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Technical Document and  
Records Management  
Procedure**

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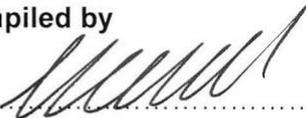
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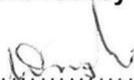
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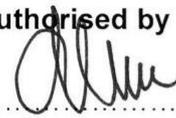
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## **1. INTRODUCTION**

In meeting 32-1: Eskom Document and Records Management Policy [1] requirements, this procedure describes the process and requirements for the registration (identification & retention), access and use, support for creation, review and authorisation, publication, archiving and disposal of documents and records within the Engineering Business Management System.

It is a principle requirement that all Eskom business functions and activities are documented or recorded to provide authentic, reliable and retrievable evidence. The documents must also be maintained and kept up-to-date for as long as the business elements they support are in use.

This procedure supports the requirements of ISO 9001: Quality management systems – Requirements [15] and ASME NQA-1-2008: Quality Assurance Requirements for Nuclear Facility Applications [16] for the control of documents and the control of records.

## **2. SUPPORTING CLAUSES**

### **2.1 SCOPE**

The full spectrum of documentation used within Engineering is depicted in **Table 1 Eskom Documentation classes**.

This procedure only describes the requirements and controls for managing the Project/Plant Specific Technical Documentation (includes documents, drawings and records) specifically in SPO. Project/Plant Specific Technical Documentation is the technical documentation that does not require periodic reviews and revisions. Project/Plant Specific Technical Documentation is technical documentation that is subject to Engineering Change Procedures as set out in:

- 240-53114026: Project Engineering Change Management Procedure [9]
- 240-53114002: Engineering Change Management Procedure [10]

Any technical document requiring a periodic review cycle, shall be managed in terms of 32-6: Document and Records Management Procedure [3], but may also be stored in SPO.

The landscape for the various documentation, specific documentation management systems in Generation and how they relate to each other is depicted in Appendix A: Typical Document Management System Landscape for Technical & Project Documentation in a Generation Environment. A similar landscape will exist for the other areas.

Further this procedure supports the process that has been described and mapped in the 32-1216: Process Control Manual for Manage Documents and Records.[2].

Although this procedure describes the management of Project/Plant Specific Technical Documentation in SPO, similar principles may be applied to the management of documentation in other systems, like Hyperwave, Project Wise etc.

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**Table 1: Eskom's Documentation Classes**

<b>Procedure Identifier</b>	<b>Class of Documentation</b>	<b>Definition</b>	<b>Characteristics</b>	<b>Examples</b>
32-6	Management and Governance Documents and Records	Documents that set direction and policy, defining authority and responsibility and describe the controls and rules for a given process or set of activities.	Changes and updates according to Periodic Review Cycles described in 32-6 Document and Records Management Procedure	Policies, Procedures, Standards etc.  Safety, Health, Environment, and Quality (SHEQ) Policy, Plant Codification Standard, Plant Safety Regulations, Project Execution Plan, Project Instruction Manual, Configuration Management Plan. Project Environmental Management Plan, Engineering Management Plan
240-53114186	Project and Plant Specific Technical Documents and Records	Documentation containing product-related data and information that are used and stored. Covers data and information pertaining to: product definition and specification, design, manufacturing, quality assurance, product liability, product presentation; description of features, functions and interfaces; safe and correct use; service and repair of a technical product as well as its safe disposal.	Changes and Updates as per 240-53114002 Engineering Change Management Procedure and 240-53114026 Project Engineering Change Management Procedure	Drawings, Design Reports, Analysis Reports etc.  Basic Design Report, Layout Drawing, Process and Instrumentation Diagram (P&ID). FMECA Study, RAM Analysis, FEA Model, FEA Analysis Results, Project Design Manual, Geological Test Results, Material Test Certificates, Seismograph Logs, Vibration Results, Test Certificate

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### **2.1.1 Purpose**

The purpose of this procedure is to set the requirements, direction, principles and controls in compliance with 32-1: Eskom Document and Records Management Policy [1] so that authentic, reliable and useable documents and records are created, which are capable of supporting Project and Plant Specific Technical functions and activities, for as long as they are required.

So as to (through these documents and records) enable organisations to, inter alia -

- Ensure the technical integrity of Eskom's assets over their lifecycle
- Meet legislative and regulatory requirements including archival, audit and oversight activities,
- Provide protection and support in litigation including the management of risks associated with the existence of, or lack of, evidence of organisational activity,
- Protect the interests of the organisation and the rights of employees, clients and present and future stakeholders, and
- Maintain corporate, individual or collective intellectual property.

### **2.1.2 Applicability**

This procedure is applicable to employees, including contractors, performing engineering work within operating units, projects, and service functions, for Eskom Holdings SOC Limited divisions, including Eskom subsidiaries.

