	<b>Work Instruction</b>	<b>Medupi Power Station Project</b>
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## **1. Introduction**

Eskom's **Team Medupi (TM)** shall undertake quality assurance, quality control and verification activities where:

- a) Required by Specification and / or Code.
- b) Processes and activities are unique or the product is critical or complex.
- c) An additional level of independent quality checking is required over and above that provided by Contractor during the build process and at final build completion especially where;
  - Contractor planned quality control activities are considered insufficient.
  - Contractor service provision is considered inconsistent with defined objectives.

The aforementioned, however, does not detract from contractual responsibility of Contractor for effective quality management.

Contractors are responsible and accountable for:

- d) Quality Assurance as part of their quality management focus on providing confidence that quality requirements will be fulfilled
- e) Quality Control as part of their quality management focus on fulfilling quality requirements as a consequence of their contractual responsibilities for quality during the Power Station build process as defined in:

## **2. Supporting Clauses**

### **2.1 Scope**

The scope of this document covers the manufacturing, inspection, testing and document compilation during manufacturing activities performed by Contractors at offsite locations for Eskom's Medupi Power Station Project.

#### **2.1.1 Purpose**

The purpose of this work instruction is to outline the process steps and control mechanisms for:

- a) Defining **TM** quality management intervention requirements.
- b) Completing intervention and verification activities reporting responsibilities.
- c) Organising resources to conduct interventions at off-site premises during manufacturing activities.
- d) Measurement and analysis activities relative to;
  - The technical integrity of product.
  - The effectiveness and efficiency of work processes and personnel.
- e) Final inspection and equipment release.
- f) Stopping the work.

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### **2.1.2 Applicability**

This document is applicable to all manufacturing activities taking place offsite.

### **2.1.3 Effective date**

Date of authorisation of the document.

## **2.2 Normative/Information 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: 2015 Quality Management Systems
- [2] ISO 9000:2015 Quality Management Systems - Vocabulary

### **2.2.2 Informative**

- [3] 200-5019 Project Execution Plan
- [4] 200-1679 Project Quality Plan
- [5] 200-5665 Development and Change of Project Quality Management Systems (QMS)
- [6] 200-1680 Document and Record Management
- [7] 200- 1684 Corrective Action Request
- [8] 200-15327 Control of Nonconforming Product
- [9] 200-2086 "Contractor Quality Requirements for Engineering and Construction Works.
- [10] 200-1689 "Quality Management Specification"

## **2.3 Definitions**

<b>Term</b>	<b>Explanation</b>
Quality	Degree to which a set of inherent characteristics fulfils requirements
Quality Assurance	Part of Quality Management focused on providing confidence that quality will be fulfilled
Inspection	Conformity evaluation by observation and judgment of Contractor activities and control processes accompanied, if appropriate, by measurement, testing of gauging
Verification	Conformity through the provision of objective evidence that specified requirements have been fulfilled.
Quality Control	Part of quality management focused on fulfilling quality requirements

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Process	Set of interrelated or interacting activities which transform inputs into outputs
Product	Result of a process-software, hardware, materials or processed materials
Defect	Non-fulfilled of a requirement related to an intended or specified use
Nonconformity	Non-fulfilment of a requirement

## 2.4 Abbreviation

Abbreviation or Acronym	Definition
AIA	Authorised Inspection Agency
DQM	Discipline Quality Manager
OSQCM	Off-site Quality Control Manager
EA	Engineer's Assistant
I&TN	Inspection and Test Notification
I&TR	Inspection and Test Report
ITP	Inspection and Test Plan
LDE	Lead Discipline Engineer
MS	Method Statement
NCR	Non Conformance Report
NoD	Notice of Defect
QCI	Quality Control Inspector
PQM	Project Quality Manager
SHEQ	Safety, Health, Environment and Quality
SPO	Smart Plant for Owner Operators
TM	Team Medupi
TS	Timesheet
VIR	Vendor Inspection Register
WISPA	Web Integrated System of Processes and Applications

## 2.5 Roles and Responsibilities

### a) Responsible

Those who do the work to achieve the task. 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.

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**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.

