	Work Instruction	Medupi Power Station Project
---	-------------------------	-------------------------------------

Title: **Control of Nonconforming Outputs** Document Identifier: **200-15327**

Alternative Reference
Number:

Area of Applicability: **Medupi Power Station Project**




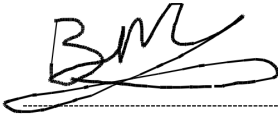
Functional Area: **Medupi Project Quality Department**

Revision: **05**

Total Pages: **22**

Next Review Date: **October 2023**

Disclosure Classification: **Controlled Disclosure**

Compiled by	Supported by	Functional Responsibility	Authorized by
			
R Tshotheli	E Memela	M Sinobolo	B Mgidlana
Senior Advisor: Quality Assurance	Chief Advisor: Quality Assurance	DQM Representative	Project Quality Manager
Date: <i>23/11/2020</i>	Date: 23/11/2020	Date: 23/11/2020	Date: 19/01/2021

Content

Page

1. Introduction.....	4
2. Supporting Clauses	4
2.1 Scope.....	4
2.1.1 Purpose.....	4
2.1.2 Applicability	5
2.1.3 Effective date.....	5
2.2 Normative/Informative References	5
2.2.1 Normative.....	5
2.2.2 Informative.....	5
2.3 Definitions	6
2.4 Abbreviations	6
2.5 Roles and Responsibilities	7
2.6 Related /Supporting Documents.....	8
3. Document Content.....	8
3.1 General	8
3.2 Process Map / Flowchart	10
3.3 NOD Processing.....	11
3.4 Nonconformity Registration and Risk Ranking.....	11
3.5 Nonconformity Correction Proposal by Contractor.....	12
3.6 Contractor Correction Proposal Review by TM	12
3.7 Nonconformity Elimination and Notification by Contractor	13
3.8 Conformity Verification (Inspection) by TM	14
3.9 Conformity Verification (Inspection) On Site	14
3.10 Nonconformity Closure and Notification by All	14
3.11 Defects open 90 days and more.....	15
3.12 Defect Notification Requirements	15
3.13 Stop Work Orders.....	15
3.14 Conformity Verification (Inspection) Off Site	15
3.15 Measurement, Analysis and Improvement.....	16
4. Process for Monitoring.....	17
4.1 Process Key Performance Areas and Indicators.....	17
4.2 Document Review and Self-Assessment.....	17
4.2.1 Document Self-Assessment	17
4.2.2 Revision Period	18
4.3 Training Requirements	18
5. Acceptance.....	18
6. Revisions.....	18
7. Development Team	19

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

Appendix A : NOD Form	20
Appendix B – Eskom Document Hierarchy.....	22

Figures

Figure 1: Control of Nonconforming Product Flowchart.....	10
---	----

Tables

Table 1: RACI Matrix.....	8
Table 2: KPAs/KPIs	17

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

1. Introduction

Eskom's Team Medupi (TM) shall undertake inspection activities as required by:

- a) Specification and code
- b) Where there is required and additional level of quality assurance over and above that provided by Contractor activities and the subsequent documentation.

The Contractor shall remain responsible for quality control and verification activities.

Where nonconforming product is identified during TM inspection activities it shall be documented via a Notice of Defect Report (NOD). If by any unforeseen circumstances the WISPA is not available, the manual registration of the NOD will apply (see appendix A) on contingency basis. Each department within the Medupi Power Station Project shall after they have identified the non-conformance register it on the form attached as appendix A. The same form shall be sent to the respective DQM, for the registration through IC. The registration will only be done by the Medupi Project Quality Inspection Coordinator for consistency purposes. The numbering will resume from the last number registered on WISPA.

2. Supporting Clauses

2.1 Scope

This work Instruction is applicable to all outputs intended for inclusion in the permanent works at Eskom's Medupi Power Station project.

Excluded from the scope of this work Instruction is procedural or system nonconformity which shall be documented in all instances via Corrective Action Reports and Audit Finding Reports respectively.