This procedure is applicable to all Project/Plant Specific Technical Documentation (documents, drawings and records), which are registered, created, updated, used, revised, reviewed, approved authorised, stored, disseminated and controlled during the execution of functions and activities using SPO 4.4 Build 27 or later<sup>1</sup>.

Any technical document requiring a periodic review cycle, shall be managed in terms of 32-6: Document and Records Management Procedure [3], but may also be stored in SPO.

Any document where the contents impacts design limits of multiple assets' design or operation albeit procedure or standard or contains asset information must be submitted through controlled technical governance, i.e. SCOT or similar governance process.

## **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] 32-1: Eskom Document and Records Management Policy
- [2] 32-1216: Process Control Manual for Manage Documents and Records.
- [3] 32-6: Document and Records Management Procedure

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<sup>1</sup> Please note that this document will be continuously updated to reflect the latest configuration and capabilities of the Smart Plant for Owner Operator (SPO) system. This SPO system as it is rolled out to Eskom, will become the standardised way in which Project/Plant Specific Technical Documentation (documents, drawings and records) is managed throughout the organisation.

- [4] 32-644: Eskom Documentation Management Standard
- [5] 240-58552870: SmartPlant for Owner Operators (SPO) Documentation Metadata Standard
- [6] 240-54179170: Technical Documentation Classification and Designation Standard
- [7] 240-44174997: Documentation Preservation Standard
- [8] 240-53113685: Design Review Procedure
- [9] 240-53114026: Project Engineering Change Management Procedure
- [10] 240-53114002: Engineering Change Management Procedure
- [11] 240-68604731: Design Base Standard
- [12] 240-53665024: Quality Management System Manual
- [13] 240-53114190: Internal Audit Procedure

### **2.2.2 Informative**

- [14] ISO 9000: Quality management systems — Fundamentals and vocabulary
- [15] ISO 9001: Quality management systems – Requirements
- [16] ASME NQA-1-2008: Quality Assurance Requirements for Nuclear Facility Applications
- [17] IEC 61355: Classification and designation of documents for plants, systems and equipment

## **2.3 DEFINITIONS**

**Authenticity** – An authentic record is one that can be proven:

- To be what it intended/purports to be,
- To have been created or sent by the person identified to have created or sent it, and
- To have been created or sent at the time recorded.

**Document and Records management** – Field of management responsible for the efficient and systematic control of the creation, receipt, maintenance, use, disposal and destruction of records; including processes for capturing and maintaining evidence of and information about business activities and transactions in the form of records.

**Document Metadata** – Is all additional related document information that describes the attributes of a specific document (or record). Metadata includes but are not limited to the following; document title, document identifiers, document revision number, document compiler, document revision dates, document types, and areas of applicability.

**Document Kind** – Is a kind of document defined with respect to its specified content of information and form of presentation. See 240-54179170: Technical Documentation Classification and Designation Standard [6]

**Controlled Hard Copy** – Is a status assigned to those documents which are issued to specific user (a controlled copy holder) for a specific location, to support the execution of safety critical tasks; without access to a document management system.

**External Documentation** - Documentation created and mastered outside Eskom and includes documentation created by external parties as contracted deliverables to Eskom.

**Engineering Work** - The application of specific scientific disciplines in the process of developing, designing, maintaining and operating assets with full cognisance of their (the) design and design limitations in order to improve the lives of people.

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**Integrity** – The integrity of a record refers to its being complete and unaltered, i.e. protected against unauthorised alteration.

**Governance Document** - Means documents that set direction and policy, defining authority and responsibility and describe the controls and rules for a given process or set of activities.

**Records** – Document stating results achieved or providing evidence of activities performed

**Reliability** – A reliable record is one whose contents can be trusted as a full and accurate representation of the transactions, activities or facts to which they attest and can be depended upon in the course of subsequent transactions or activities in Project/Plant Specific Technical Documentation this is attested to by the fact that the documentation has been demonstrably approved, reviewed and authorised for its purpose.

**Technical Documentation** – means various documents with product-related data and information that are used and stored. The data and information intended include matters of product definition and specification, design, manufacturing, quality assurance, product liability, product presentation; description of features, functions and interfaces; safe and correct use; service and repair of a technical product as well as its safe disposal. Excluding the following document types i.e. project execution documents (i.e. schedules, project management, etc.), Governance documents and General Business documents.

