

PSEG Internal Use Only

PSEG NUCLEAR L.L.C.
TECHNICAL STANDARD
INTERIM AND PERMANENT ABANDONMENT
OF CONTROLLED PLANT EQUIPMENT

Revision Summary:

Revised Technical Standard throughout to align with the current CC-AA-103 Configuration Control (CC) process for permanent abandonment design changes in place of the legacy procedure CCAP-80 Engineering Change Process referenced throughout Rev. 2 of this Technical Standard.

The Interim abandonment process has also been revised to align with all current process documents that have replaced the legacy documents. See Process Summary below.


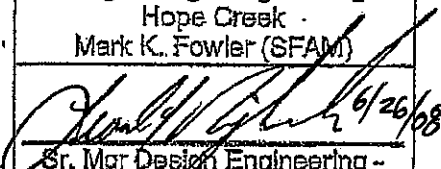
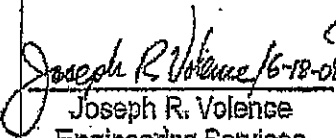

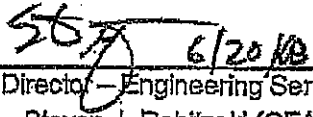

In accordance with CC-AA-301, Engineering Programmatic and Technical Standards, Rev. 3, the Quality Code "(Q)" has been removed from the end of the Standard number.

(See next page)

Effective Date: June 30, 2008

Implementation Requirements

Revised SAP Standard Task List CCTS5001 is available on the effective date.

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	INTERIM & PERMANENT ABANDONMENT OF CONTROLLED PLANT EQUIPMENT		NC.CC-TS.ZZ-5001

COVER PAGE CONTINUATION SHEET

REVISION SUMMARY (Cont'd)

NC.CC-TS.ZZ-5001, Rev. 3

The CC procedures and T&RMs (Training and Reference Materials) were adopted as the PSEG Nuclear Configuration Control Program on 1-1-2008 as part of the Operational Excellence Model (OEM) for all Functional Areas (FAs). This Rev. 3 aligns its reference to other FA documents where needed.

Preserved in this revision are **all** the Rev. 2 concepts of Interim Abandonment of Controlled Plant Equipment (CPE) implemented with an Interim Abandoned Equipment Evaluation (IAEE) package prepared per this Technical Standard and Permanent Abandonment of CPE implemented with a Design Change Package (DCP).

Process Summary: The IAEE Package is **not** a Design Change. No field work to alter the design of CPE is done under an IAEE Package. The IAEE Package is a method **outside** the DCP process to identify proposed (interim) abandonment information on design documents, in procedures and with CPE information tags (field signage). Affected Documents (ADs) in an IAEE Package are temporary until either permanent abandonment is implemented with a DCP, design changes are made that restore functionality or functionality is restored through pure maintenance activities. The IAEE Package and its ADs are then **cancelled**.

Due to extensive revisions, no margin bars are used. References to legacy procedures and organizational elements and positions have been replaced throughout with the current active superseding document and organizational groups and position names.

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**TECHNICAL STANDARD
INTERIM AND PERMANENT ABANDONMENT
OF CONTROLLED PLANT EQUIPMENT**

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1.0 **PURPOSE**

The purpose of this technical standard is **twofold**:

- ◆ To provide a process within **this** technical standard for **interim** abandonment identification, evaluation and processing of documents into DCRMS with interim abandonment boundaries and temporary interim document statuses. Interim abandonment is **not** a design change. In practice, interim abandoned equipment is functionally abandoned through procedure controls. When interim abandonment ends, the documents are canceled.
- ◆ To provide the necessary guidance when **permanently** abandoning Controlled Plant Equipment (CPE) in place for Hope Creek and Salem Generating Stations. Permanent abandonment of CPE is performed IAW CC-AA-103, Configuration Control of Permanent Physical Plant Changes, and its supporting T&RM, CC-AA-103-1001, Implementation of Configuration Changes.


For **permanently** abandoned CPE, the intent of this standard is to ensure abandoned in place Structures, Systems and Components (SSC's) are properly evaluated and isolated from operable plant SSC's both electrically and mechanically.

2.0 **SCOPE**

2.1 **Interim Abandonment**

- 2.1.1 An interim abandonment process is provided in this technical standard to create, review, approve, issue, revise and cancel an Interim Abandoned Equipment Evaluation (IAEE) Package **separate** from the Design Change Package (DCP) process. This IAEE process images documents in DCRMS in an "**Installed**" status that typically define **interim** abandonment boundaries. Those documents are stashed "**canceled**" when **either** final abandonment is processed under a DCP **or** the CPE functionality is restored through maintenance efforts (no design change).
- 2.1.2 This process also addresses CPE currently subjected to **defacto** abandonment through current procedure revisions that exercise operational configuration control to "not use" the CPE. CPE currently abandoned in this manner may be treated as interim abandoned with an IAEE Package or permanently abandoned with a DCP.

NOTE: Documents with "interim abandoned" markups are **NOT** design changes.

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2.1.3 Long Term tagout of equipment (with or without procedure changes) is undesirable because tags are subject to loss and deterioration and these tagouts are not shown on drawings.

NOTE: Undesirable indefinite equipment tagouts are eliminated with either interim or permanent abandonment. Tagouts of CPE are replaced with permanent field signs (formally called "labels" per OP-AA-116-101, Equipment Labeling).

2.2 **Permanent Abandonment**

2.2.1 This technical standard also provides guidance that applies to permanently abandoned plant SSCs at Hope Creek and Salem Generating Stations that have been identified in a Design Change Package (DCP) to be permanently disconnected and no longer be used in plant applications and processes.