2.1.1 Purpose

The objective of this work Instruction is to ensure that all identified nonconforming and / or defective (hereinafter referred to as nonconforming) product is documented, evaluated and disposition in compliance with both:

- a) ISO 9001:2015, Sub-clause 8.7 "Control of Nonconforming Output" which states:

The organization shall ensure that outputs that do not conform to their requirements are identified and controlled to prevent their unintended use or delivery.

- b) ISO 9001:2015, Sub-clause 10.2 "Nonconformity and corrective action" in its entirety
- c) Conditions of Contract defined in FIDIC, Sub-clause 7.5 "Rejection" which states:

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

If, as a result of examination, inspection, measurement, or testing any plant, materials or workmanship is found to be defective or otherwise not in accordance with the contract, the Engineer may reject the plant, materials or workmanship by giving notice to the Contractor with reasons.

2.1.2 Applicability

This work Instruction is applicable to all outputs intended for inclusion in the permanent works at Eskom's Medupi Power Station project.

Excluded from the scope of this work Instruction is procedural or system nonconformity which shall be documented in all instances via Corrective Action Reports and Audit Finding Reports respectively.

This document shall apply during the construction of the Medupi Power Station Project.

2.1.3 Effective date

Date of authorisation of the Work Instruction.

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 - Requirements
- [2] ISO 9000 Quality Management Systems – Fundamentals and Vocabulary

2.2.2 Informative

- [3] 200 5919 Project Execution Plan
- [4] 200 1679 Project Quality Plan
- [5] 200 46362 Site Quality Assurance, Control and verification Work Instruction
- [6] 200 5665 Development and Change of Project QMS Documents
- [7] 200 1680 Document Management Work Instruction
- [8] FIDIC Forms of Contract

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

2.3 Definitions

The vocabulary of ISO 9000 and the following definitions apply in the application of this Work Instruction.

Term	Definition
Product	Output of an organization that can be produced without any transaction taking place between the organization and the customer, ISO 9000:2015 Clause 3.7.6 Plant, materials, design or workmanship as defined in 7.5 of FIDIC
Inspection	Conformity evaluation by observation and judgement of Contractor activities and control processes accompanied, if appropriate, by measurement, testing or gauging
Non-conformity	Non-fulfilment of requirement
Defect	Non-fulfilment of a product requirement related to an intended or specified use.
Correction	Elimination of an actual nonconformity / defect that has occurred
Corrective action	Elimination of the cause of a nonconformity / defect in order to prevent its recurrence

2.4 Abbreviations

Abbreviation	Explanation
DQM	Discipline Quality Manager
EA	Engineer Assistant
I&TN	Inspection and Test Notification
I&TR	Inspection and Test Report
ITP	Inspection and Test Plan
KPA's / KPI's	Key Performance Areas / Indicators
LDE	Lead Discipline Engineer
UM	Unit Manager
NCR	Nonconformity Report
NOD	Notice of Defect
QMS	Quality Management System

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

Abbreviation	Explanation
TM	Eskom's Medupi Project Execution Team
TPIA	Third Party Inspection Agency
WISPA	Web Integrated System of Processes and Applications

2.5 Roles and Responsibilities

a) Responsible

Those who do the work to achieve the target/objective. There is at least one role with a participation type of responsible, although others can be delegated to assist in the work required.

b) Accountable (also approver or final approving authority)

The one ultimately answerable for the correct and thorough completion of the deliverable or task, and the one who delegates the work to those responsible. In other words, an accountable must sign off (approve) work that responsible provides. There **must** be only one accountable specified for each task or deliverable.

c) Consulted (sometimes counsel)

Those whose opinions are sought, typically subject matter experts; and with whom there is two-way communication.

d) Informed

Those who are kept up-to-date on progress, often only on completion of the task or deliverable; and with whom there is just one-way communication.