## 2.4 ABBREVIATIONS

Abbreviation	Description
ASME	American Society of Mechanical Engineers
COE	Centre of Excellence
ISO	International Standards Organisation
MEA	Manage Engineering Accountability
PBS	Plant Breakdown Structure also known as “ConfigPBS”
PDF	Adobe Document Publishing Format
SCOT	Steering Committee of Technology
SPO	SmartPlant for Owner Operators

## 2.5 ROLES AND RESPONSIBILITIES

### 2.5.1 Senior General Manager: Engineering

The Senior General Manager: Engineering is accountable to ensure that this procedure is implemented in all Project/Plant Specific Technical Documentation being managed within SPO.

### 2.5.2 Document Manager

The Document Manager is the custodian of all the Project/Plant Specific Technical Documentation for the applicable domain, i.e. Project or Operating Plant domains.

The Document Manager is appointed in terms of 32-644: Eskom Documentation Management Standard [4].

The Document Manager shall ensure compliance to this procedure.

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### **2.5.3 Document Controller**

The Document Controller(s) shall be appointed by the Document Manager in terms of 32-644: Eskom Documentation Management Standard [4] who shall be responsible to facilitate the correct implementation of this procedure including;

- providing administrative support during the document and record management lifecycle (i.e. planning, development, receipt, registration, review and authorisation, publication, transmittal, use, archiving and disposal), and
- reporting on document controls including document status, redundant documents, templates, adherence to procedure, training and other document and record management related issues, and
- transmitting documentation and managing hard copies which are specifically reserved to be carried out by Document Controllers only.

Document Controllers shall be competent in the use of the relevant Document Management System.

A Document Controller may perform all the duties of a Registrar (see Section 2.5.4 below).

### **2.5.4 Document Registrar**

The Registrar is a person declared competent to register a document within the Smart Plant system, in particular:

- to correctly title a document and
- to perform classification of documentation in terms of 240-54179170: Technical Documentation Classification and Designation Standard [6], and
- to correctly capture the document's metadata in terms of 240-58552870: SmartPlant for Owner Operators (SPO) Documentation Metadata Standard [5].

A Registrar, may not transmit documentation or manage hard copies. These activities are to be carried out by Document Controllers specifically.

The Registrar role is normally assigned to Document Controllers, Engineers or Draftsmen.

### **2.5.5 Document Compiler**

The Compiler (the person who drafted the content), working under the guidance and direction of the Document Approver, shall:

- Request registration or revision of a document using 240-71448396 Project/Plant Specific Technical Documentation Registration & Revision Form [19]) (unless he is acting as a Registrar as well – see Section 2.5.4 Document Registrar)
- compiles the document using the latest authorised revision of the applicable template (Refer to Section 2.7 Related/Supporting Forms and Templates),
- ensures that minimum document requirements (as described in Section 3.4.1 Registration of Proposed Documentation) are adhered to,
- ensures that there is no duplication with existing documentation, regarding the document's objective and content,
- ensures that the document content is technically accurate, with integrity and pertinent to the subject matter,
- ensures that proof reading is performed on the developed document, and

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- certifies that the document is complete and meets the requirements as well as adhering to engineering processes and design standards.

Any employee may be identified as a Document Compiler, on condition of having applicable knowledge and competency in the subject matter being documented and having been trained on this procedure.

### **2.5.6 Peer Reviewer**

It is the responsibility of the Document Authoriser, Document Approver and Document Compiler to identify suitable Peer Reviewers that would assist with the refining and integration of the design within the overall project.

The Peer Reviewer, on a voluntary or request basis may offer review and development comments during the design process to develop a document.

### **2.5.7 Document Approver**

The Document Approver is a competent person who takes professional accountability for content as per MEA & relevant Professional Organisation.

The Document Approver certifies compliance with the Engineering Processes and the integrity of the content and confirms that the technical content falls within the envelope for which standard was established.

The Document Approver further also declares what the content may be used for by marking the document with the applicable Approval Status.

### **2.5.8 Acceptance Reviewer**

Acceptance Reviewers are persons identified by the Document Authoriser as deemed competent to assess one or more specific aspects of content of the document under review. Acceptance Reviewers may include Engineers, Document Controllers, Draftsmen, Configuration Management Practitioners, Quality Practitioners, Safety Practitioners etc. See 240-53113685: Design Review Procedure [8])

The Acceptance Reviewer comment/s shall be captured using SPO during the Perform Acceptance Review Step, or as part of the minutes during a Design Review Meeting. The panel of Acceptance Reviewer/s are listed, for reference purposes, within SPO or in the minutes of the Design Review Meeting.

The Acceptance Reviewers shall review the document for compliance to verification and validation requirements as stipulated by the relevant COE's, including higher level system and interfacing system requirements as well as the requirements of Engineering (-ilities)<sup>2</sup>, Configuration Management and Documentation or Drawing Office Standards that are applicable to content for the stated purpose.