3.0 **RESPONSIBILITIES**

3.1 Identifier of Abandoned Equipment:

- ◆ Identifies the equipment that is a candidate to be abandoned by preparing a Notification IAW LS-AA-120, Issue Identification and Screening Process.

3.2 Evaluator of Proposed Abandoned Equipment:

- ◆ Should be from Plant (System) Engineering but may be delegated to other departments when appropriate.
- ◆ Creates an Interim Abandoned Equipment Evaluation Form as an SAP long text with the Standard Text Key shown in Attachment 1.
- ◆ Evaluates the proposed equipment abandonment to determine the viability and acceptability of placing it in the abandoned condition IAW the provisions and choices of the Interim Abandoned Equipment Evaluation Form.
- ◆ Obtains Design Engineering and Operations comments and review confirmation in SAP of the Interim Abandoned Equipment Evaluation.

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3.2 (Continued)

- ◆ Completes the Interim Abandoned Equipment Evaluation Package and submits it to Design Engineering Staff for issue through Records Management.
- ◆ Sends an e-mail to the Design Engineering Staff mailbox “DMGDPCP” to issue and/or cancel the IAEE Package.

3.3 The Operations department is responsible for :

- ◆ Reviewing the **interim** abandoned equipment evaluations.
- ◆ Reviewing DCPs for **permanent** abandoned equipment IAW CC-AA-103, Configuration Change Control for Permanent Physical Plant Changes.
- ◆ Controlling interim and permanent abandoned equipment in accordance with OP-AA-108-101-1002, Component Configuration Control.
- ◆ Ensuring Plant labeling of interim and permanent abandoned equipment IAW OP-AA-116-101, Equipment Labeling.
- ◆ For ensuring the Work Clearance Module is updated to reflect interim and permanent abandoned status of equipment IAW CC-AA-103-1062, SAP Users Guide to Master Data.

3.4 The Maintenance department is responsible for:

- ◆ Evaluating, with Engineering concurrence, need for preventive maintenance on **interim** abandoned equipment and proposed spare equipment. See MA-AA-716-210, Performance Centered Maintenance Process.
- ◆ Performing the maintenance that is required to correct and return the equipment to a functional condition, when directed by Work Order.

3.5 Design Engineering Branch Manager or designee:

- ◆ Approves the **interim** abandoned equipment evaluations as an SAP final confirmation.
- ◆ Approves the Final Abandonment DCP IAW CC-AA-103.

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- ◆ Ensures configuration impacts of permanently abandoned plant SSC's are identified in the DCP and on the appropriate facility configuration Information documents.
- ◆ Ensures SAP Master Data information is updated to reflect abandoned status IAW CC-AA-103-1062.
- ◆ Ensures SAP order operations are created in the NUTS Order for activities required to address the Attachment 2 check list items impacted as appropriate.

3.6 Design Engineering Staff (DES) is responsible for:

- ◆ Issuing Interim Abandoned Equipment Evaluation Packages IAW this technical standard and DES deskguides to status Affected Documents and the IAEE Package as "Installed" status in DCRMS.
- ◆ Canceling Interim Abandonment design documents at the direction of a dedicated Operation in the IAEE NUTS Order to the DCP Mailbox "E-DMTDCP" monitored by DES.
- ◆ Issue DCPs prepared IAW CC-AA-103 for purposes of permanent abandonment.

3.7 Operations Department Shift Clerk is responsible for:

- ◆ Attaching new IAEE change paper (ADs) to Control Room set(s) of any affected OWDs.
- ◆ Maintaining affected OWDs with attached IAEE change paper, throughout issuance of OWD revisions for other reasons, until cancellation of the IAEE package and therefore, permanent removal from OWDs of the IAEE change paper.

4.0 **REQUIREMENTS**

4.1 The intent of this technical standard is to provide an organized process for identifying, documenting, evaluating, dispositioning, reviewing and approving requests for abandonment of selected Controlled Plant Equipment (CPE). CPE is SSCs and more. See the CPE definition.

4.2 Attachment 1 is the Interim Abandoned Equipment Evaluation, used to document a decision on interim abandonment configuration control for the CPE and then serves as the source information for the balance of the IAEE Package.

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NOTE: **Attachment 1 is used twice** in the complete processing of an IAEE package: **once** for getting PHC approval for CPE abandonment and **a second time** to create the IAEE Package for issue in DCRMS.

- 4.3 Design documents designated for **interim** abandonment are required to be flagged as interim documents in an issued Interim Abandoned Equipment Evaluation (IAEE) Package (by listing them in the Affected Document List section of the IAEE package), prepared IAW this technical standard.
- 4.4 An Interim Abandoned Equipment Evaluation (IAEE) Package consists of the files for the approved Evaluation in SAP, a 10CFR50.59 Cover Sheet, Applicability Review and Screening or Evaluation and **interim** design documents marked up to show **interim** abandonment boundaries. Files for these documents must be available in a shared folder to the Design Engineering Staff for issuance in DCRMS. Revised procedures to limit access to the **interim** abandoned equipment are issued as whole procedure revisions. List procedures requiring revision in the procedure section of the IAEE package.
- 4.5 Procedure revisions are driven by sub-Ops in the NUCM Order assigned for installing permanent placards and SAP procedure revision requests.
- 4.6 If a 10CFR50.59 Evaluation is needed but does not “screen out”, an IAEE Package shall **not** be prepared. 50.59 Forms are available in Forms on LAN and are prepared IAW LS-AA-104-1000, 50.59 Resource Manual.
- 4.7 Field work to **permanently** abandon CPE is done IAW CC-AA-103, (using the Attachment 2 checklist recommendations of this Technical Standard) or make design changes that restore functionality.
- 4.8 Operational control of CPE abandoned by procedure revision and tagout only is **discouraged for long term abandonment**. Interim abandonment by IAEE package or permanent abandonment by Design Change Package is the preferred process for long term or permanent abandonment. Each of these methods provides permanent field signs, drawing markups and procedure revisions. Permanent abandonment provides additional protections from use as described below.
- 4.9 Where the decision is to **permanently** abandon SSCs in place, it is the intent of this technical standard to ensure Abandoned-In-Place SSC’s are physically

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isolated from operable SSC's, conspicuously labeled and maintained in good material condition.