Process Step / Activity	QCI	DQM	EA	Planning Engineer	LDE	UM	Contractor
Validate nonconformity and finalize NOD		R	A			C	
Registration and issues of NOD		R	A				
Propose nonconformity disposition and correction measures		I	I			C	A/R

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

Review nonconformity disposition and proposed correction <ul style="list-style-type: none"> Rework / Replace Repair / Accept As Is – (inclusive of review by Design Engineer and / or AIA and Engineering Change Request) 		R	AA	I	R	I	
Accept defect disposition and proposed defect correction		I	A/R				
Implement nonconformity correction measures			A				R
Notify TM, via I&TN, of completion of correction measures							A/R
Verify nonconformity correction measures	R	R	A			I	
Trend nonconformity		R					A
Implement corrective action to prevent reoccurrence of nonconformity							A/R

Table 1: RACI Matrix

2.6 Related /Supporting Documents

Documents superseded by this Work Instruction

[1] 200-15327 Control of Nonconforming Product Rev 03

Forms and templates

[2] 200-75592 Document Self-Assessment Template

Records

[3] Document Self-Assessment Checklist (Hyperwave)

3. Document Content

3.1 General

Nonconforming product shall be documented via a Notice of Defect (**NOD**) which shall be initiated, processed and closed within **WISPA (Web Integrated System of Processes and Applications)**. Personnel who identify nonconforming product shall be, in all instances, responsible for initiating the **NOD**.

The Discipline Quality Manager (**DQM**) shall review **NODs** prior to issue and thereafter the **DQM** shall issue **NODs**.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

WISPA default email notification of **NODs** shall be issued to **EA, LDE, DQM**, Commissioning Manager, Package Contracts Engineer and **Contractor**.

The Contractor shall disposition nonconforming product as either:

- a) **“Replace”** or **“rework”** thus eliminating the nonconformity.
- b) **“Repair”** or **“Accept As Is”** the nonconformity (Accept is as a concession).

EAs shall approve Contractor proposed correction measures after proposed correction measures are reviewed by Planning Engineer and / or **LDE & DQM**.

DQMs shall close out **NODs** after verifying Contractor correction measures are complete and correct.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

