Enclosure 26 to ET 07-0022

WCNOC Procedure AI 16C-007, "Work Order Planning"

This form shall be completed within 14 days as required by USAR Section 17.2.5.5.

ON THE SPOT CHANGE (OTSC)

OTSC #: 07-0020

Document Number: AI 16C-007 Current Revision Number: 21

Document Title: WORK ORDER PLANNING

Originator: Ron Benham 3/23/2007

Print Name *Date*

Reason For Change: INPO Work Planning and Preparation AFI and Level II PIR 2006-0001663, Equipment Not Deenergized from OTSC 07-0016, and Level II PIR 2006-002804.

Page Affected	Step Affected	Description Of Change
5	3.1.63	Added reference to Procedure Writers Guide
5	3.1.64	Added reference to Core Work Instructions procedure
13	6.1.10	Replaced text in note prior to step 6.1.10 with the following: "A quality work package is an assembly of documents with technically correct supplemental instructions and permits necessary for effective and efficient implementation by the assigned work group. The package should be a workable collection of documents and instructions that assumes the implementer possesses the necessary skills to implement the task."
13	6.1.10-1	Inserted new step 6.1.10-1 which reads: Work instructions shall be sufficiently detailed for a qualified individual to perform the required function without direct supervision.
14	6.1.10-1	Added a new note after Step 6.1.10-1 which reads: · Actions may unintentionally be performed incorrectly or omitted if work instructions lack needed information. On the other hand, excessive detail can result in the work instructions being time consuming or in steps being missed due to the user scanning over the instructions. · Additional guidance for step development, organization, language and content may be found in AP 15C-001, Procedure Writer's Guide. These rules are not required, but may be used as a reference.
14	6.1.10-2	Inserted a new step 6.1.10-2 which reads: The following factors should be considered when determining the appropriate level of detail: o User knowledge and skills o Complexity of task o Task frequency o Consequence of error o Past experience in implementing the procedure
14 & 15	6.1.10-2 to 8	Renumbered 6.1.10 sub-steps as appropriate to support changes above
15	6.1.13	Revised step 6.1.13 to add the requirement to use Core Work Instructions (CWI), where applicable.
20	6.2.2	Added note prior to the new Step 6.2.2 which reads: Peer review criteria and review requirements are controlled by Maintenance department expectations and do not affect other work groups. All other work groups may progress work orders using the status, "Peer Review Not Required (I1)
20	6.2.2	Inserted new Step 6.2.2 through 6.2.2-2 to provide guidance for peer review process and status progressions.
20	6.2.3	Renumbered old step 6.2.1-1 and subsequent steps as 6.2.3 through 6.2.3-3 and provided addition information describing new status progressions.
28	6.5.5-1	Revised step 6.5.5-1 to include Core Work Instructions
28	6.5.7-4	Revised step 6.5.7-4 to include Core Work Instructions

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29	6.6.1-4	Revised step 6.6.1-4 to read: Work Planners will communicate Clearance Order, Local Control and Flow Path Evaluation requirements to Preparers via the Clearance Order worksheet in the Permits application of EMPAC. Unless a Master Clearance Order is to be used, check boxes and comments should identify: [3.2.13] and [3.2.19] · Types of Energy Isolation. · Any needed cautions, notes and procedures. · Temporary and back-up power source s · Other special considerations
30	6.6.5	Added step 6.6.5: A CPI, Containment Penetration Integrity permit is required anytime the work step deals with containment penetration isolations. Applying this permit will require an Operations signature in the permits section of the printed Work Order. [This is a Preventative Action from PIR 2006-002804]

OTSC SCREENING

*(A YES answer to any of the following questions indicates an OTSC **cannot** be performed.)*

1. Will this change affect the scope, essential purpose, major activities, equipment operating mode(s), performance frequency, or range of operation, which define the limits of the intended use? ☐ YES ☒ NO
2. Will this change cause safety-related equipment to become inoperable or unable to perform its intended safety function or require entry into a technical specification or TRM action statement? ☐ YES ☒ NO
3. Will this change eliminate a step required to verify operability or functionality or satisfy a commitment? ☐ YES ☒ NO
4. Will this change reduce quality verification requirements (e.g., hold points, independent verification)? ☐ YES ☒ NO
5. Will the change cause a reduction of personnel or equipment safety? ☐ YES ☒ NO
6. Will the change require a 50.59 Evaluation? ☐ YES ☒ NO

☒ Proposed change is attached.

☒ Applicability Determination (APF 26A-003-01) has been completed and attached as required by AP 26A-003, 10 CFR 50.59 REVIEWS

☐ 50.59 Screen (APF 26A-003-02) has been completed and attached as required by AP 26A-003, 10 CFR 50.59 REVIEWS

☒ 50.59 Screen not required.