Table 1: RACI Matrix

Process Step	Contractor	Engineer's Assistant	DQM	LDE	OSQCM	SHEQ Panel	Doc Controller
Ensure ITPs are planned to control all necessary inspection and testing activities	R	A	C	C	C	I	I
Prepare and submit activity specific <b>ITP to TM</b> for approval one month in advance of planned work commencement.	R	A	C	C	C	I	C
Determine conformity of <b>ITP</b> to specification and code	R	A	C	C	C	I	I
Determine suitability of Contractor planned interventions	C	C	R	A	C	I	I
Initiation and issue of Inspection and Test Notification (I&TN)	R	I	A	C	C	I	I
Registration and filing of I&TN	I	I	A	I	R	I	I
Identification to proceed and procure an inspection resource	I	I	R	I	A	C	I
SHEQ panel inspector selection and Competency Assessment	I	I	C	I	A	R	I
Issue of instruction to proceed	C	I	A	I	R	I	I
Inspection	C	I	I	I	R	A	I
Reporting of Inspection and initiation, if required, of Notice of Defect (NOD)	I	I	I	I	A	R	I
Registration and filing of I&TR	I	I	A	I	C	I	R
Review, approve or reject I&TR	I	I	R	I	A	I	I
Measurement, analysis and reporting of manufacturing inspection data	C	I	R	I	A	I	I

## 2.6 Related/Supporting Documents

### Documents superseded by the work instruction

[1] 200- 45965 Manufacturing Inspection and Testing Rev.07

### Forms and Template

[2] 200-75592 Document Self –Assessment Template

[3] 200-75575 Manufacturing Inspection & Test Notification

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[4] 200- 75577 Manufacturing Inspection and Test Report

### **Records**

The following quality records are utilised to record process data required to verify process conformity:

[5] Document Self –Assessment Report

[6] Inspection and Test Report (recorded on SPO as permanent record)

[7] Notice of Defect Report

[8] Manufacturing Inspection Weekly Update

Retention and storage of records generated as a result of this document shall follow the process defined in the work instruction 200-1680 “Document and Record Management”

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### 3. Document Content

#### 3.1 Process Map / Flowchart

Process Activities	Responsible	Document(s)
<p>1 Submit Inspection and Test Plan (ITP) index identifying their and/or Supplier ITPs</p> <p>2 Team Medupi EA coordinates the ITP review and LDE/DQM verifies completeness of ITP index against manufacturing schedule</p> <p>3 Initiates and issues an Inspection and Test Notification (I&amp;TN) coincident with Manufacturing activities as required by approved I&amp;TN</p> <p>4 OSQCM enters inspection data of I&amp;TN into Vendor Inspection Register (VIR) and formulates daily VIR and issue</p> <p>5 Determine if inspection and/or test intervention is to proceed as planned or be cancelled / waived</p> <p>6 Issue I&amp;TN to <a href="mailto:offshorequalityass@eskom.co.za">offshorequalityass@eskom.co.za</a> for Offshore inspections &amp; and SHEQ Panel email for Onshore inspections. The relevant DQM and Doc Control(<a href="mailto:medupisitedoc@eskom.co.za">medupisitedoc@eskom.co.za</a>) must be copied for both Inspection types Issue.</p> <p>7 SHEQ panels assigns a competent inspection resource and advise OSQCM. Inspector confirms inspection with Contractor 24 hours prior</p> <p>8 Inspect manufacturing item in line with TM approved ITP and relevant specifications / codes</p> <p>To 9</p>	<p>Contractor</p> <p>Engineer Assistant (EA)/ Lead Design Engineer (LDE) / Discipline Quality Manager</p> <p>Contractor</p> <p>Off-site Quality Control Manager (OSQCM)</p> <p>DQM / LDE</p> <p>OSQCM</p> <p>SHEQ Panel</p> <p>SHEQ Panel Inspector</p>	<p>ITP</p> <p>ITP Index</p> <p>I&amp;TN</p> <p>Daily VIR</p> <p>Daily VIR</p> <p>I&amp;TN</p> <p>Assignment email</p>