3.2 Process Map / Flowchart

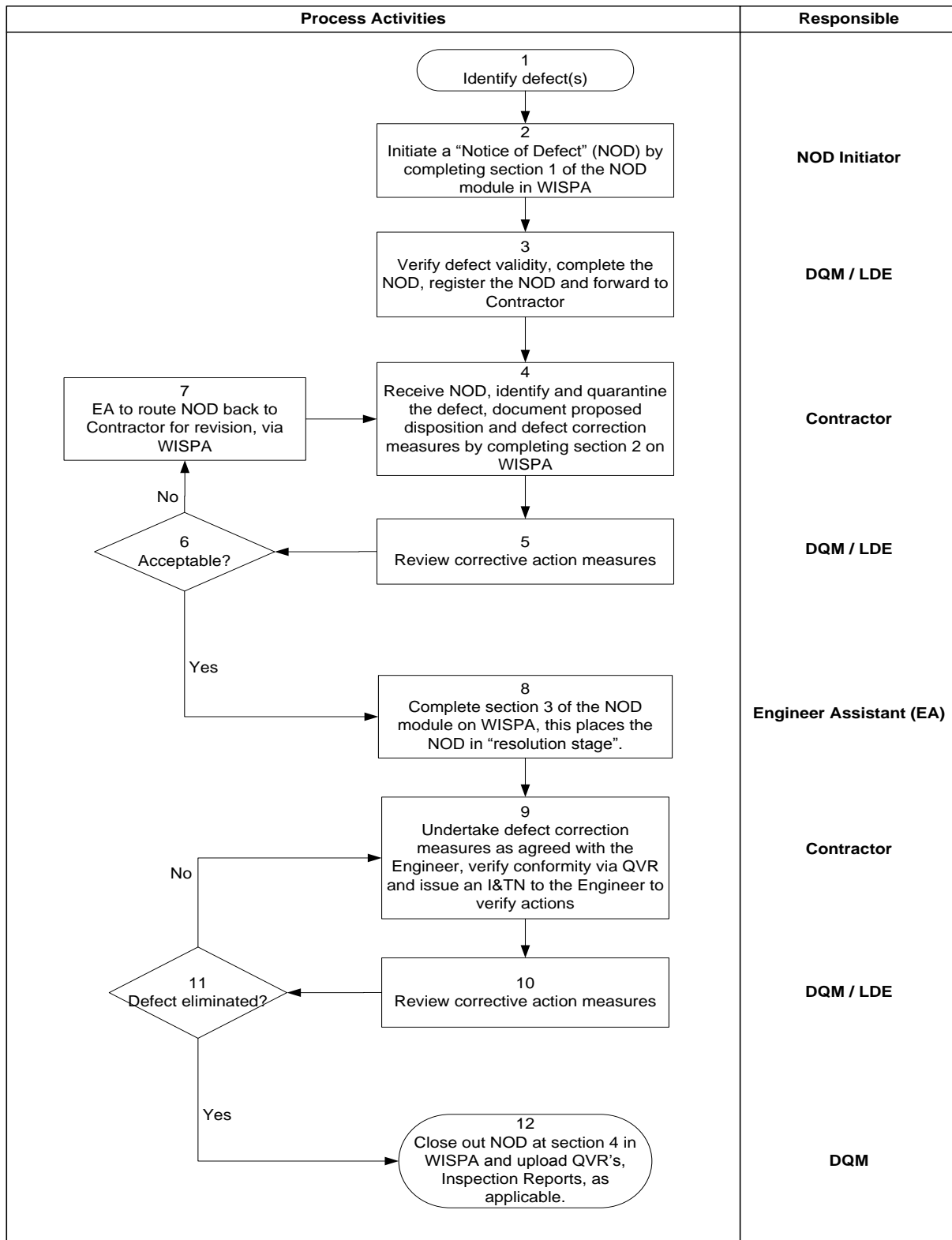


Figure 1: Control of Nonconforming Product Flowchart

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

3.3 NOD Processing

NODs identified off site at Contractors / Suppliers premises shall be documented via SHEQ Panel Inspection and Test Report (I&TR) in the first instance and thereafter via the “Notice of Defect” in WISPA by **DQM**.

NODs identified on site during construction and commissioning shall be documented via Eskom’s Medupi project “Daily Inspection and Test Report” in the first instance and thereafter via the “Notice of Defect” in WISPA.

Where possible, **NODs** shall be supported by photographs for clarity.

The initiator of the **NOD** shall complete **Section 1** of the NOD module in **WISPA**, except for the below listed items, which shall be completed by TM **DQM** when validating NOD acceptability:

- a) Risk Ranking
- b) NOD SPO No
- c) Failure Mode

3.4 Nonconformity Registration and Risk Ranking

TM DQM, in conjunction with **LDE**, shall assess and determine the validity of **NODs**.

Non valid **NODs** shall be rejected and not issued to Contractor – although initiation will remain traceable.

Valid NODs shall be risk ranked, from a safety perspective in determining whether work can continue, based on the below table and thereafter completed with the required data and issued to the Contractor with default copies to EA, DPM, **LDE**, Commissioning Manager and Package Contracts Engineer.

Risk Factor	Risk Scoring		
	High	Medium	Low
Affects personal and / or product safety.	8	4	2
Affects the product functionality.	2	1	0
Affects the product performance.	2	1	0
Affects the product operability.	2	1	0
Affects the product serviceability.	2	1	0
Affects the product ability to interchange	2	1	0
Critical –Score 13 to 16 – Supplier to:			

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

Cease work on the equipment, material containing the nonconformity and rectify immediately or within required period	
Major –Score 09 to 12 – Supplier to:	Minor – Score 0 to 8 – Suppliers to:
Cease work on the equipment, material containing the nonconformity. Quarantine the nonconformity area or in situ via physically identifying the equipment, structure, material as nonconforming.	Physically identified the equipment, structure, material as nonconforming. Take all due care in any further processing operations pending TM being provided with and reviewing the contractor proposed corrective measures.

3.5 Nonconformity Correction Proposal by Contractor

Upon receipt of a TM NOD Contractors are required to:

- a) Within twenty four hours physically quarantine the nonconformity in a specific quarantine area or in-situ by physically identifying the product as nonconforming via labeling or color coding to prevent further processing or inadvertent incorporation into the final product until correction measures are approved by TM.
- b) Within seven working days, return the NOD to TM after having determined:
 - If the identified nonconformity is an isolated incident or a repeat or systematic failure – the latter requiring root cause analysis by Contractor.
 - The impact of the nonconformity, on both technical integrity and schedule.
 - The proposed disposition (as either replace, rework, repair or accept as is) and the necessary correction measures and planned completion date in consideration of project schedule requirements in **Section 2** of the NOD in WISPA.