### **2.5.9 Document Authoriser**

The Document Authoriser is a person duly delegated to release the content for use within the applicable domain. By authorising the document, the Document Authoriser confirms

- the competency of approver and reviewers and

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<sup>2</sup> Engineering-ilities include aspects of the design like RAM, Durability, Safety, Constructability, Operability, Legal & Regulatory, Environmental, Extend-ability, Life Cycle Cost, Value Engineering, Inspect and Testability, Procurability, Manufacturability, Supportability (Logistic & Maintenance), Natural Events, etc.

- the adequacy of scope of review and soundness of review process.

## **2.6 PROCESS FOR MONITORING**

This procedure will be monitored via 240-53114190: Internal Audit Procedure [13] and self-assessments.

### **2.6.1 Process measures**

The adequacy, effectiveness and efficiency of this procedure will be monitored by reports on document status, documents generated, reviewed and obsolete statistics.

### **2.6.2 Product measures**

When implementing this procedure, the product will be an approved document, review cycle authorised (or not) document, complete with full traceability as to the comments that were made as part of the review. The product will be measured by the document metadata fields are correctly populated and records of reviews captured.

## **2.7 RELATED/SUPPORTING FORMS AND TEMPLATES**

The applicable Functional Responsible Person per process shall ensure applicable template/forms are established and authorised, which shall be used in the creation of the documents, drawings and records pertaining to the process.

The documentation Compiler shall use the latest revision of the applicable template/forms.

The following is a list of forms and templates available:

[18] 240-53519752 Appointment of Document Controller

[19] 240-71448396 Project/Plant Specific Technical Documentation Registration & Revision Form

[20] 240-71450346 Project/Plant Specific Technical Document Template: (also forms basis as the template for other specific document templates)

[21]240-48887557 Reference Drawing Template

[22]240-71448634 Project/Plant Specific Technical Documentation Acceptance Review Comments

[23]240-71448626 Project/Plant Specific Technical Documentation Transmittal Form

[24]240-71448722 Project/Plant Specific Technical Documentation Disposal Authorisation Form

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### 3. PROJECT/PLANT SPECIFIC TECHNICAL DOCUMENT AND RECORDS MANAGEMENT PROCEDURE

#### 3.1 OVERVIEW

The main activities that comprise the Project/Plant Specific Technical Documentation Management capability are illustrated in Figure 1

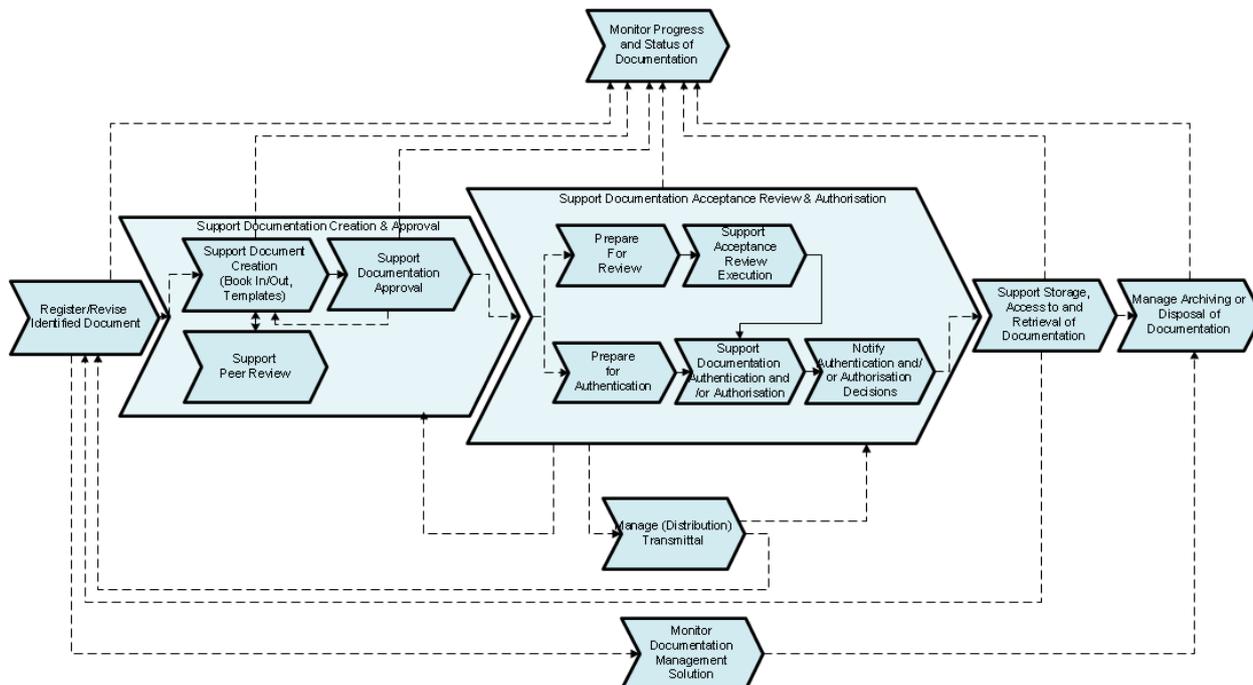


Figure 1: Overview of Project/Plant Specific Technical Documentation Management

#### 3.2 PROJECT/PLANT SPECIFIC TECHNICAL DOCUMENTATION REQUIREMENTS

All Project/Plant Specific Technical Documentation shall be registered, controlled and managed using SmartPlant for Owner Operators (SPO) and shall as a minimum comply with the following:

- the document ownership shall reside within the applicable domain,
- document shall be unique in its purpose, content and aim,
- the document or record shall be uniquely identified,

Project/Plant Specific Technical Documentation shall be:

- Identifiable with minimum set of metadata as set out in 240-58552870: SmartPlant for Owner Operators (SPO) Documentation Metadata Standard [5];
- Registered in SPO that has an authorised disaster recovery plan;
- Accessible through SPO to enable well informed decision making;
- Authorised/Authenticated in SPO, and once authorised only revised in accordance with the applicable change management procedure, i.e. 240-53114026: Project Engineering Change Management Procedure [9] or 240-53114002: Engineering Change Management Procedure [10].

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- Kept securely based on classification and protected from loss and destruction;
- Not kept for longer than is necessary, in accordance with legal, business and regulatory requirements, in line with corporate guidelines;
- Disposed of appropriately, in accordance with legal and regulatory requirements;
- Communicated to interested and affected parties where required;
- Classified to indicate the security level in order to protect against unauthorised access;
- Properly approved, reviewed and authorised to ensure the integrity of documentation
- Properly managed to provide evidence of its integrity on an on-going basis

### **3.3 PROJECT/PLANT SPECIFIC TECHNICAL DOCUMENTATION METADATA**

The Compiler shall ensure that the applicable metadata for technical documentation including that described by 240-58552870: SmartPlant for Owner Operators (SPO) Documentation Metadata Standard [5] is provided.

### **3.4 CREATION AND MANAGEMENT OF PROJECT/PLANT SPECIFIC TECHNICAL DOCUMENTATION**

#### **3.4.1 Registration of Proposed Documentation**

The Document Compiler shall register a new or revised document by either:

- Registering the document directly on the system when he has Registrar rights, or
- Completing and submitting the 240-71448396 Project/Plant Specific Technical Documentation Registration & Revision Form [19] to a Document Registrar for registration of a new document or record.

The metadata of the proposed document shall be used to perform a document search by the Document Registrar to identify any possible duplication of documents.

A Unique Identifier and/or revision shall be generated only once a search proved that the document (or similar) does not exist within the system. The final metadata as determined by the Document Registrar is forwarded to the Compiler, for inclusion on the document.

The Document Controllers shall manage the proposed development period, after which a reminder will be sent to the Document Compiler to establish the status of the document development. This could result in an extended development period or termination of the Unique Identifier number, for those documents that the Compiler has confirmed will no longer be developed.

#### **3.4.2 Registration of Records**

All records (including all approved documentation) are only managed by Document Controllers.

The Document Controller shall ensure that any record received is legible. The record may either be an approved hard copy or digitally approved file in Portable Document Format (PDF) format, see 240-44174997: Documentation Preservation Standard [7].

For signed hard copies, the Document Controller, over and above the requirements as stipulated above scans the document and files the original hard copies for safe keeping. See Section 3.4.9 Support Documentation Management, Storage, Archive, Access and Retrieval. The Document Controller OCR's and uploads the scanned files and attaches them to the document object. The document object is also

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linked to the offline storage location (store room), where it was physically filed. The Document Controller also requests and links the native files to the object.

After the Document Controller has correctly uploaded the files and updated the statuses, the Document Controller initiates the applicable Review and Authorisation workflow or Authorisation workflow (See Section 3.4.7 Support Documentation Acceptance Review and Authorisation).

### **3.4.3 Changing Approved Documentation (Revising a Document)**

Once documentation is Approved (i.e. the document is a record), a document shall only be changed by creating a new revision.

A proposed revision to a document will follow the same process described under Section 3.4.1 Registration of Proposed Documentation.

Authorised Non-Governance Engineering Technical Documents may only be revised using the Engineering Change Process (i.e. a change to a baseline).

A revision to an Authorised Non-Governance Engineering Technical Document shall only be authorised, once the proposed engineering change has been authorised. See Section 3.4.7 Support Documentation Acceptance Review<sup>3</sup>.

### **3.4.4 Support Documentation Creation**

During the documentation creation stage, the document in question is being compiled/drafted, i.e. the document's content is being created.