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Process Activities	Responsible	Document(s)
<p>From 8</p> <p>9 Inspector documents the inspection status via Inspection and Test Report (I&amp;TR) and the SHEQ Panel submits via email to TM Package Proxy email address, medupiinspection@eskom.co.za and DQM within 72 hours of inspection completion (preceded by NoD) within 24 hours, if initiated, along with timesheet</p> <p>10 DQM reviews the I&amp;TR, NoD and timesheet and if incomplete/incorrect return it to SHEQ Panel with corrections identified and OSQCM or If complete signs SHEQ Panel timesheet and issue I&amp;TR with attachments to medupisitedoc@eskom.co.za for registration as a permanent quality record, medupiinspection@eskom.co.za proxy and SHEQ Panel NoD Issuance shall proceed as defined in 200-15327 Control of Nonconforming Product Work Instruction</p> <p>11 Register the I&amp;TR as complete in the VIR</p>	<p><b>SHEQ Panel Inspector</b></p> <p><b>DQM</b></p> <p><b>DQM</b></p> <p><b>OSQCM</b></p> <p><b>OSQCM</b></p>	<p><b>I&amp;TR</b></p> <p><b>NoD Timesheet(s)</b></p> <p><b>I&amp;TR</b></p> <p><b>Timesheet(s)</b></p>

Figure 1: Manufacturing Inspection and Testing flowchart

### 3.2 Structure, Formant and Content of Manufacturing Inspection and Testing

The work instruction applies when the Contractor is in the process of manufacturing products that will be used by Medupi Power Station Project to build the station according to their requirements of the clients.

Contractor shall, in line with 200-1689 "Contractor Quality Requirements During manufacturing", submit for **TM** approval an Inspection and Test Plan (**ITP**) Index identifying their and / or their Supplier ITPs to be utilised on the project for manufacturing activities.

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Thereafter, Contractor shall submit, taking cognizance of schedule and contractual review periods, individual ITPs for each activity for **TM** approval ensuring the approval process can be enacted prior to work commencing.

All Contractor **ITPs** shall be approved by **TM** prior to Contractor being allowed to commence the applicable work activity at site as defined in 200-1689 & 200-2086.

### **3.3 Inspection Resources and Responsibilities**

**TM's Engineer's Assistant** shall coordinate the **TM** review of, and response to, Contractor ITP Index and individual **ITPs**.

**LDE / DQM** shall verify completeness of **ITP** Index against manufacturing schedule and ensure its updating and submittal by Contractor on a monthly basis to identify the latest **ITPs**.

All Contractor / Suppliers **ITPs** shall be reviewed by **LDE** and **DQM** and approved by the **LDE** prior to Contractor being allowed to commence the applicable work activity, except in the case of a Statutory ITP which will be reviewed by **AIA**.

In process and final inspections shall be undertaken on behalf of **TM** and signed for on the **ITP** and supporting Protocols documents - Checklists and Test Certificates etc by:

- a) SHEQ Panel Quality Control Inspectors
- b) Discipline Engineers on behalf of the Employer reporting to **LDEs** as and when required
- c) **AIA**

### **3.4 TM Inspection and Test Intervention Activity Planning**

#### **3.4.1 Intervention Types**

Inspection activities shall be "planned" based on code / specification or "targeted" based on previous inspection results or "surveillance" activities.

. Planned inspections shall be defined in the applicable ITP as:

- a) **"A" – Actual inspection/Test** - meaning actual inspection or test by **TM**
- b) **"W" – Witness** - meaning witness of Contractor inspection and / or test by **TM**,
- c) **"R" – Review** - meaning review of documents relevant to the process, inspection or test activity
- d) **"M" – Monitor** - Meaning day to day overview of on-going works by **TM**.

Note that a **Hold "H"** - meaning that a hold shall be applied to the process activity until the **"actual inspection"** or **"witness of an inspection"** or **"review of documentation"** is completed and the quality documentation verified and the process activity is released as conformant by **TM** may be applied as applicable. **Hold (H)** shall in all instances, by default, be prefixed with either **"A"**, **"W"** or **"R"** or a combination thereof by **TM** during the review process.