4.10 The following criteria shall be applied when considering the need to **permanently** abandon equipment in place rather than physically remove the SSC from the plant:

1. Conspicuous labeling of abandoned-in-place equipment eliminates operational uncertainty from the standpoints of both configuration control and equipment performance monitoring.
2. The station has recognized the advantage of formally abandoning equipment to reduce engineering and maintenance burdens such as resolution of associated condition reports or work orders and the completion of related preventive and corrective maintenance tasks.
3. Requiring that abandoned-in-place equipment be maintained at a high level of visible material condition communicates and reinforces a consistent expectation for plant wide visible material condition.
4. Abandoned instrumentation is removed to avoid confusion regarding their status by personnel such as Operators, Maintenance technicians, etc.
5. No instrumentation shall be abandoned in place that is installed in the control room console.
6. Any abandoned instrumentation (strain gauges, accelerometers, etc) that is attached to a active SSC shall be evaluated for impact on the natural frequency.
7. Cables shall be disconnected and terminated at the closest safe isolation point.
8. Abandoned conduit, cable tray, hangers or supports shall be reviewed for personnel safety issues with respect to access and egress into the affected areas.
9. Alarm indications should be disabled and spared.

4.11 When preparing a Change Package that involves **permanently** abandoning an SSC, the Applicability "YES" check list items identified on Attachment 2, shall be

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addressed at the appropriate level of detail IAW CC-AA-103 in the following Design Change Package forms:

- Form 3 Summary
- Form 4 Attributes of the Solution/Technical Evaluation section, and
- Form 5 Planning and Installation Instructions and Testing Criteria.

4.12 The 10CFR50.59 Screening/Evaluation (and associated 50.59 Cover Sheet and 50.59 Applicability Review) shall address the impact that **permanently** abandoning an SSC may have on the adjacent or associated operable SSC's.

5.0 **PROCESS DESCRIPTION**

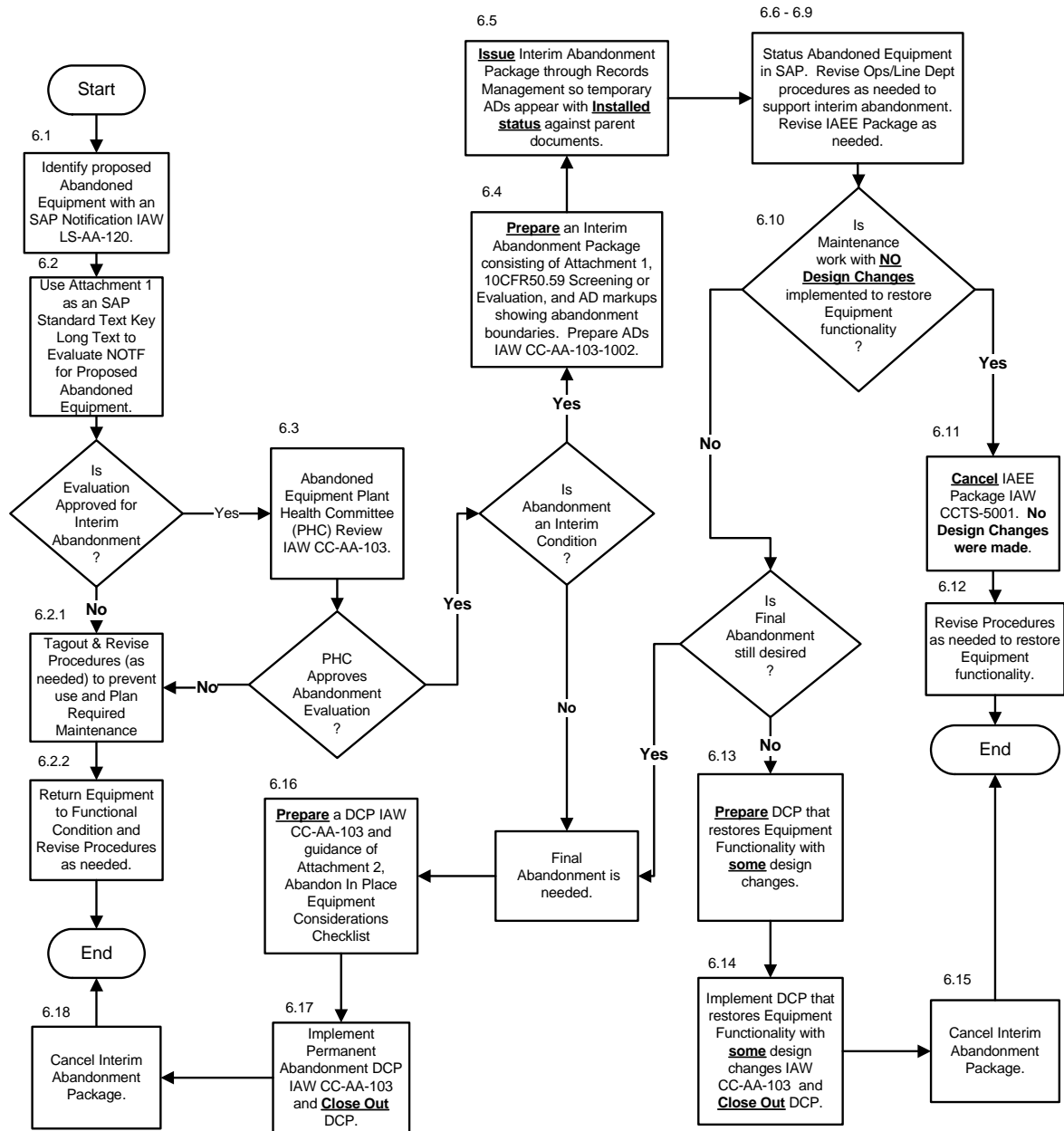
5.1 See the flowchart on the next page for the overall process description.

