	<p style="text-align: center;">Scope of work</p>	<p style="text-align: center;">Engineering</p>
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1. Introduction

Kendal Power Station uses conveying system to discharge ash through the spreader and stacker for redundancy purposes. The spreader stream caught fire from the head station of 00ETK14 to the tripper part of the machine, burning the PLC cubicle, long line protection system, signal cables, marshalling panels, junction boxes and auto tension system panel.

2. Supporting Clauses

2.1 Scope

The scope of work is to restore the spreader stream through replacement and commissioning of the system from control and instrumentation point of view.

2.1.1 Purpose

The purpose of the scope of work is to restore full functionality and operational capability of the spreader stream.

2.1.2 Applicability

This document shall apply to Kendal Power Station common plant.

The 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

2.2.2 Informative

Not Applicable

2.3 Definitions

Not Applicable

2.4 Abbreviations

Not Applicable

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Abbreviation	Description
JB	Junction Box
PLC	Programmable Logic Controller

2.5 Roles and Responsibilities

2.5.1 C&I Engineering

Responsible for:

- Compiling Scope of work and technical criteria
- Conducting quality checks
- Reviewing and accepting the report from the contractor
- Witnessing and sign-off on commissioning activities

2.5.2 C&I Maintenance

- Witnessing and sign-off on commissioning activities
- Technical assistance when required in the absence of drawings

2.6 Process for Monitoring

Not Applicable

2.7 Related/Supporting Documents

Not Applicable

3. Scope of work and requirements

3.1 Specification and Description of the Services

The scope of work is separated in three technical areas, which is programmable logic controller (PLC) and termination, long line protection and tensioning system.

PLC cubicle, termination and commissioning

- PLC back plane replacement
- PLC IO module replacement

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- Din rail replacement
- Fused terminal plug replacement
- Signal cable termination to headstation junction box and mid point box
- Headstation junction box replacement
- PLC general arrangement drawing
- IO termination drawings for PLC and all junction boxes
- Tracing and Marking of cables
- Commissioning of the machine

Long line protection system

- All protection devices (pull key, E-stop, Misalignment and belt rips) replacement as per 100m spacing apart
- Replace pig tails as per 3meter spacing apart
- Replace green wire cable
- Commission 00ETK14

Tensioning system

- Replace tensioning system panel
- Replace tensioning controller
- Replace isolators
- Provide tensioning panel general arrangement drawing
- Commission system

4. Revisions

Date	Rev.	Compiler	Remarks
October 2020	N/A	T.B Magagula	Scope of work

5. Development Team

- Thabo Magagula
- Teboho Moleli

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6. Acknowledgements

Not Applicable

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