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### 3.4.2 Determination of Intervention Types

**TM** intervention and verification activities shall be determined by **TM's Lead Discipline Engineer (LDE)** and **DQM** to occur where;

- a) Required by Specification and / or Code
- b) Processes and activities are unique or the product is critical or complex.
- c) An additional assurance of quality is required over and above that provided by Contractor documentation as defined in Section 1 of this work Instruction.

Where, during review and approval of Contractor **ITPs**, it is deemed no added value is required over and above that provided by Contractor documentation then no intervention requirement shall be documented in Contractor **ITPs**.

**TMs** decision to attend or not attend (waive) an intervention activity that is planned via an **ITP** shall be:

- d) Based on previous and continued satisfactory performance - not time constraints.
- e) determined by the **DQM and LDE**
- f) documented in the **Contractors Inspection and Test Notification (I&TN)**

Intervention requirements shall be increased / decreased as and when required relative to Contractor performance as determined by **DQM/LDE**. In such instances the **ITP** will not be revised but the requirements shall be notified to Contractor by **DQM** via correspondence.

With "planned" inspections, **DQMs** shall define activities to be targeted for specific attention where the planned inspection interventions have identified there is an issue with product quality, process adherence or service provision.

Such inspections shall be assigned to SHEQ Panels and/ or **OSQCM** to undertake a forensic review of the product and / or process and establish root cause analysis and therefore identify corrective action requirements.

### 3.4.3 ITP Approval

**TM's Engineer's Assistants** shall workflow received **ITPs** via **Smart Plant Enterprise Owner Operators (SPO)** to generate technical and inspection intervention review comments from **LDEs, DQMs** and **AIA**. However, squad check sessions may be implemented if considered more timely and the final commented version entered to SPO thereafter thus negating individual upload of multiple review comments.

During the review process **LDEs** shall ensure **ITPs** are clearly annotated to cater for;

- a) Identification of the item/activity to be inspected or tested.
- b) Sequence of operations prior to, during, and after inspections and tests.
- c) Identification of the code, contract specification and drawing or work instruction for each of the above operations.
- d) Acceptance criteria, with reference to the appropriate technical specification, in-house, national or international standard and relevant clause number for each of the above operations.
- e) Inspection and test activities the Contractor has nominated for his intervention points.

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- f) Inspection and Test records to be generated for each operation.
- g) Inspection and test interventions of **TM**.

#### **3.4.4 Construction Readiness Review Meetings**

Subsequent to **ITP** approval and prior to any new activity commencement, **DQMs** shall, if required, ensure that Contractor schedules and implements a “**Construction Readiness Review Meeting**” at manufacturing premises as a final check to ensure all **SHEQ** and engineering requirements have been reviewed and endorsed as suitable to commence the activity. Said meetings shall be scheduled by Contractor and attended by **OSQCM** or assigned **SHEQ** Panel personnel.

### **3.5 Inspection and Test Notifications**

#### **3.5.1 Contractor Notification of Inspection and / or Test Activity**

**Contractor**, as per contract requirements, shall:

- a) Be responsible for notifying TM of the opportunity to action planned intervention requirements documented (as either A, W and R) in Contractors ITPs.
- b) Ensure that all work has been fully inspected, accepted and documented by Contractor personnel prior to requesting an inspection by TM.

Notification shall be effected using an I&TN included as Appendix B to this work instruction by issuing it by 15:00hrs on a daily basis via email to the package proxy email address and **medupiinspection@eskom.co.za** as and when an item has been inspected, accepted and documented as conformant by Contractor identifying;

- c) Items / activities to be inspected.
- d) **ITP** reference and operation number.
- e) Location, date and time of inspection and if it's an initial or repeat inspection – wherein they must reference the previous **I&TN** No.
- f) Item traceability (KKS No.)

As per the following timeframes;

- g) Seven (07) days prior to any planned inspection and /or test performed in South Africa
- h) Twenty-one (21) days prior to any planned inspection and / or test performed outside of South Africa.

The subject line of the email issuing **I&TNs** must contain the unique **I&TN** number as listed on the **I&TN** to enable traceability and easy tracking of email notifications.