APPROVAL FOR IMMEDIATE USE

Approved By: _____ _____
Call Superintendent (for ACPs only) *Date*

Approved By: Paul Clarkson | Paul Clarkson | 3/23/2007
*WCNOC Staff Member** *Print Name* *Date*

Approved By: William C. Wiseman | William C. Wiseman | 3/23/2007
*Cognizant Supervisor** *Print Name* *Date*

* For Operations Department procedures, one must hold a Senior Reactor Operator license per USAR Section 17.2.5.5.

REVIEWS DLR 3-23-07

Cross-Disciplinary Review Required By: ☒ Other (*Specify*) ☐ NONE REQUIRED
☒ Quality Control ☐ Surveillance Coordinator ☐ IST Engineer

☒ All cross-disciplinary reviews have been completed, reviewer comments have been resolved and the approval of this OTSC is recommended. ☐ Recommend cancellation of this OTSC.

Donald L Hoter _____ _____
Qualified Reviewer *Print Name* *Date*

PSRC REVIEW AND RECOMMENDATION FOR APPROVAL

☐ PSRC review required.* ☒ PSRC review and Plant Manager approval not required.

*(*Mandatory for all OTSCs to Administrative Control Procedures*)

☐ Approved ☐ Disapproved PSRC Meeting No: _____ _____ _____
PSRC Chairman (Initials) *Date*

_____ _____
(Plant Manager) *Date*

FINAL APPROVAL

☒ Approved: ☐ Disapproved, cancel, remove from OTSC file, and initiate PIR

☒ Maintain in active OTSC file until incorporated into future revision.

☐ Maintain in active OTSC file until specified date: / /

Responsible Manager

3-23-07
Date

WOLF CREEK
NUCLEAR OPERATING CORPORATION

AI 16C-007

WORK ORDER PLANNING

Responsible Manager

MANAGER MAINTENANCE

Revision Number	21
Use Category	Reference
Administrative Controls Procedure	No
Management Oversight Evolution	No
Program Number	16C

DC38 8/22/2006

TABLE OF CONTENTS

1.0 PURPOSE

1.1 This procedure provides administrative instructions for the initiation, planning, and processing of Work Orders to assure that work activities performed at Wolf Creek Generating Station (WCGS) are planned in a consistent, efficient and technically competent manner.

2.0 SCOPE

2.1 This procedure is applicable to ALL planning and processing of Work Orders as governed by AP 16C-006, MPAC Work Request/Work Order Process Controls.