Where Contractor disposition is documented as:

- Repair – the Contractor shall prepare and include as attachments to the NOD in WISPA any supporting documentation which are not limited to, repair ITPs, Method Statements, Material Data Sheet and drawings.
- Accept As Is – the Contractor shall prepare and include as an attachment a fully cost Engineering report.

Contractors shall take the actions necessary to ensure correction measures are until such time as accepted by TM EA.

3.6 Contractor Correction Proposal Review by TM

NOD's returned by Contractor for TM review disposition as:

- a) **Replace or Rework**

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

- Shall be reviewed by TM's Planning Engineer on the basis that proposed correction measures will effect conformity and affect only schedule.
- Planning Engineer shall determine acceptability of dates identified by Contractor for replacement or rework against project schedule and accept / reject accordingly.

b) **Repair or Accept As Is**

- Shall be reviewed by **LDE** and **DQM** on the basis that proposed correction measures require technical and design / code evaluation and shall review comments made from a technical integrity and inspection perspective respectively – at this juncture **LDE** shall also be responsible for:
 - Coordinating the review, where required, of any Design Authority and / or AIA.
 - Completing Contractors Engineering Change Request and obtaining acceptance of the same relative to costs by Package Contract Engineer.

TM EA shall thereafter determine the reply to be sent to contractor by completing **Section 3** of the NOD in WISPA.

3.7 Nonconformity Elimination and Notification by Contractor

Upon receipt of the NOD with **Section 3** completed by TM the Contractor shall implement the correction measures approved by TM and in doing so shall ensure all applicable inspection / test and changes management documentation is completed relative to the correction measures.

If the corrective measures are rejected on **Section 3** or by the **EA**, the NOD shall be sent back to contractor for correction. Once the correction is done and submitted, it shall be work flowed back to the **LDE/ DQM** on **Section 3** again for acceptance, if accepted the NOD move to **Section 4** in **WISPA**.

Additionally, where TM identifies the nonconformity as a repeat systematic failure, the Contractor shall, within seven working days of being notified via WISPA of TM completion of **Section 3** of the NOD undertake:

- a) Root cause analysis of the nonconformity and issue a Corrective Action Request (CAR) to ensure corrective action is taken to prevent nonconformity reoccurrence.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

- b) An internal review of the quality management system and competency of personnel to identify why system nonconformity are not being identified, trended, actioned and eliminated by Contractor.

Thereafter the Contractor shall request TM conformity verification of enacted correction measures via issuance of an I&TN to:

Medupigaonsite@eskom.co.za for onsite conformity verification.

Medupiinspection@eskom.co.za for offsite conformity verification.

3.8 Conformity Verification (Inspection) by TM

Conformity verification (Inspection) shall be managed by TM QA Department, Inspection Coordinator (IC) and **DQM**:

- a) At site via QA Department, Quality Control Inspectors (QCI); and
- b) Offsite at Contractors / Suppliers premises via SHEQ Panel Inspectors.

3.9 Conformity Verification (Inspection) On Site

Upon receipt of Contractors Site I&TN **TM** QA Department, IC Shall:

- a) Register the data into **TM's** Daily I&TN (see Work Instruction 200 46362: Site Quality Assurance, Control and Verification).
- b) Organise QCIs to undertake an inspection at site of correction measures effected by Contractor to eliminate nonconformity.

QCIs shall physical inspect correction measures and document conformity or rejection:

- a) On the Contractors' Quality Verification Documented Information (e.g. ITPs, Checklist and Test Certificates) at site.
- b) On the applicable daily I&TR.

3.10 Nonconformity Closure and Notification by All

NOD shall be closed within the timeline as per works completion to next project phase. **Daily I&TRs** shall be issued to the Contractors Project & Site Quality Manager and **TM's EAs, DPMs, LDEs & DQM** by **TM IC**.