After the successful registration of a document, the Document Compiler will received notification of the correct metadata to be used to populate the title page/block of the document being compiled.

The Document Compiler shall make use of the "check in check out" facilities on the system for maintaining the document on SPO.

During the Document Creation stage, comments may be obtained from the peers. See Section 3.4.5 Support Documentation Peer Review.

The Compiler works directly under the instructions of the Approver during the creation of the document.

### **3.4.5 Support Documentation Peer Review**

The Document Compiler and Document Approver may require review and comments during the design process of compiling/drafting the document, in particular focussing on refining design decisions and clarifying integration aspects early in the process in order to optimise the final solution.

During this stage the document is marked as a DRAFT document on all pages

This Peer Review may occur using any of the following:

- 1) Formalised review meeting during which minutes are taken by the Compiler or Approver. These aspects are considered further in the design process. These minutes are appended to the document being created.

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<sup>3</sup> Configuration Management should specifically review this aspect of a change to an Authorised Technical Document without an Authorised Change during the Acceptance Review.

- 2) Informal review during which other designers are surveying the draft document being compiled and letting the Compiler and Approver know of any concerns or suggestions to be considered. These written comments as received by the Compiler, are also appended to the document being developed.
- 3) Circulating the document being developed to be marked up by the peers – checking out/in and mark-up the document being developed.

### **3.4.6 Support Documentation Approval**

The Document Compiler and Document Approver review the document and concur that it is suitable for approval. They shall record the suitability of the document for the intended purpose (Approval Status) on the document and sign the hard copy as Compiler and Approver, and submit both the hard (record) and soft copies of the document to the Document Controller.

On receipt, the Document Controller updates the document object as per Section 3.4.2 Registration of Records.

### **3.4.7 Support Documentation Acceptance Review and Authorisation**

After the document has been Approved, the document is submitted to the Document Controller to initiate the Acceptance Review and Authorisation stages. The Acceptance Review and Authorisation may take the form of either:

- 1) (NOT CURRENTLY AVAILABLE/CONFIGURED – Review and Authorisation Outside the system – Signed in Wet Ink - The System is only updated to reflect the Status decided) Acceptance Review and authorisation is done in accordance with the design review procedure e.g. as part of a formal design review committee. With this process the document is circulated in advance to a broad spectrum of subject matter expert reviewers, comments are made and forwarded to the secretariat and then consolidated and concluded during the meeting. Based on the consolidated comments, the document is either Authorised or Not Authorised. The actual document is signed and Authorised by the Authoriser. The formal minutes from the meeting will be loaded as the Comments Report in SPO and the scanned Authorised document is attached to the document object. The respective Authorisation Status will also be set to reflect the outcome of the meeting. The complete documentation pack as Authorised should be Authenticated by the Authoriser as soon as it is loaded on the system.
- 2) Acceptance Review and Authorise using the Review and Authorisation workflow of SPO. With this process, the document is work flowed to a number of reviewers as selected by the Authoriser ensuring that a broad spectrum of subject matter expert reviewers are involved in reviewing the document. Once all the comments have been completed by the reviewers, the Authoriser reviews the comments received for acceptability, prior to consolidation. Any unacceptable comments are returned to the respective reviewer for correction. The Authoriser consolidates, concludes and uploads the comments report (onto the document object), with the comments forming the basis for the Authorisation or Not of the document.

In order to perform the acceptance review, the following aspects must be completed first:

- The metadata on the system is verified and corrected to reflect as captured on the document.
- The document is linked to the PBS/CDW tags by the Configuration Controllers
- The Document Authoriser assigns the required reviewers

The Document Authoriser declares one of the following Authorisation Statuses on the Document:

- Not Authorised with Comments
- Authorised with Comments

### **CONTROLLED DISCLOSURE**

- Authorised

A document may only be “Authorised with Comments” if the document may be used downstream in the asset creation process, and that any correction of the document will not result in rework or risk to the project. (e.g. a document may only be “Authorised with Comments” where all the technical aspects are correct, but minor formatting like fonts and line sizes are none compliant to the requirements).

Please note that any future change to an authorised document is subjected to the Engineering Change Process (See 240-53114026: Project Engineering Change Management Procedure [9] and 240-53114002: Engineering Change Management Procedure [10])

### **3.4.8 Notify Documentation Authorisation Decision**

The Document Controller returns the outcome of the review, the document and the consolidated comment report to the Compiler and Approver for consideration of the comments and possible revision of the document.

The document may only be used downstream once the document has been Authorised.