#### **3.5.2 TM Registration, Filing and Distribution of Inspection and Test Notification**

**I&TNs** received from Contractor at [medupiinspection@eskom.co.za](mailto:medupiinspection@eskom.co.za) shall be processed by **OSQCM** who shall:

- a) Register on the Vendor Inspection Register all received Contractor **I&TNs**.

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b) Formulate, from the individual **I&TNs** received from Contractors, a “**Daily VIR**”.

**OSQCM** shall email the “**Daily VIR**” to **DQMs and LDEs** to obtain confirmation whether inspection and / or test intervention is to proceed as planned or be cancelled.

Non response by **DQMs/LDEs** by close of business on the day of **Daily VIR** receipt shall be deemed as agreement to proceed in which case the **OSQCM** shall assign **SPO Nos.** to the **I&TNs**.

### **3.5.2.1 Onshore inspections**

Where inspections and / or test intervention is required to be performed within South Africa the **OSQCM** shall allocate an SPO document number for the inspection report and shall issue the individual **I&TNs** and a request for the SHEQ panel to perform the inspection via email to:

- a) The relevant SHEQ Panel email address.
- b) [Medupisitedoc@eskom.co.za](mailto:Medupisitedoc@eskom.co.za)
- c) **DQM**

### **3.5.2.2 Offshore Inspections**

Where inspections and / or test intervention is required to be performed outside of South Africa the **OSQCM** shall allocate an SPO document number for the inspection report and shall issue the individual **I&TNs** via email to:

- a) [OffshoreQualityAss@eskom.co.za](mailto:OffshoreQualityAss@eskom.co.za) to coordinate offshore inspection
- b) [Medupisitedoc@eskom.co.za](mailto:Medupisitedoc@eskom.co.za)
- c) **DQM**

Where inspection and / or test intervention is not required, the **I&TN** email received from Contractor shall be responded to by **DQM** identifying TM non-attendance and copied to **LDE** and **OSQCM**.

## **3.6 Inspection Activities by TM**

**TM's OSQCM** shall workshop this work instruction and its requirements with SHEQ Panel management and Contractors to ensure SHEQ Panels are able to brief their individual inspection personnel as to TM operational requirements.

Inspection and testing at Supplier / Sub supplier premises is outsourced to **SHEQ Panels** and they are responsible for ensuring:

- a) Submission of Curriculum Vitae of any resource to be used for conducting inspections on behalf of TM and categories of equipment which that resource will inspect and acceptance of such resources by TM. A skills matrix must be updated and resubmitted with acceptance of each resource or removal of a resource from the approved list.
- b) Notification of the allocated inspection resource for each I&TN by email to [Medupiinspection@eskom.co.za](mailto:Medupiinspection@eskom.co.za)
- c) Confirmation with the supplier that each allocated inspection is proceeding as scheduled, by telephone call 24 hours prior to planned inspection time.
- d) The competency of the inspection resource for the inspections and / or tests to be undertaken.

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- e) The inspection resource is provided with and instructed to use;
  - TM Inspection and Test Report (200-75577), as included as Appendix C to this work instruction, except in the case of statutory work wherein AIA will use its own report format.
  - TM Notice of Defect work instruction- see 200-15327.
- f) The subsequent Inspection and Test Report is accurate and comprehensive and clearly identifies conformity status of the equipment / material and the number and suitability of Supplier quality control personnel.

SHEQ panel shall implement the requirements of the **ITP** and witness, inspect and / or review appropriate documentation to determine conformity to planned arrangements and shall sign-off such intervention points on the ITP.

Where product nonconformity is identified by **SHEQ** panel inspection resource they shall be highlighted in the **I & TR** and further recorded on a **NOD**. System or process nonconformity shall be documented in the **I & TR**.

**I&TR** accompanied by **NOD**, if initiated, and **SHEQ** panel timesheet shall be submitted directly by **SHEQ** Panel within three working days (72 hrs) of inspection completion to:

- g) **TM's** package proxy e-mail address (package No [@eskom.co.za](mailto:@eskom.co.za)),
- h) **TM** Quality Department. via [medupiinspection@eskom.co.za](mailto:medupiinspection@eskom.co.za)
- i) **TM** DQM

The aforementioned notwithstanding identification of nonconformity requires **SHEQ** Panel inspection resource to forward copies of the relevant **NoD's** within one working day (24 hours) of inspection completion in advance of the formal **I&TR**.