Subsequently, **DQM** shall review the **Daily I&TR** and ensure that inspection results relative to **NODs** are thereafter documented in **Section 4** of the **NOD** in **WISPA** before it's returned to the Contractor.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

3.11 Defects open 90 days and more

The Engineer shall ensure that SC15.1 and SC4.1 notification be issued to the Contractor stipulation the time frame in which the defect must be addressed. In the event that the Contractor does not comply SC15.2 will be issued where applicable to the specific Contract Conditions. The Engineer shall ensure that there is a position paper from the Contractor that provides clarity on the defect and reason for it to be open more than 90 days. The position paper will be subject to TM Engineering review and approval. Upon TM Engineering's review and approval of the position paper, the Risk ranking shall be re-evaluated taking in consideration of that current status of the defect and the position paper.

Issuance of SC15.2 [Termination by Employer]

In the event of a non-compliance on the part of the Contractor and after a SC15.1 has been issued the Engineer may issue a SC15.2 notification to the Contractor, where the Contract allows the Engineer to do so. The SC15.2 will have the effect of a 15% withholding on every Interim Payment Certificate (IPC) until such time as the defect has been remedied and c

3.12 Defect Notification Requirements

Non-compliance with the requirements of a defect notification will lead to the issuance of a SC8.8 [Suspension of Work] for the specific area of the defect in the event that the issuance of a SC15.1 and SC15.2 notice is being ignored by the Contractor.

3.13 Stop Work Orders

The Engineer shall enforce contractual remedies as per the FIDIC/NEC contract clause and issue a stop work order at any time for any portion of the work that does not comply with the Specification as stipulate on clause 4.1. When such an order is issued the Contractor shall immediately stop works in the specified area. The contractor shall contractually respond to the condition of the stop work order, with a schedule that clearly indicates start date to remedy the defect and the closure date. The contractor shall not resume until the Engineer issues a written instruction for work to recommence once the defect is verified and closed.

3.14 Conformity Verification (Inspection) Off Site

Upon receipt of Contractors **Manufacturing I&TN TM QA Department IC** shall:

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

- Register the data into **TM's QA Department "Supplier Inspection Register"** (see **Work Instruction 200 45965 "Manufacturing Inspection work Instruction"**)
- Forward the **Manufacturing I&TR** to **EGC** Quality hub to procure **SHEQ** Panel Inspectors to undertake an inspection at Contractor / Supplier premises of correction measures effected by Contractor / Supplier to eliminate nonconformity.

SHEQ Panel Inspectors shall physically inspect correction measures and document conformity or rejection:

- On the Contractors Quality Verification Records (ITPs, Checklists, Test Certificates etc) at Contractor / Supplier premises.
- On their **I&TR**

Manufacturing I&TR shall be issued via email by **SHEQ** panels to **TM** Package proxy email address, Eskom's **EA** and **DQM** and medupiinspection@eskom.co.za

TM DQM shall apply an electronic signature to **Manufacturing I&TR** and Timesheet and email the **I&TR** to:

- Document Control for uploading into **SPO**
- **TM QA Department IC** for registration of applicable data into **TM QA Department. "Supplier Inspection Register"**

Subsequently the **DQM** shall ensure that inspection results relative to **NODs** identified by **SHEQ** Panel Inspectors via **I&TR** are documented in **Section 4** of the **NOD** in **WISPA** along with uploaded **I&TR** before it is returned to the Contractor.

3.15 Measurement, Analysis and Improvement

- a) Team Medupi "NOD Register" is maintained in WISPA.
- b) DQMs shall, as appropriate, measure, analyze trend and report defects based on Failure Mode, Project Phase, Status, Risk ranking, Issue Ratios.
- c) Where NODs issued by TM exceed twenty percent (20%) of the Contractor Non-conformance Reports the DQM shall request EA to intervene and organize a specific quality meeting to address the issue with Contractor to ensure Contractor takes responsibility for nonconformity identification and management.
- d) NOD status reporting shall occur on a weekly basis via the DQM's "Weekly Quality Assurance Report" which shall be issued electronically via email every Monday to the EA, TM QA Manager, and medupiq@eskom.co.za.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

4. Process for Monitoring

4.1 Process Key Performance Areas and Indicators

The following Key Performance Areas / Indicators (KPA's / KPIs) shall be measured, analysed and reported. The Process Owner shall be accountable, and assign the responsibility at the frequency as indicated below, documented as part of the QMS measurement, analysis and improvement initiative.