5.2 Business Continuity Plan

In the event that SAP is unavailable, the SAP long text form for the Interim Abandoned Equipment Evaluation shown in Attachment 1 can be used to carry out signature authorization on a hardcopy. Provide the completed hardcopy to Design Engineering Staff for incorporation into the Document Control and Records Management System (DCRMS).

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5.0 Interim Abandoned Equipment Process Flowchart



6.0 PROCESS

<p>Identify proposed Abandoned Equipment with an SAP NOTF IAW LS-AA-120.</p>	<p>6.1 <u>Identify Proposed Abandoned Equipment</u></p> <p>Owner: Any Notification Preparer</p> <ul style="list-style-type: none"> Any employee prepares Notification IAW LS-AA-120 to identify proposal for abandoned equipment. <p>Outcome: Proposed Abandoned Equipment identified in a Notification.</p>
<p>Determine acceptability of Interim Abandoned Equipment NOTF.</p>	<p>6.2 <u>Evaluate Proposed Abandoned Equipment NOTF</u></p> <p>Owner: Plant (System) Engineer or designee</p> <ul style="list-style-type: none"> Import Standard Task List (Group “CCTS5001”) for Interim Abandoned Equipment Evaluation into a NUTS Order with PM Act Type: “IAE”. Prepare the Interim Abandoned Equipment Evaluation. Assign SAP Operations to Design Engineering, Operations Department and the Design Engineering Branch Manager for review comments and approvals. Design Engineering Branch Manager approves the Interim Abandoned Equipment Evaluation. Label the approved IAEE “Revision A” and copy it into the Confirmation text. <p>If the evaluation results of the abandoned equipment proposal are Design Branch Manager ACCEPTED, GO TO Section 6.3.</p> <p>If the results of the review are NOT ACCEPTED, CONTINUE with 6.2.1.</p> <p>Outcome: Design Branch Manager Acceptance of Interim Abandoned Equipment Evaluation determined.</p>

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<div style="border: 1px solid black; padding: 10px; text-align: center;"> Plan Required Maintenance </div>	<p>6.2.1 <u>Plan Required Maintenance</u></p> <p style="text-align: right;">Owner: Maintenance</p> <ul style="list-style-type: none"> • Use tagouts or tagouts and procedure revisions to prevent near term CPE use. • Plan Required Maintenance to restore functionality to CPE. <p>Outcome: Maintenance Orders are planned to restore CPE functionality.</p>
<div style="border: 1px solid black; padding: 10px; text-align: center;"> Return Equipment to Functional Condition. </div>	<p>6.2.2 <u>Return Equipment to Functional Condition</u></p> <p style="text-align: right;">Owner: Maintenance</p> <ul style="list-style-type: none"> • Implement NUCM Orders to return equipment to functionality. • Revise procedures as needed to operate the equipment and remove any tags. <p>Outcome: Equipment functionality is restored. <u>STOP</u></p>
<div style="border: 1px solid black; padding: 10px; text-align: center;"> Plant Health Committee (PHC) Review </div>	<p>6.3 <u>Plant Health Committee (PHC) Review</u></p> <p style="text-align: right;">Owner: Plant (System) Engineer or designee</p> <ul style="list-style-type: none"> • Print the Interim Abandoned Equipment Evaluation (IAEE) from SAP and present the results to the PHC IAW ER-AA-2001. Items left incomplete for PHC review require completion during IAEE Package development. • Resolve PHC comments. Use <u>alphabetic revision levels</u>. • Incorporate any PHC comments and obtain Design Engineering Branch Manager reapproval for changes of intent. <p>If the results of the review are PHC ACCEPTABLE, GO TO Section 6.4 for Interim Abandonment.</p> <p>If Final Abandonment is needed immediately, GO TO 6.16.</p> <p>If the results of the review are <u>NOT ACCEPTABLE</u>, GO TO 6.2.1.</p> <p>Outcome: PHC decision on CPE interim abandonment</p>

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Prepare an Interim Abandoned Equipment Evaluation (IAEE) Package

6.4 **Prepare an Interim Abandoned Equipment Evaluation (IAEE) Package**

Owner: Plant Engineer or designee

Prepare the complete IAEE Package IAW Attachment 1 section requirements stated below. **Start with a copy of the PHC approved IAEE Form (long text) placed in a new SAP Operation** of the same NUTS Order. **Delete the Review/Approve names and Op numbers used for the PHC cycle.**

- **Revision Summary:** Use numerical revision levels starting with “Rev. 0”.
- **Part A.** Identify SAP FLOCs included in the equipment description to be abandoned and the reason for abandonment.
- **Part B.** Answer the functional questions asked and provide references, if appropriate.
- **Part C.** Prepare a 50.59 Cover Sheet, Applicability Review, Screening or Evaluation from the perspective of the **formal abandonment Design Change Package**, **not** the proposed interim abandonment.