### **3.7 Postponement of Inspection by Supplier**

Where Contractors require to temporarily postpone an inspection and / or test activity they may provide notification two working days (48hrs) prior to planned intervention to facilitate **TM** notification to **SHEQ** Panels of the postponement to **TM** using the following channels:

- a) package proxy email address (PackageNo [@eskom.co.za](mailto:@eskom.co.za))
- b) [medupiinspection@eskom.co.za](mailto:medupiinspection@eskom.co.za)
- c) **DQM**

Cost recovery from Contractor may occur where Supplier fails to notify Employer of any postponement that results in the mobilization of **SHEQ** Panel resources.

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### **3.8 Processing of Inspection Data**

**OSQCM** shall register receipt of all **I&TRs on VIR**.

**DQM** shall review the content and format of **I&TR**, any attached **NOD's** and **SHEQ** Panel Timesheets and thereafter:

- a) Where deemed complete / conformant shall;
  - Sign the inspector's timesheet attached to the **I&TR** via electronic signature.
  - Forward the **I&TR** with attachments to;
    - Document Controller for registration in SPO by email to [medupisitedoc@eskom.co.za](mailto:medupisitedoc@eskom.co.za)
    - [medupiinspection@eskom.co.za](mailto:medupiinspection@eskom.co.za) as evidence of Report registration and activity completion
    - SHEQ panel
- b) Where deemed incomplete / nonconforming shall forward the **I&TR** to;
  - **SHEQ** Panel identifying correction requirements
  - [medupiinspection@eskom.co.za](mailto:medupiinspection@eskom.co.za) and OSQCM for information / follow up.

Document Controller shall register **I&TRs** in **SPO** when received as permanent quality records.

**NoDs** initiated by **SHEQ** Panel that are deemed valid shall be processed by **DQM** as per **QMS** Work Instruction **200 15327 "Control of Nonconforming Product."**

### **3.9 Performance Monitoring**

**OSQCM** shall measure, analyze, and via Weekly Report, report the status of manufacturing activities and the service provided by the **SHEQ** panels.

## **4. PROCESS FOR MONITORING**

### **4.1 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.

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Table 2: KPAs/KPIs

Key Performance Area	Key Performance Indicator	Target	Measure Frequency	Responsible	Record
Inspection and Test Notifications	Submittal Efficiency – receipt date versus Inspection date, Submittal Conformity - correctness of data. Percentage of incorrect / total submissions	> 3 days  >95%	Weekly	DQM	Weekly report
Inspections	Inspection Efficiency : <i>No postponed+cancelled+aborted</i> <i>Total no planned</i>	< 5%	Weekly	DQM	Weekly report
	Inspection Conformity – No. conformant / No. defective	>92.5%			
Inspection Reporting	Reporting Efficiency - %. of Inspection and Test Reports received within required timeframe of 72hrs	>95%	Weekly	DQM	Weekly report
	Reporting Conformity - No of Inspection Reports rejected by DQM for incorrect Inspection and Test Report format or insufficient / incorrect inspection information	<2%			
Product Conformity	No. NOD's initiated by SHEQ panel	N/A	Weekly	DQM	Weekly report

## 4.2 Document Review and Checklist for Self-Assessment

### 4.2.1 Document Self -Assessment

The “Process Owner” along with departmental personnel, supported by PQM, shall undertake a “self -check” review of the process defined in this document every six months, 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

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Participants and results of the “self-check” review shall be documented by the Process Owner in the “Self-Assessment Checklist” (***QMS Template No. QMS 200 – 75592***) included as **Appendix A** to this work instruction which shall be issued to by the Process Owner once completed.

#### 4.2.2 Review Period

All QMS documents shall undergo Annually self-assessment in between the mandatory 3 yearly review period.