The Authorised document (with comments or not) is distributed by the Document Controller as per the list of Interested and Affected Parties received. Only documents correctly labelled with the respective Authorisation Statuses are transmitted. See Section 3.4.10 Manage Documentation Distribution via Transmittals

### **3.4.9 Support Documentation Management, Storage, Archive, Access and Retrieval**

#### **3.4.9.1 Management**

Refer to 32-6: Document and Records Management Procedure [3].

#### **3.4.9.2 Storage and Archive**

All records created through the engineering design activities shall be stored and archived electronically and managed in SPO, including the design basis, asset creation process (design, construction and commissioning) and design base. See 240-68604731: Design Base Standard [11].

Refer to 32-6: Document and Records Management Procedure [3] for the storage and archival of hard copies.

All technical documentation generated shall be assigned the retention classification as per 240-54179170: Technical Documentation Classification and Designation Standard [6].

#### **3.4.9.3 Retrieval**

A User may

- query or find documentation himself using the metadata search functionality of SPO, or.
- obtain a document by requesting it from the relevant document centre.

The latest revision conforming to the required Approval and Authorisation status of the requested documents shall normally be provided in soft copy (electronic protected PDF Format labelled to reflect Statuses’). See preservation standard 240-44174997: Documentation Preservation Standard [7].

Native and/or other versions/revisions of the document may be specifically requested if required.

### **CONTROLLED DISCLOSURE**

#### **3.4.9.4 Access**

Documents may be viewed directly by all users by accessing SPO, depending on user's access and security levels assigned.

All personnel are responsible to ensure that the access to records within or external to the organisation is in accordance with the security and access rights assigned to the respective document.

Access to hard copies (as well as physical electronic storage media like CD, DVD, etc.) is managed as per 32-6: Document and Records Management Procedure [3].

#### **3.4.10 Manage Documentation Distribution via Transmittals (Not Available in SPO Yet)**

The person with the required delegation (typically Project Manager/Construction Manager) shall identify to the Document Controller those documents that are to be issued, and identify recipient by name, organisation and location.

The Document Manager shall maintain a Master Document Index to track those documents that have been issued through transmittal, including the name of the holder, date of issue, revision number, organisation and location.

Documents shall be delivered via transmittal form (see 240-71448626 Project/Plant Specific Technical Documentation Transmittal Form [23]), with signed receipt being returned to the Document Controller for record purposes. All revised "controlled copies" shall be returned by the holder to the Document Controller (at the time the revised document is delivered) via transmittal sheet.

The person with the required delegation (typically Project Manager/Construction Manager) shall certify the proposed complete Transmittal Pack, prior to issue by the Document Controller, specifically verifying that the correct revisions are being distributed with required Approval and Authorisation Statuses'.

The records shall normally be provided as soft copies (electronic protected PDF Format labelled to reflect the authorisation status).

#### **3.4.11 Control of external document Receipt via transmittal (Not Available in SPO Yet)**

All Project/Plant Specific Technical Documentation is managed on receipt of the documentation under a formal transmittal.

#### **3.4.12 Manage Documentation Disposal**

Any disposal of documentation (electronic files, document object and/or hard copy) are authorised using the 240-71448722 Project/Plant Specific Technical Documentation Disposal Authorisation Form [24].

Once the disposal is authorised, the object and files are deleted and the hard copies destroyed as per 32-6: Document and Records Management Procedure [3]. The disposal certificate (completed template above) is then stored as the record of the destruction of the document.

### **3.5 RECORDS**

The following records are generated through implementation of this procedure and are controlled in accordance with this procedure.

[18] 240-53519752 Appointment of Document Controller

[19] 240-71448396 Project/Plant Specific Technical Documentation Registration & Revision Form

[20] 240-71450346 Project/Plant Specific Technical Document Template: (also forms basis as the template for other specific document templates)

### **CONTROLLED DISCLOSURE**

- [21] 240-48887557 Reference Drawing Template
- [22] 240-71448634 Project/Plant Specific Technical Documentation Acceptance Review Comments Template
- [23] 240-71448626 Project/Plant Specific Technical Documentation Transmittal Form
- [24] 240-71448722 Project/Plant Specific Technical Documentation Disposal Authorisation Form

#### **4. ACCEPTANCE**

This document has been seen and accepted by:

<b>Name</b>	<b>Designation</b>
P Serekwa	Acting Configuration Management Manager: Plant Engineering
Vinod Singh	Design Base Manager: Power Delivery Engineering
Thaabit Toefy	Configuration Manager: Koeberg Nuclear Power Station
Felix Bosch	Plant Infrastructure Manager: Engineering Support
Lorna Ndlela	Eskom Documentation Management

#### **5. REVISIONS**

<b>Date</b>	<b>Rev.</b>	<b>Compiler</b>	<b>Remarks</b>
October 2012	0	AD Martin	Superseded Procedure 474-58
November 2012	1	AD Martin	Final Authorised Document
July 2014	2	SJ Barnard	Document Purpose changed, new update to correctly reflect Project/Plant Specific Technical Documentation, Final document for Authorisation and Publication

#### **6. DEVELOPMENT TEAM**

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

- Johannes Rottier
- Benny Lesejane
- Ben Kotze
- Thaabit Toefy
- Michelle Heugh
- Felix Bosch
- Lorna Ndlela

#### **7. ACKNOWLEDGEMENTS**

All parties that reviewed the document and supplied comments.