NOTE: The IAEE Package contains AD markups to show **only the proposed equipment abandonment boundaries**, and **NOT** the physical isolation design changes necessary in the Final Abandonment DCP.

- **Part D.** Describe the specific abandonment measures to be taken for interim abandonment and additional changes for a Final Abandonment DCP. Provide drawing markups for interim abandonment.
- **Part E.** Prepare a list of Affected Documents (ADs) (design documents) and AD markups to show the interim abandoned equipment boundaries **only** or design limitations (for design analyses).



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	<p>6.4 <u>(Continued)</u></p> <p><u>NOTE:</u> The following prominent NOTE should be added to any <u>design document ADs</u> per rules of CC-AA-103-1002, Creating Affected Document (AD) and Field Change Request (FCR) Markups: “Interim Abandoned Equipment Evaluation (IAEE) Package. Do Not Update.”</p> <ul style="list-style-type: none"> • Part F. Identify procedure numbers and titles that require revision to implement interim abandonment. <p><u>NOTE:</u> Procedures are not ADs. ADs are <u>ONLY</u> design documents.</p> <ul style="list-style-type: none"> • Part G. Identify Preventive Maintenance (PM) tasks that must be maintained or canceled as part of the interim abandonment phase prior to implementation of a Final Abandonment DCP. <p>Assign Review Operations to Design Engineering and Operations Department for the IAEE Package.</p> <ul style="list-style-type: none"> • Part H. Obtain a Design Engineering Branch Manager Op Confirmation approval. • Prepare procedure revision requests for any operating procedures required to support the interim abandonment and reference the IAEE Package number. • See IAEE Package definition for package preparation and file storage instructions. • Update an interim abandoned equipment log, by unit, similar to the “Abandoned Equipment Log” shown in Attachment 3. If not already created, create and save the log in a write-protected file in the following unit appropriate NJNBUFP19 folders: <ul style="list-style-type: none"> ➤ PSEG Power\Operations\OPS\Salem\ Abandoned Equipment ➤ PSEG Power\Operations\OPS\Hope Creek\Abandoned Equipment <p>Outcome: IAEE Package prepared and approved.</p>
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<div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>Issue IAEE Package through Records Management in DCRMS</p> </div>	<p>6.5 <u>Issue IAEE Package through Records Management in DCRMS</u></p> <p>Owner: Design Engineering Staff/Records Management</p> <ul style="list-style-type: none"> • Issue an IAEE Package from the saved files in M:\shared\DCP List to the Design Change/Mod folder of DCRMS. • Post ADs from the IAEE Package with “Installed” status appended to the parent document or, if necessary, post new documents with “installed” status if no parent document exists. <p><u>NOTE:</u> Any AD that does not have a parent document shall be identified as a Preliminary Interim Document type pre-established in DCRMS for this process.</p> <ul style="list-style-type: none"> • Records Management supplies any impacted OWDs to the Control Room/Work Control Center IAW RM-AA-102. <p><u>NOTE:</u> AD markups to show proposed equipment abandonment <u>boundaries</u> are to be prepared IAW markup rules of CC-AA-103-1002, Creating Affected Document (AD) and Field Change Request (FCR) Markups.</p> <p>Outcome: IAEE Package and ADs issued in DCRMS.</p>
<div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>Assign Order/Op to Design Engineering to Update Affected FLOC descriptions</p> </div>	<p>6.6 <u>Assign Order/Op to Design Engineering to Update Affected FLOC descriptions</u></p> <p style="text-align: right;">Owner: Plant Engineer or designee</p> <ul style="list-style-type: none"> • Identify Functional Locations (FLOCs) to be updated with description notes that reference Interim Abandoned Equipment NUTS Order 800XXXXX”. See CC-AA-103-1062, SAP Users Guide to Master Data. <p>Outcome: SAP FLOCs identified as interim abandoned.</p>

<div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>Revise Operations/Line Department Procedures to address interim abandonment.</p> </div>	<p>6.7 <u>Revise Operations/Line Department Procedures to address interim abandonment</u></p> <p style="text-align: right;">Owner: Operations/Line Departments</p> <ul style="list-style-type: none"> • Revise Operations/Line Department procedures IAW procedure revision requests to address interim abandonment. <p>Outcome: Revised Operations/Line Department Procedures issued.</p>
<div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>Additional Status Tasks for Interim Abandoned Equipment</p> </div>	<p>6.8 <u>Additional Status Tasks for Interim Abandoned Equipment</u></p> <p style="text-align: right;">Owner: Plant Engineer or designee</p> <ul style="list-style-type: none"> • Establish or update a write protected interim abandoned equipment log similar to the “Interim Abandoned Equipment Log” in Attachment 3. • Assign the Standard Task List operation to Operations Dept. to create an interim abandoned equipment tag. Prepare sturdy field label per OP-AA-116-101, Equipment Labeling, with clear identification of <u>Interim</u> Abandoned Equipment and drawing reference. • Assign the appropriate station operation in the Standard Task List to Operations Dept. to update the SAP Work Clearance Module with Interim Abandoned Equipment notes. <p>Outcome: Additional Status Tasks for Interim Abandoned Equipment completed.</p>