3.0 REFERENCES AND COMMITMENTS

3.1 References

3.1.1 AI 05C-004, Job Authorization Request

3.1.2 AI 16C-001, Rework Identification and Control Process

3.1.3 AI 22C-008, Work Scoping Team

3.1.4 AP 05-001, Change Package Planning and Implementation

3.1.4 AP 05-002, Dispositions and Change Packages

3.1.5 AP 05-005, Design Implementation and Configuration Control of Modifications

3.1.6 AP 05-007, Determination of Safety Classification

3.1.7 AP 05G-005, Maintenance Group Environmental Qualification Program

3.1.8 AP 05-010, Design Drawings

3.1.9 AP 10-104, Breach Authorization

3.1.10 AP 12-002, Internal and External System Cleanliness

3.1.11 AP 12-003, Foreign Material Exclusion

3.1.12 AP 14-001, Control of Heavy Loads, Lifting, and Rigging

3.1.13 AP 14B-001, Use of Plant Chemicals

3.1.14 AP 15C-002, Procedure Use and Adherence

3.1.15 AP 15C-004, Preparation, Review, and Approval of Documents

3.1.16 AP 16-001, Control of Maintenance

3.1.17 AP 16-003, Master Lubrication List and Control of Lubricants

3.1.18 AP 16A-001, 'R' Program Repair/Alterations

3.1.19 AP 16A-003, ASME Section XI Repair/Replacement Program

3.1.20 AP 16B-003, Planning and Scheduling Preventive Maintenance

3.1.21 AP 16C-006, MPAC Work Request/Work Order Process Controls

3.1.22 AP 16C-008, Electrical Safety Program

3.1.23 AP 16E-002, Post Maintenance Testing

3.1.24 AP 20G-001, Control of Inspection Planning and Inspection Activities

3.1.25 AP 21B-003, Control of Temporary Equipment

3.1.26 AP 21D-002, Evaluation for Potential Energy/Fluid Transfer Paths

3.1.27 AP 21D-004, Control of Containment Penetrations During Shutdown Operations

3.1.28 AP 21I-001, Temporary Modifications

3.1.29 AP 22A-001, Screening, Prioritization, and Pre-Approval

3.1.30 AP 22C-002, Work Controls

3.1.31 AP 22C-005, IPS Daily Scheduling

3.1.32 AP 22C-007, Daily and Outage Contingency Planning

3.1.33 AP 22D-001, Refueling Outage Planning and Implementation

3.1.34 AP 22D-002, Forced Outage Work Planning and Implementation

3.1.35 AP 23L-002, Heat Exchanger Program

3.1.36 AP 24E-001, Identification and Control of Materials, Parts, and Components

3.1.37 AP 24E-006, Replacement Item Selection

3.1.38 AP 24H-003, Commodity Discrepancy Report

3.1.39 AP 28-007, MPAC Nonconformance Control

3.1.40 AP 28A-001, Performance Improvement Request

3.1.41 AP 29B-003, Surveillance Testing

3.1.42 AP 29F-002, Control of Welding Operations

3.1.43 CCP-05414, Generic Hardware Alternates and Repair Methods For Safety Related Electrical and HVAC Sheet Metal Structures.

3.1.44 CCP-05412, Zinc Plating Of Fasteners

3.1.45 CNT-MM-300, Fabrication, Installation, and Removal of Component Support

3.1.46 CNT-MM-301, Step by Step Component Support Work Guidelines

3.1.47 INPO 92-001, Guidelines for the Conduct of Maintenance at Nuclear Power Stations

3.1.48 INPO 87-028, Good Practice MA-318, Maintenance Work Package Planning

3.1.49 LTR MD 98-0017, Removal and Storage of Components from the Plant

3.1.50 LTR OP 90-0173, Control of Work Activities

3.1.51 PIR 95-2146, QC Involvement Unclear

3.1.52 PIR 2000-1866, Method for Notifying QC

3.1.53 PIR 2000-1826, Updating of NCR status in MPAC

3.1.54 PIR 2001-0201, SEL 00-032 - Equipment Reliability Process

3.1.55 PIR 2003-3043, Enhancement to Work Order Planning

3.1.56 Quality Control Inspection Manual (QCIM)

3.1.57 STS GP-006, Containment Closure Verification

3.1.58 STS GP-007, Containment Penetration Isolation Verification

3.1.59 10 CFR 50, Appendix B, Quality Assurance During Operation Phase

3.1.60 ASME Code Case OMN-13, Requirements for extending Snubber In-service at LWR Power Plants.

3.1.61 AI 16C-008, Work Order Implementation

3.1.62 PIR 2005-1968, AFI(ER.1-1) Ineffective problem resolution and a tolerance for degraded equipment conditions

3.1.63 AP 15C-001, Procedure Writer's Guide

3.1.64 AI 16C-010, Core Work Instructions

3.2 Commitments

3.2.1 PIR 93-0096, Insufficient Work Instructions

3.2.2 PIR 95-2808, Energy/Fluid Transfer Paths

3.2.3 PIR 96-1929, A Train Work Performed While B Train LCO was in Progress

3.2.4 PIR 97-2539, LER 97-015, RCMS # 97-209 and 97-213 - Missed In-service Inspection Surveillance on Pressurizer Safety

3.2.5 RCMS 93-310, LTR WO 93-184, PIR MA 93-0942, NOV 482/9321-05, Failure to Transfer Work Request Information

3.2.6 RCMS 89-102, Response to Violation 8822-01 and 8905-03, Redlining Control Room Drawings

3.2.7 PIR 98-1540, Acid Spill

3.2.8 RCMS 96-100, PIR 96-0507, Temporary Containment Penetration Closures

3.2.9 RCMS 99-009, LER 98-0010, PIR 99-0037, Reuse of Non-conforming parts

3.2.10 PIR 98-1764, Job Duration for LCOs, PIR 98-3927

3.2.11 PIR 97-2413, Draining

3.2.12 PIR 99-1285, Containment Closure Violation

3.2.13 PIR 99-1922, Vague Clearance Order Information

3.2.14 RCMS 92-027, Restoration guidance

3.2.15 PIR 2002-0048, Untimely Identification and Resolution Of Nonconforming Conditions

3.2.16 PIR 95-1853, Revisions to Action Request

3.2.17 RCMS 92-237, Post Maintenance Testing

3.2.18 PIR 05-0969, CA#5 Installation of Temporary Personal Protective Grounds

3.2.19 PIR 2006-0001663, Equipment Not De-energized

4.0 DEFINITIONS

4.1 See AP 22C-002, Work Controls, for definitions.

5.0 RESPONSIBILITIES

5.1 Department Managers:

5.1.1 Administration, implementation, and review of this procedure within their respective work groups.

5.2 The Responsible Work Group (RWG) Supervisor/Designee:

5.2.1 Converting designated WR to WO prior to assignment.

5.2.1 Assigning the appropriate RWG planner for WO/SWO

5.3 Responsible Work Group (RWG) Planner:

5.3.1 Developing work instructions and planning the work activity utilizing a WO or SWO, to control and document the implementation and completion of the work activity.