Key Performance Area	Key Performance Indicator	Target	Measure Frequency	Responsible	Record
Project Phase	Manufacture Construction / Installation Commissioning	Decline of NOD as project form one phase to the other	Weekly	DQM	NOD analysis
Status	Issued	Within 24 hours	Weekly	DQM	Register
	Actioned	7 working days	Weekly	DQM	Register
	Answered	0 days	Weekly	DQM	Register
	Closed	Less than 90 days	Weekly	DQM	Register
Efficiency	Time delays for dispositioning, approval, resolution, close out	<90 days	Weekly	QCI	Register

Table 2: KPA's/KPIs

4.2 Document Review and Self-Assessment

4.2.1 Document Self-Assessment

The "Process Owner" identified on the front page of this document along with departmental personnel and the project QMS Engineer shall undertake a "self-check" review of the process defined in this document at six monthly intervals, commencing from the effective date of this document, to check:

- the process / Work Instruction operational integrity
- process efficiency
- the level of stakeholder knowledge and implementation.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

Participants and results of the “self-check” review shall be documented by the Process Owner in the “Self-Assessment Checklist” (***QMS Template No. QMS PTZ 200 - 75592***) included as an Appendix to this Work Instruction which shall be issued to medupiq@eskom.co.za by the Process Owner once completed.

Process Owner shall proceed with any revision requirements in line with Medupi Work Instructions PPZ 200 5665 “Development and Change of Medupi QMS Documents” and PPZ 200 1680 “Document and Record Management”

4.2.2 Revision Period

All QMS documents shall undergo a 3-yearly compulsory revision.

4.3 Training Requirements

No project specific training required to implement the process documented in this document beyond normal job function.

5. Acceptance

This document has been seen and accepted by:

Name	Designation
Dr Andre Eugene Venter	FIDIC Engineer
Eugene Memela	Assurance Manager
Howard Motsepe	Commissioning Manager.
Rofhiwa Nemutandani	Engineering Manager.
Elvis Modise	Employer's Representative
Thabisile Biyela	Senior Construction Manager
Brenda Mgidlana	Project Quality Manager

6. Revisions

Date	Rev.	Compiler	Remarks
October 2020	05	R. Tshotheli	Included the Consequence Management and the general document clean-up. Wispa contingency plan is also included.

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

Date	Rev.	Compiler	Remarks
October 2017	04	K.J Morifi	Addressing ISO 9001:2015 requirements and migrating this work Instruction to a document template 348-24473 Rev 04.
February 2013	03	I. Gough	Response period to NODs corrected to comply with PQP, Reference to Engineering Change Request as a consequence of "accept as is" disposition. Eskom's Medupi Project Assurance Department. NOD Review report 200 101041.
August 2011	02	P. Madwe	Specify reasons for revision of document. List all changes to the document, as well as authorities for these changes.

7. Development Team

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


- Quality Management Department
- Raymond Tshotheli
- Eugene Memela
- De Wet van Rooyen
- Discipline Quality Managers