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<div style="border: 1px solid black; padding: 10px; width: fit-content; margin: auto;"> <p>Revise IAEE Package as needed</p> </div>	<p>6.9 <u>Revise IAEE Package as Needed</u></p> <p style="text-align: right;">Owner: Plant Engineer or designee</p> <ul style="list-style-type: none"> • Copy the last approved IAEE Package long text into a new Operation in the same NUTS Order. • Index revision level up one number on the Form and SAP Operation short text. • Revise IAEE Package long text as necessary to add or delete ADs or make other changes. Summarize changes on the first page of the IAEE Form. • Obtain a Reviewer confirmation of the revised “IAEE Package” Operation. • Obtain a Design Engineering Branch Manager final confirmation of the revised “IAEE Package” Operation. <p><u>NOTE:</u> Scope changes of significance require re-presentation to the PHC.</p> <p>Outcome: IAEE Package Revised and Issued.</p>
<div style="border: 1px solid black; padding: 10px; width: fit-content; margin: auto;"> <p style="text-align: center;">Is Maintenance work with <u>NO</u> <u>Design Changes</u> Implemented to restore Equipment Functionality ?</p> </div>	<p>6.10 <u>Is Maintenance work with NO Design Changes implemented to restore Equipment Functionality?</u></p> <p style="text-align: right;">Owner: Plant Engineer or designee</p> <p>If Maintenance work with <u>NO Design Changes</u> are implemented to restore equipment functionality, GO TO 6.11.</p> <p>If a Design Change is desired or needed to restore equipment functionality, GO TO 6.13.</p> <p>If Final Abandonment is still desired, GO TO Section 6.16.</p> <p>Outcome: Final Abandonment determination made.</p>

<div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>Cancel IAEE Package. NO Design Changes were made.</p> </div>	<p>6.11 <u>Cancel IAEE Package. NO Design Changes made</u></p> <p style="text-align: right;">Owner: Plant Engineer or designee</p> <ul style="list-style-type: none"> • If possible, implement Maintenance activities <u>only</u> to restore equipment functionality. • Following equipment function restoration, since NO Design Changes were made, cancel the IAEE package by assignment of an Operation to DES in the IAEE Package NUTS Order. • Send an e-mail to common DCP mailbox “DMGDGP” for DES to <u>cancel</u> the IAEE package and its ADs per the assigned NUTS Order/Operation. <p>Outcome: IAEE Package Canceled.</p>
<div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>Revise Procedures as needed to restore Equipment Functionality.</p> </div>	<p>6.12 <u>Revise Procedures as needed to restore Equipment Functionality</u></p> <p style="text-align: right;">Owner: Plant Engineer or designee</p> <ul style="list-style-type: none"> • Assign SAP tasks to Operations or other Departments to revise procedures as needed to restore Equipment functionality. • Revise FLOC descriptions to remove proposed interim abandonment notes in SAP. See CC-AA-103-1062. • Have Interim Abandoned Equipment labels removed after equipment functionality restored. <u>STOP</u> <p>Outcome: Equipment Functionality Restored.</p>

<div style="border: 1px solid black; padding: 5px; width: fit-content;"> <p>Prepare DCP IAW CC-AA-103 that restores Equipment Functionality with <i>some</i> Design Changes.</p> </div>	<p>6.13 <u>Prepare a DCP IAW CC-AA-103 that restores Equipment Functionality with <i>some</i> Design Changes</u></p> <p style="text-align: right;">Owner: Design Engineer or designee</p> <ul style="list-style-type: none"> • Identify design changes and document changes necessary to achieve Equipment functionality. • Identify Operations and other department procedure revisions needed to restore Equipment functionality under the revised design. <p>Outcome: DCP issued with <i>some</i> Design Changes to restore Equipment functionality.</p>
<div style="border: 1px solid black; padding: 5px; width: fit-content;"> <p>Implement DCP to restore Equipment Functionality with <i>some</i> Design Changes IAW CC-AA-103 and Close Out</p> </div>	<p>6.14 <u>Implement DCP to restore Equipment Functionality with <i>some</i> Design Changes IAW CC-AA-103 and Close Out.</u></p> <p style="text-align: right;">Owner: Design Engineer or designee</p> <ul style="list-style-type: none"> • Prepare installation and test instructions IAW CC-AA-103 to restore equipment functionality with some design changes. • Obtain Plant Engineer review of test plans or Plant Engineer development of special tests • Have Interim Abandoned Equipment labels removed as part of installation instructions. • Revise FLOC descriptions to remove proposed interim abandonment notes in SAP. See CC-AA-103-1062. • Notify System Engineer to cancel the IAEE Package. <p>Outcome: DCP Implemented and Closed Out.</p>

<div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>Cancel IAEE Package</p> </div>	<p>6.15 <u>Cancel IAEE Package</u></p> <p style="text-align: right;">Owner: Design Engineer or designee</p> <ul style="list-style-type: none"> • Cancel the IAEE package by assignment of an Operation to DES in the IAEE Package NUTS Order. • Send an e-mail to mailbox “DMGDGP” to cancel the IAEE Package and its ADs. • Equipment functionality restored with some design changes. <u>STOP. DO NOT GO ON TO 6.16.</u> <p>Outcome: IAEE Package Canceled.</p>
<div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>Prepare DCP IAW CC-AA-103 and Attachment 2 for permanent abandonment.</p> </div>	<p>6.16 <u>Prepare a DCP IAW CC-AA-103 and guidance of Attachment 2 for permanent Abandonment</u></p> <p style="text-align: right;">Owner: Design Engineer or designee</p> <ul style="list-style-type: none"> • Prepare a DCP for <u>Final Abandonment</u> IAW CC-AA-103 and the guidance of Attachment 2, Abandon in Place Equipment Considerations Checklist. • Identify field changes and document changes necessary to achieve Equipment isolation for final abandonment. <p>Outcome: Final Abandonment DCP Issued.</p>

