Eskom	Scope of Work	Camden Power Station

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.....	.....	.....
M Nchabeleng	**P. Mthombeni**	**D. Nyathikazi**
Boiler Engineer	**Boiler Engineering Manager**	**Boiler Maintenance Manger**
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1. INTRODUCTION

Boiler tubes are vital for steam generation and need maintenance during both scheduled and unscheduled shutdowns. To be proactive, we replace boiler tubes that have reached the end of their design life. To ensure high-quality work and effective performance of the components at Camden Power Station, all the basic requirements listed in this document must be followed. This scope of work will be carried out as and when required.

1.1 PURPOSE

The purpose of this document is to provide the SOW for the Spares Supply Contract.

1.2 APPLICABILITY

This document applies to Eskom Camden Power Station only. It applies to Boiler Engineering, Boiler Maintenance, and Projects, Boiler services contractor, and or any contractor that will be involved in executing this scope of work.

2. SUPPORTING CLAUSES

2.1 SCOPE

This document will cover the requirements for the Supply of pressure parts tube spares for Camden Power Station.

2.1.1 Boiler Pressure Parts Tubes

The table below shows the range of boiler tubing materials to be supplied, and the total column indicates the total tubing required for a 3-year period, according to Camden Power Station's current outage opportunities plan. All quantities are based on the Bills of Material in the scopes submitted for the upcoming outages.

Table 1: Boiler Pressure Parts Tubes

Stock No	Material	Outside Diameter (mm)	Wall Thickness (mm)	Area	Bill of Quantities
Non-stock	15Mo3	38	4.5	Economiser (U 1-5,8)	50 x 6m
562867	15Mo3	50.8	4.4	Economiser (6 and 7)	200 x 6m
Non-stock	15Mo3	50.8	6	Economiser Connecting Tubes	150 x 6m
Non-stock	15Mo3	76.2	6.4	Economiser Side Walls	100 x 6m

242902	15Mo3	76.2	7.0	Evaporator Front Wall	100 x 6m
242902	15Mo3	76.2	7.1	Burner Tubes	100 x 6m
242902	15Mo3	76.2	7.0	Furnace Rear Wall	100 x 6m
242902	15Mo3	76.2	6.4	Evaporator LHS Wall	100 x 6m
242902	15Mo3	76.2	7.00	Furnace Rear Wall	100 x 6m
242902	15Mo3	76.2	7.00	Rear Wall Top Nose	500 x 6m
242889	15Mo3	76.2	7.00	Rear Screen Tubes	100 x 6m
242889	15Mo3	76.2	7.00	Front Screen Tubes	100 x 6m
242889	15Mo3	76.2	7.00	Furnace Roof Tubes	50 x 6m
242889	15Mo3	76.2	7.00	Platen Tubes	50 x6m
242898	15Mo3	50.8	6.4	Upper Hanger Tubes	90 x 6m
242898	15Mo3	50.8	6.4	Lower Hanger Tubes	90 x 6m
242890	15Mo3	50.8	7.1	Saturated Steam Rear Wall Lower Section	100 x 6m
242898	15Mo3	50.8	6.4	Membrane Wall	150 x 6m
242903	15Mo3	57.15	7.00	Saturated Rear Wall Upper Section	0
242897	13CrMo910	57.15	10.9	Riser Tubes	10 x 6m
242894	15Mo3	57.15	4.87	SH1 Inlet Tubes	150 x 6m

242900	15Mo3	53.97	6.4	SH1 Upper Section	10 x 6m
242904	15Mo3	53.97	5.38	SH1 Middle Section	400 x 6m
242899	15Mo3	53.97	4.87	SH1 Lower Section	20 x 6m
242896	13CrMo44	57.15	8.22	SH2 Upper Section	50 x 6m
Non stock	13CrMo44	53.97	5.38	SH2 Middle Section	200 x 6m
242900	15Mo3	53.97	6.40	SH2 Lower Section	150 x 6m
242897	10CrMo910	57.15	10.97	SH3 Element	100 x 6m
242893	10CrMo910	57.15	9.44	SH3 Element	300 x 6m
242897	10CrMo910	57.15	10.97	SH4 Transition Mat	400
242901	SA 213 TP316	57.15	5.89	SH4 Tubes	250 x 6m
Non-stock	SA 213 TP316	57.15	10.16	SH4 Transition Material	50 x 6m

2.1.3 Minimum Requirements

Please remember the following requirements for the boiler tubing scope of work:

a) Quotations must include Delivery and Transport Costs, including off-loading items. The packaging requirements are as follows:

1. The goods should be packaged to withstand transportation and storage for an extended period without being damaged by moisture, corrosion, or station vibrations.

2. The packaging should allow the use of lifting gear without damaging the goods and should not need to be opened for lifting or transport operations.

3. Different spare types should be packaged separately for separate storage.

4. Packaging and labelling should allow spare parts to be identified without opening the packaging.

5. Packaging should allow parts to be positively identified, and if not possible, the packaging should retain its integrity after being opened and closed.

6. Delivery packaging should have at a minimum, the following details (preferably on a removable adhesive sticker):

- Order number

- Short description of the component

- Stock Number

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] 240-168966153: Technical Evaluation Procedure Rev 1

[3] BS En 12952: Water-Tube Boilers

[4] 474-12132 Technical Specification for the Procurement of Boiler Tubing Across the Eskom Generation Fleet of Coal-Fired Power Plants

[5] 240 -87733094 Procurement of Seamless Steel High-Pressure Pipe Work and Boiler Tubing Material Standard in the Generation Rev 3

[6] EN 10216: Seamless steel tubes for pressure purposes

[7] BS EN 10204: Metallic Products – Types of Inspection Documents

2.2.2 Informative

N/A

2.3 DEFINITIONS

Definition	Explanation
Contractor	Service provider contracted for the supply of spares and various services on the machines
Employer	Eskom Camden Power Station

2.4 ABBREVIATIONS

Abbreviation	Explanation
CPS	Camden Power Station
GO	General Overhaul
HP	High Pressure
LP	Low Pressure
EN	Euro Norm
SOW	Scope of Work

2.5 TECHNICAL INPUTS FOR PRICE ADJUSTMENTS

N/A

3. AUTHORISATION

This document has been seen and accepted by:

Name	Designation
Mlungisi Makhaya	Boiler Maintenance: Senior Supervisor Welding
Sydney Tshalane	Outage Coordinator
Gaolaolwe Lenoge	Snr Boiler Health Care Engineer
Lindani Meyiwa	Site Rep Metallurgist
Velaphi Vilakazi	Snr Boiler Engineer
Andrew Downes	Chief Metallurgist
Johanp Pretorius	Boiler Pressure Parts Specialist

4. REVISION

Date	Rev.	Compiler	Remarks
July 2024	0	M Nchabeleng	Draft
August 2024	01	M Nchabeleng	Final Document

5. DEVELOPMENT TEAM

- Michelle Nchabeleng