Rotating electrical machines Part 9: Noise limits.	Latest	IEC 60034-9
SANS IEC 60034-11 Rotating electrical machines Part 11: Thermal protection.	Latest	IEC 60034-11
Rotating electrical machines Part 12: Starting performance of single-speed three-phase cage induction motors.	Latest	IEC 60034-12
Rotating electrical machines Part 14: Mechanical vibration of certain machines with shaft heights 56 mm and higher - Measurement, evaluation and limits of vibration severity.	Latest	IEC 60034-14
Rotating electrical machines Part 15: Impulse voltage withstand levels of form-wound stator coils for rotating a.c. machines.	Latest	IEC 60034-15
Rotating electrical machines Part 18: Functional evaluation of insulation systems Section 1: General guidelines.	Latest	IEC 60034-18-1
Rotating electrical machines Part 18-34: Functional evaluation of insulation systems - Test procedures for form-wound windings - Evaluation of thermomechanical endurance of insulation systems	Latest	IEC 60034-18-34
Rotating electrical machines Part 26: Effects of unbalanced voltages on the performance of three-phase cage induction motors.	Latest	IEC 60034-26
The preparation of steel surfaces for coating	Latest	SANS 064
Zinc chromate primers for steel	Latest	SANS 679
National colour standards for paint	Latest	SANS 1091
Mechanical Vibration – Evaluation of machine Vibration by measurements on non-rotating Parts - Part 1: General guidelines	Latest	ISO 10816-1

4. Constraints on how the *Contractor* Provides the Works

4.1 Marking, packing, transport and offloading of the goods

The *Supplier* must provide a Packaging & Transport procedure for all the motor when required by the *Purchaser*. Motors must be wrapped with plastic to prevent water and dust ingress during transportation. Motors to be transported with low bed trucks, shaft must be locked to ensure that airgap doesn't get affected during transportation.

4.2

4.2.1 Marking

The *Supplier* must ensure that items are legible and indelibly marked/tagged with the *Purchaser's* Stock number where available, purchase order number, description and *Supplier* reference number. Goods must be preserved and/or packaged for transport and storage for long term storage as per procedure.

4.2.2 Offloading

- a) All motors must be delivered and off loaded at the *Purchaser's* stores.
- b) All motors must be wrapped with plastics to prevent dust ingress. Some of these components will be kept in store as spares, therefore it must be preserved accordingly.
- c) Crates to be such a design that it can be lifted with a forklift and must be able to be lifted with a sling using a crane, it must not collapse when lifted.

4.3 Meetings

- a) Meetings of a specialist nature may be convened at times and locations to suit the Parties.
- b) Records of these meetings shall be submitted to the *Purchaser* by the person convening the meeting within five days of the meeting.
- c) All meetings shall be recorded using minutes or a register prepared and circulated by the person who convened the meeting.
- d) Such minutes or register shall not be used for confirming actions or instructions under the contract as these shall be done separately by the person identified in the *conditions of contract* to carry out such actions or instructions.

4.4 Documentation control

The final design documents, manufacturing certificates, testing certificates, operating and maintenance manuals are delivered with motors in accordance with the Eskom standard 240-50237155 for New Induction motors Section 3.3.

In addition to General Documentation requirements in 240-50237155 Rev-4, all documents, manuals, drawings are to have the serial number of the relevant motor, the Power Station name and description as either on the price list or revised during task order execution.

Two hard copies per motor of all documents, manuals and drawings are to be provided by the supplier number of hard copies per motor. Electronic copies are made available with the drawings, manuals and documents in PDF format.

5. Detailed Scope of Work of items to be supplied:

Description	Stock number
Brake Motor	666251