### 4.3 Training Requirements

Training required to implement the process documented in this work instruction are in line with normal Job function include:

- Smart Plant Enterprise Owner Operator (SPO)
- WISPA NOD Processing

## 5. Acceptance

This documents has been seen and accepted by:

Name	Designation
Moses Sinobolo	On-site QC Manager
Eugene Memela	Quality Assurance Manager

## 6. Revisions

Date	Rev.	Compiler	Remarks
March 2021	8	Moses Sinobolo Discipline Quality Manager	<ul style="list-style-type: none"><li>• Minor changes to RACI matrix and removing names of people who left the project</li></ul>
November 2017	7	J Mathebula QMS Auditor	<ul style="list-style-type: none"><li>• Aligned contents of the work instruction with the new document template</li><li>• Aligned with the ISO 9001:2015</li><li>• Change of Procedure to Work Instruction according to Eskom Definition of Standard Documents 32-9</li></ul>
April 2016	6	J Ballett Offsite QC Manager	<ul style="list-style-type: none"><li>• LPE changed to LDE Working hours changed to working days.”</li><li>• Contractors added to section 5.6(3.7). LDEs removed from OSQCM`s distribution list for I&amp;IT. Note at end of section 5.5.2.2(3.5.2.2)</li></ul>

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## **7. Development Team**

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

- M Sinobolo
- J Ballett
- Raymond Tshotheli
- Eugene Memela

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## Appendix A – Process Self-Assessment Checklist

Discipline: <b>Quality Management</b>		Applicable Document No.: 200-45965 Rev. 8				Self Assessment Date: / /	
Item No	Ref Section	Self-Assessment Question	Compliant			Comment	
			Yes	Part	No		
1	3.5.1	Are I& TN received from Contractor registered in required time?					
2	3.5.2	Are DQMs/LDEs consulted as to whether planned inspections need to occur?					
3	3.5.2/ 3.7	Is the distribution of I& TNs correct where inspections are to proceed/cancelled?					
4	3.5.2.1 /3.5.2.2	Are I&TNs issued to panels within 24hrs of receipt by Medupi Inspection?					
5	3.6	Are I&TRs received within 72hrs of inspection completion at correct location?					
6	3.6	Do I& TRs identify conformity/nonconformity and have NoDs attached					
7	3.6	Are skills matrixes regularly updated by the panels?					
8	3.8	Are Timesheets attached to I&TRs?					
9	3.9	Are I& TRs monitored for conformity and rejected where incomplete?					
10	3.5.2	Are I&TRs assigned SPO Nos?					
11	3.8	Are I& TRs registered /filled in SPO?					
12	3.6	Are non-conformities identified via NoD form?					
13	3.9	Is inspection process data analysed and trended by OSQCM?					


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## Appendix B - 200-75575 "Manufacturing Inspection &amp; Test Notification"


		MEDUPI POWER STATION PROJECT Manufacturing Inspection and Test Notification		Insert Contractor Logo herein	
Package No.: PXX		Planned Inspection / Test Day, Date & Time: Identify herein			MI&TN Seq No.: Identify herein
P.O No. : Identify herein		Stat Work		Non Stat Work	KKS No. : Identify herein
To be completed by the Contractor to request the Engineers attendance at manufacturing inspection activities	Distribution:		1 - Medupi Quality Dept. via email to <a href="mailto:medupiinspection@eskom.co.za">medupiinspection@eskom.co.za</a> 2 - Identify herein		
	Contractor Identity: Identify herein		Supplier Identity: Identify herein Sub Supplier Identity: Identify herein		
	Description of item to be inspected:		: Identify herein		
	Description of inspection and / or tests		: Identify herein		
	Inspection / Test Specification		: Identify herein		
	Drawing No.		: Identify herein		
	ITP Doc No. & Revision		: Identify herein		
	ITP Title		: Identify herein		
	ITP Activity Nos. to be actioned		: Identify herein		
	Type of Engineer intervention		: Identify herein		
	Suppliers Address: Identify herein		Sub Suppliers Address: Identify herein		
	Contact Name		: Identify herein		
	Contact Office & Cell Phone No.		: Identify herein		
	Contact Fax No.		: Identify herein		
	Contact email address		: Identify herein		
Address where inspection / test is to occur		: Identify herein			
Organisations to be present:		Sub Supplier: <input type="text"/>	Supplier: <input type="text"/>	Contractor: <input type="text"/>	
		Engineer: <input type="text"/>	AIA: <input type="text"/>	Other: <input type="text"/>	
Nearest Airport: Identify herein		Nearest Train Station: Identify herein			
Comments:					
Verified as accurate and Issued on behalf of: define herein					
Name:		Position:		Signature:	Issue Date:
<p><i>This Inspection &amp; Test Notification is required to be provided by Contractor to Team Medupi 7 days prior to meetings, inspections and / or tests conducted in South Africa and 21 days prior to the meetings, inspections and / or tests conducted outside of South Africa to facilitate organisation of applicable resources.</i></p>					