<div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>Implement Permanent Abandonment DCP IAW CC-AA-103 and Close Out DCP.</p> </div>	<p>6.17 <u>Implement Permanent Abandonment DCP IAW CC-AA-103 and Close Out DCP</u></p> <p style="text-align: right;">Owner: Design Engineer or designee</p> <ul style="list-style-type: none"> • Prepare installation and test instructions IAW CC-AA-103 and CC-AA-103-1001 to implement final equipment abandonment. • Obtain Plant Engineer review of test plans or Plant Engineer development of special tests. • Determine any need for change of Interim Abandoned Equipment labels to implement Final Abandonment signage. • Revise FLOC descriptions to change proposed interim abandonment notes in SAP to Final Abandonment. See CC-AA-103-1062. <p>Outcome: Final Abandonment DCP Implemented and Closed Out.</p>
<div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>Cancel IAEE Package</p> </div>	<p>6.18 <u>Cancel IAEE Package</u></p> <p style="text-align: right;">Owner: Design Engineer or designee</p> <ul style="list-style-type: none"> • Cancel the IAEE package by assignment of an Operation to the DCP Mailbox Work Center “E-DMTDCP” in the IAEE Package NUTS Order. • Send an e-mail to mailbox “DMGDGP” for Design Engineering Staff to cancel the IAEE Package and its ADs. <p>Outcome: IAEE Package Canceled.</p>

7.0 **DEFINITIONS**

7.1 **Controlled Plant Equipment** – Structures, Systems and Components (SSCs) that:

- Have functions that impact the plant safety analysis, or
- Other structures, systems and components that are subject to special considerations based upon management discretion (for example, considerations given to licensing basis, the Maintenance Rule, personnel safety, availability, commercial risk, etc.)

7.2 **Design Change Package (DCP)** – See definition in CC-AA-103, Configuration Change Control for Permanent Physical Plant Changes.

7.3 **Interim Abandoned Equipment** – Equipment that is mechanically and/or electrically isolated from functional systems/components using installed plant equipment (for example, valves, breakers, switches, etc.) but otherwise left in-place without physical changes to the isolated equipment. This may be specific pieces of equipment or a system/subsystem. Documents showing Interim Abandoned Equipment are posted against their parent documents by issuance of an Interim Abandoned Equipment Evaluation Package (See definition).

7.4 **Interim Abandoned Equipment Evaluation (IAEE)** – A written evaluation in a Standard Text Key long text of an SAP Operation (shown as Attachment 1). The IAEE documents the acceptability of placing equipment in the abandoned condition and serves as source information for preparation of a Design Change Package (DCP) to implement the permanent abandonment as a design change or controls disuse of equipment by revision to operational procedures (operational configuration control).

7.5 **Interim Abandoned Equipment Evaluation (IAEE) Package** – A set of mixed source electronic files (SAP, Word and ImageMaster) prepared and placed by the preparer on the M:\Shared\DCP List folder for upload to DCRMS by Design Engineering Staff. These files may be printed as a paper packet. The files consist of:

- ◆ The approved Interim Abandoned Equipment Evaluation (IAEE) from SAP long text with names and SAP NUTS Order/Op numbers identified for preparer, reviewer(s) and approver. The completed long text is copied and downloaded as an .rtf file (Rich Text Format) to the D:\SAP Data

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folder and then relocated to M:\Shared\DCP List under a folder labeled with the NUTS Order.

The IAEE long text in SAP identifies all the documents in the package.

- ◆ A 50.59 Cover Sheet, a 50.59 Applicability Review, and 50.59 Screening or 50.59 Screening and Evaluation, in Word with the IAEE NUTS Order/Op numbers identified. These Word files are saved to M:\Shared\DCP List under a folder labeled with the NUTS Order.
- ◆ Design documents [Affected Documents (ADs)] marked up using ImageMaster IAW CC-AA-103-1002 to show interim abandoned equipment boundaries. AD markups are created as .tif (Tagged Image File Format) files and stored in M:\Shared\DCP List folder under a folder titled with the NUTS Order number, similar to DCPs prepared IAW CC-AA-103.

AD title blocks use the IAEE NUTS Order nomenclature and “DO NOT UPDATE” signage.

The IAEE Package and ADs are canceled by an Operation in the IAEE NUTS Order assigned to the DCP Mailbox “E-DMTDCP” (monitored by Design Engineering Staff (DES) after a DCP is issued to permanently abandon the subject equipment, modify it functionally, or, alternatively, maintenance restores equipment function.


7.6 **Spare Equipment** – Installed equipment that is physically connected to the system but no longer performs any specific function. (for example, a “spare” breaker is no longer used, but is **not** disconnected from its system power and remains functional and available for use.) Predefined surveillances may continue to be performed on spare equipment (for example, a spare breaker may continue to have preventive maintenance performed in accordance with the predefined surveillance schedule to allow the spare breaker to be used if needed.)

8.0 **REFERENCES**

8.1 CC-AA-103, Configuration Change Control for Permanent Physical Plant Changes

8.2 CC-AA-103-1001, Implementation of Configuration Changes

8.3 LS-AA-120, Issue Identification and Screening Process

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- 8.4 OP-AA-108-101-1002, Component Configuration Control
 - 8.5 OP-AA-116-101, Equipment Labeling
 - 8.6 CC-AA-103-1062, SAP Users Guide to Master Data
 - 8.7 MA-AA-716-210, Performance Centered Maintenance Process

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ATTACHMENT 1

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**Interim Abandoned Equipment Evaluation (IAEE)
(Use SAP Standard Text Key "DCPAEE")
(Use a Paper form only in event SAP is unavailable.)**