**CONTROLLED DISCLOSURE**

## APPENDIX A: TYPICAL DOCUMENT MANAGEMENT SYSTEM LANDSCAPE FOR TECHNICAL & PROJECT DOCUMENTATION IN A GENERATION ENVIRONMENT

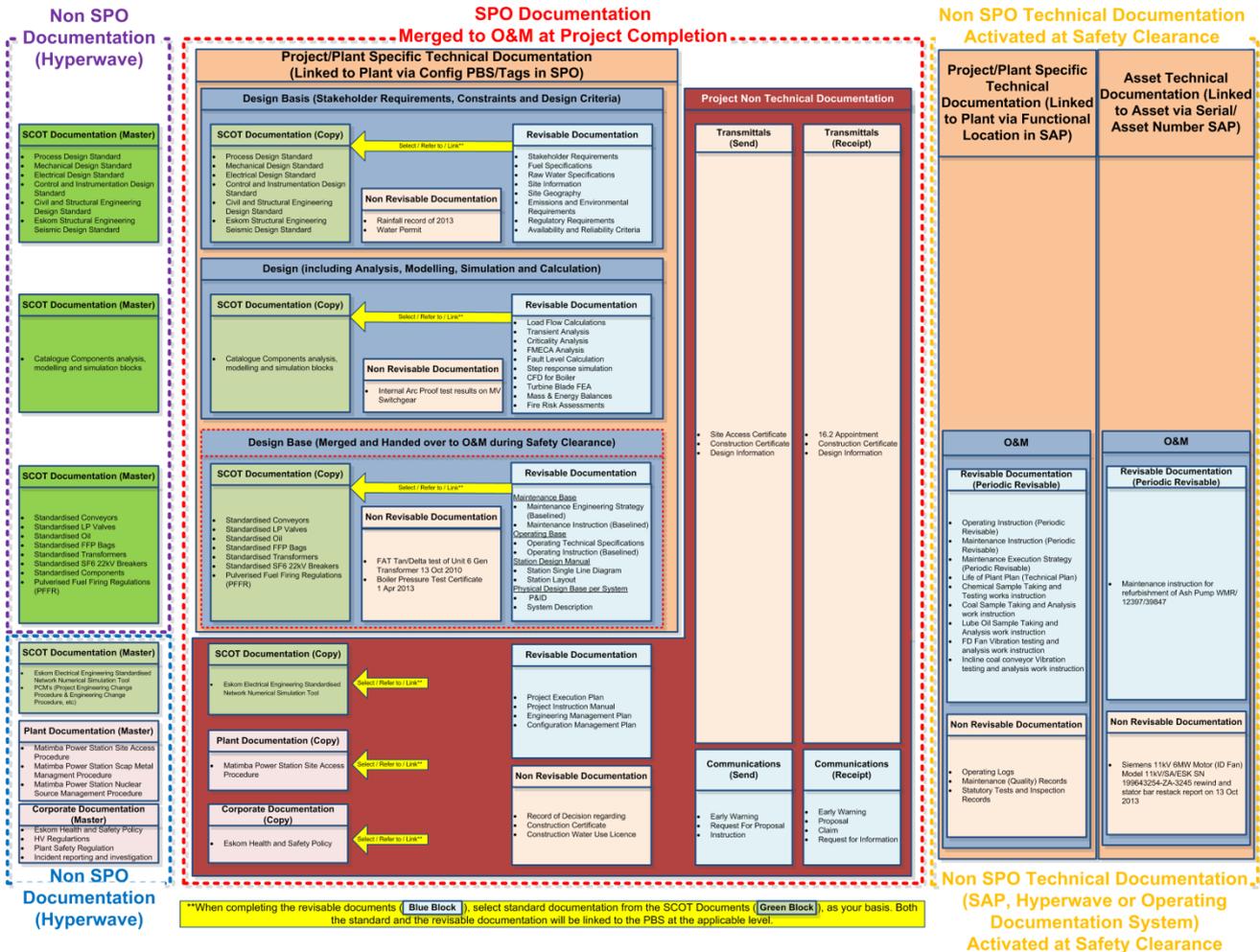


Figure 2: Typical Document Management System Landscape for Technical and Project Documentation in a Generation Environment

**CONTROLLED DISCLOSURE**