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## Appendix C- PTZ 200-75577 “Manufacturing Inspection and Test Report”

	Medupi Power Station Project Manufacturing Inspection and Test Report	Unique Identifier: 200 – 75577 Revision 2 Page 23 of 24
	Pkg No.: Identify Herein  Intervention Date Identify Herein	MI&IT Report No. OS or OFS / Pkge No. / MI&TN No. / 1st 3 letters of Supplier Name / 1st 3 letters of Sub-Supplier Name (if applicable) / Unique Sequential No. (Commencing 00001)

Example – OS / P02 / 00034 / AJC / KOG / 00023

1.0 Equipment / Material Identification & inspection Type:										
Summary Item inspected / Tested: Identify Herein										
Summary Sub Items Inspected / Tested :Identify Herein										
ITP Title: Identify Herein										
ITP No. & Rev :Identify Herein					ITP Activity Nos.: Identify Herein					
Intervention is Medupi required				Identify Herein		Intervention is Statutory				Identify Herein
Hold		Witness		Review		In-Process Inspection		Stage Inspection	Final Inspection	

2.0 - TPIA Data:	
TPIA Home Address: Identify Herein Identify Herein	TPIA Inspecting Office Address: Identify Herein Identify Herein
Inspector Name: Identify Herein Cell No. Identify Herein Email Address: Identify Herein Fax Address Identify Herein	Address where inspection / test occurred Identify Herein Identify Herein Identify Herein
Contractor Name and Address: Identify Herein Identify Herein	Contact Person: Identify Herein Office & Cell Phone Nos.: Identify Herein Email: Identify Herein
Supplier Name and Address: Identify Herein Identify Herein	Contact Person: Identify Herein Office & Cell Phone Nos.: Identify Herein Email: Identify Herein
Sub Supplier Name and Address: Identify Herein Identify Herein	Contact Person: Identify Herein Office & Cell Phone Nos.: Identify Herein Email: Identify Herein

Inspection renders the inspected item as :	Conformant		Defective		Indeterminate	
--	------------	--	-----------	--	---------------	--

3.0 - Executive Summary. :
Define herein an overview summary of the inspection / test visit.

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4.0 - Detailed Description of Equipment, Parts and Materials:		
Contractor P.O. # :		Supplier P.O. # :
<u>Equipment, Parts and/or Materials</u> Identify Herein Identify Herein		<u>KKS Nos.</u> Identify Herein Identify Herein

5.0 - Detailed Description of Inspections and / or Tests Performed:	
<u>Inspection and / or Test Type or Method</u> Identify Herein Identify Herein	<u>Standard / Code</u> Identify Herein Identify Herein

6.0 - Inspection and Test Equipment Utilized.		
<u>Type Utilized:</u> Identify Herein Identify Herein	<u>Serial No.:</u> Identify Herein Identify Herein	<u>Calibration Cert. No.:</u> Identify Herein Identify Herein

7.0 Defects Noted – and Identified to the Supplier / Sub Supplier
1 -
2 -

8.0 - Inspection Costs						
Inspection Hrs	Reporting Hrs	Travel Hrs / Km's	Ancillary Hrs / Costs Train, Taxi, Flight, Hotel			
9.0 - Attachments						
1 - Timesheet	YES	NO	3 - NOD's	YES	NO	
2 - Copy of MI&TN	YES	NO	4 - Photographs	YES	NO	
5 – Other (please specify)						

10.0 – Concerns / Areas for Improvement
1 -
2 -

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