Note: All Controlled Plant Equipment (CPE) proposed for Interim Abandonment Status requires submittal and presentation of a printout of this completed SAP form to the Plant Health Committee (PHC) IAW ER-AA-2001, Plant Health Committee. Following PHC approval, the Preparer saves in M:\Shared\DCP List a Reviewed and Approved IAEE Package (see IAEE Package definition for saving methods) To make equipment design changes to restore functionality or implement final abandonment, enter DCP No. in **H. Interm Abandoned Equipment Evaluation NUTS Order No.** _____ **Rev.*** _____

* Revision Levels: Use A, B, etc. for PHC submittal and Rev. 0, 1, etc. for IAEE Package

Revision Summary: (Type here):

A. Abandoned Equipment Identification (Plant (System) Engineer or designee)

HC ____ S1 ____ S2 ____ S3 ____ SC ____ System: _____

1. Describe the equipment to be abandoned, including all FLOCs:

2. Reason for abandonment:

B. Abandonment Evaluation (Plant Engineer or designee)

1. What are the active or passive function(s) of the proposed abandoned system/equipment?

Reference:

2. Why is/are the function(s) no longer required? (If the function(s) is/are achieved by other means, explain.)

Reference:

C. 10CFR50.59 Screening (Plant Engineer or designee)

1. 50.59 Screening results acceptable? YES NO

Technical Evaluation per CC-AA-309-101, or Design Analyses per CC-AA-309 or other Document No.: _____

ATTACHMENT 1
Page 2 of 3
Interim Abandoned Equipment Evaluation

D. Interim Abandoned Equipment Summary (Plant Engineer or designee)

1. The interim equipment abandonment can be accomplished by:
 (Abandoning equipment by tagout and procedure revision alone is discouraged. Interim abandonment provides permanent field signage and drawing markup.)

2. Final abandonment requires the following additional actions:

3. Mark-up of functional drawings that show the proposed interim abandonment attached? (Required for IAEE Package) YES NO

E. List of Affected Documents (Design Documents): (Plant Engineer or designee)

F. List of Procedures requiring revision: (Plant Engineer or designee)

G. List of affected Preventive Maintenance tasks (PMs) (Plant Engineer or designee)

1. The following must be maintained, changed or canceled during the period of interim abandonment:

Prepared by: _____ (Plant Engineer or designee) Type or Print	_____ SAP Op number or Sign	_____ Date
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Reviewed by: _____ (Design Engineer) Type or Print	_____ SAP Op number or Sign	_____ Date
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Reviewed by: _____ (Operations) Type or Print	_____ SAP Op number or Sign	_____ Date
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H. Interim Abandoned Equipment Disposition: (Design Engineering Branch Manager)

1. Proposed Interim Abandoned Equipment Approved? YES NO

2. Maintenance must be performed to correct and return the equipment to a functional status? YES NO

If yes, enter the NUCM number below. **No IAEE Package** is needed. Operational configuration control may be done with procedure revisions outside the IAEE and DCP processes.

NUCM No.: _____

ATTACHMENT 1

Page 3 of 3

Interim Abandoned Equipment Evaluation

3. Will interim abandonment status be used to restore system/equipment functionality at a later date with some design changes expected? YES NO
If yes, then enter the DCP Number below.

4. Is final abandonment needed? YES NO

If yes, this is a design change. Enter the DCP Number below.
If no, then justify reasoning for no final abandonment configuration change in (5.) below

NUCP DCP No.: _____

5. Comment/Additional Instructions: _____

Approved by: _____
(**Design Engineering Branch Manager**) Type or Print SAP Op number or Sign Date

ATTACHMENT 2
PERMANENT ABANDON IN PLACE EQUIPMENT CONSIDERATIONS CHECKLIST
 Page 1 of 3

Discipline	Consideration	Applicability
Mechanical/Civil	Are any tanks or vessels being abandoned?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Are the contents of the tank or vessel to be drained and disposed of per established procedures?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Are the tanks and Vessels adequately vented to prevent condensation?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Are the tanks or vessels required to be maintained in a lay up condition?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Are any mechanical devices that are attached to an active SSC being abandoned in place?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Have the supporting stress calculations been reviewed to ensure there is no adverse impact of leaving the device installed on an active SSC?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Is any piping being abandoned in place?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Will the piping be permanently disconnected from an operating SSC?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Will the contents of the piping be drained and flushed?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Does the piping have any heat tracing that requires maintenance or abandonment?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Are there any Motor operated valves being abandoned?	<input type="checkbox"/> Yes <input type="checkbox"/> No

ATTACHMENT 2
Page 2 of 3

Discipline	Consideration	Applicability
Electrical/ I&C	Are electrical devices being abandoned in place?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Are abandoned devices electrically disconnected from the main power source?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Do any of these devices contain batteries. (Lead Acid, electrolytes, corrosive contents, etc.)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Do any of these devices contain Electrolytic Capacitors or other discrete components that could leak?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Are there any electrical motors being abandoned?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Will the electrical power to all motors be disconnected?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Will there be any instrumentation abandoned which has control room indication?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Will abandoned control room indication be isolated, removed and reflected in operating procedures and facility configuration information documentation?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Will there be any instrumentation abandoned that provides local indication?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Will the local indicating devices be removed to preclude human error confusion as to its operability?	<input type="checkbox"/> Yes <input type="checkbox"/> No

ATTACHMENT 2

Discipline	Consideration	Applicability
Generic Considerations	Will any SAP master data be voided or rendered obsolete as a result of abandoning the SSC's?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Are there any procedures affected by abandoning the SSC's?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Are there any design calculations that are impacted by abandoning the SSC's?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Will any recurring maintenance tasks be affected or need to be created by abandoning the SSC's?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Are any special Hazardous material disposal considerations required?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Is any special tagging or labeling required?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Are there any work Clearance Module impacts?	<input type="checkbox"/> Yes <input type="checkbox"/> No