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

Appendix A: NOD Form

	MEDUPI POWER STATION PROJECT		Template Identifier	348-619668	Rev	2
			Document Identifier		Rev	0
			Effective Date	November 2020		
			Review Date	October 2023		
TITLE: Notice Of Defect Form						
1.0 - Completion by MET, NOD Initiator & DQM	1.0: MET DEFECT IDENTIFICATION		Contractor Identification:			
	Discipline:	Subsystem No.	KKS Code No.	Unit :	Area:	
	Ref. Documentation:	Drawing No: 0.84/				
	Defect Summary:					
	Defect initiator to identify herein the defect in sufficient detail to facilitate correction:					Workmanship
						Material
						Damage
						Dimensional
						Test Failure
						Traceability
					Documentation	
Initiator Position & Name:	DQM Name & Date:		Required Contractor Response Date (+7 days):			
PPM issue "original" to Contractor		Distribute (SPO & email) to : LPE, DQM, Contracts, Safety, Risk, Commissioning, Engineering, Quality Mgrs & (as appropriate) Designer / AIA				
2.0 - To be completed by Contractor	2.0: CONTRACTOR PROPOSED DEFECT CORRECTION (strikethrough those invalid)		Replace	Rework	Repair	*Accept
	Contractor to identify herein action to correct the MET identified defect:					
	Proposed Defect Correction Completion Date: XX / XX / XX		Contractor Quality Mgr Signature & Date : XXXXXX XX / XX / XX			
	Contractor Engineering Mgr Signature & Date: XXXXXX XX / XX / XX		Contractor Project Mgr Signature & Date : XXXXXX XX / XX / XX			
	Return "original" to Met PPM		Distribute (SPO & email) to : LPE, PQAE, Contracts, Safety, Risk, Commissioning, Engineering, Quality Mgrs & (as appropriate) Designer / AIA			
	3.0 - Completion by MET, LPE & PPM	3.0: MET TECHNICAL ACCEPTANCE		Date Rec'd by PPM XX / XX / XX	Letter Ref: XXXXXXXXXXXXXXX	
Note – NOD to be entered to SPO for review and approval and thereafter its status and any applicable comments to be identified below by LPE and endorsed by PPM						
LPE Name, Signature & Date:		Proposed Correction Authorized Without Comment:		PPM Name, Signature & Date:		
		Proposed Correction Authorized With Comment:				
		Proposed Correction Rejected:				
Attachments : Yes / No. - No. of Pages : XX						
PPM to document herein applicable review comment:						
NOD's dispositioned as "Accept" and accepted by Engineering Authority, (AIA and Designer if appropriate) and PPM are to be further progressed as a Variation.						
PPM to issue "copy" to Contractor		Distribute (SPO & email) to : LPE, DQM, Contracts, Safety, Risk, Commissioning, Engineering, Quality Mgrs & (as appropriate) Designer / AIA				

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

	MEDUPI POWER STATION PROJECT	Template Identifier	348-619668	Rev	2
		Document Identifier		Rev	0
		Effective Date	November 2020		
		Review Date	October 2023		

TITLE: Notice Of Defect Form

4.0: MET VERIFICATION & CLOSE OUT		
Contractor Application For Inspection No.:		Inspection Date:
DQM Comment:		
4.0 – Verification by DQM		
DQM Close Out	Name, Signature & Date:	Attachments: Yes / No. Pages:
PPM Issue "original" to Contractor	Distribute (SPO & email) to : LPE,DQME, Contracts, Safety, Risk, Commissioning, Engineering, Quality Mgrs & (as appropriate) Designer / AIA	

200-15327 Form 1 / Rev 4 – 04.01.2011

Controlled Disclosure

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.
No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

File name: 348-636255 Notice of Defect Template Rev 2

Page 2 of 2

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.
No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

Appendix B – Eskom Document Hierarchy

Discipline: Quality Management		Applicable Document No.: PPZ 200 –15327 Control of Nonconforming Product , Revision 04				Self-Assessment Date: / /	
Item No	Ref Section	Self-Assessment Question	Compliant			Comment	
			Yes	Part	No		
1	3.2	Was the nonconformity with NOD validated and finalized by the DQMs ?					
2	3.2	Was the NOD registered and issued to the Contractor?					
3	3.2	Did the Contractor proposed nonconformity disposition and correction measures?					
4	3.2	Did the DQMs LDE review the nonconformity disposition and proposed correction?					
5	3.2	Was the defect disposition and proposed defect correct correction accepted by the EA?					
6	3.7	Did the Contractor implement nonconformity correction measures?					
7	3.7	Did the contractor notify TM, via I&TN, of the completion measures?					
8	3.7	Did the Contractor implement the corrective action to prevent reoccurrence of nonconformity?					
9	3.8	Were the nonconformity corrections measures verified by the DQM ?					
10	4.3	Do TM personnel understand the aims and requirements of this Work Instruction sufficiently to negate further training or is additional training required.					

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.

Comments:				
Self-Assessment by:	Name:	Position:	Revision Required? (Yes / No)	Planned Revision Date:
Attendees:				

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Ltd, Reg No 2002/015527/30.