5.3.2 Provide work instructions in sufficient detail for qualified workers to perform the specified task, reviewing/referencing.

- Applicable drawings
- Applicable permits
- Applicable working documents
- Applicable reference documents

5.3.3 Provide the level of detail in work instructions to ensure personnel safety, and equipment protection throughout the work activity.

5.3.4 Provide sufficient detail(s) to assist the RWG with any subsequent actions or notifications as necessary.

5.3.5 Provide sufficient instructions to address removed parts that are considered deficient (e.g., scrap, rebuild etc.).

5.3.6 Provide sufficient instruction to ensure restoration of an SSC to perform its design function.

5.4 Quality Control

5.4.1 Quality Control shall be responsible for inspection planning on Safety related, 'R' Program Repairs/Alterations, and other WOs requesting QC inspection services.

6.0 PROCEDURE

6.1 General

6.1.1 Work Requests (WR) are processed in accordance with AP 16C-006, MPAC WORK REQUEST/WORK ORDER PROCESS CONTROLS.

6.1.2 Work Request (WR) are assigned to designated individuals in each Responsible Work Group (RWG).

1. Some groups will have a group backlog, such as INC BACKLOG, which is the responsibility of that group's supervisor or designee.

2. The designated individuals are then responsible for converting the WRs to WOs within three working days. WRs that are identified as Tool Pouch or Hold For Investigation are exempt from being converted to WOs within three working days.

   - A current list of these designated individuals are located in Paperless Environment under MPAC - Maintenance Help - Planners Names For Use In MPAC.

6.1.3 After conversion, the WO will have a (RWG) planner assigned.

1. The assigned RWG Planner should perform an initial assessment of newly generated work orders within three (3) to five (5) working days. During this initial assessment, sub-work orders should be generated and assigned to other work groups that need to participate to complete the work. Groups to consider include Engineering, Supply Chain Services, Maintenance, Ops, QC, etc. This initial scoping is considered complete when the work order status is changed from In-Planning-New to In-Planning-Planner. (Refer to Step 3.1.62)

2. The initial assessment should identify any rework issues in accordance with AI 16C-001, REWORK IDENTIFICATION AND CONTROL PROCESS.

3. WO/SWO Steps cannot be generated to require work that is outside the scope of the original problem described in the WO. This shall require initiation of a new WR.

4. The RWG planner will generate Sub-Work Orders (SWO) or new WR as applicable and input the work description. The planner will also generate any required WO Steps.

5. Planners may choose to use the WO Copy Utility to assist in the creation of SWO and/or WO Steps. Refer to Attachment B for the use of this function.

6. The assigned planner should only use Alpha character action codes.

7. IF additional related WOs or WO Steps are initiated by someone other than the current assigned RWG planner, THEN the initiator shall coordinate these WOs or WO Steps with the appropriate RWG planner.

6.1.4 Requests for Engineering Evaluations/Dispositions should be processed using a Sub-Work Order (SWO) as follows:

1. Upon discovery that an Engineering Evaluation/Disposition is required, a new SWO will be generated. The RWG will be identified on page 2 of the SWO as Design Engineering (DES), Support Engineering (SUP) or Systems Engineering (SYS). Additionally, the RWG planner name will be changed to the appropriate RWG individual within engineering.

2. IF there are several WOs/SWOs that require Engineering Evaluation/Disposition, THEN a SWO for each WO will be generated and sent to Engineering.

3. WOs/SWOs awaiting Engineering Evaluation/Disposition shall be statused as "Hold Engineering" (HE). The reason for the "Hold" should be placed in the Note section of the applicable WOs/SWOs as to the reason for the hold.

4. Engineering shall perform the following:

   a. An SWO is required if the scope of work requires removal of a permanent plant support where the clearance order will not provide analytical isolation from the operating system. A SWO will not be required if this situation has been previously reviewed and approved by Engineering.

   b. Evaluate the stated request and provide a disposition on each SWO, as necessary.

c. Notify the affected RWG planner(s) that the Evaluation/Disposition has been performed and addressed by changing the associated WO status from "Hold Engineering, HE" to "Hold Engineering complete, HC".

d. Close the Engineering SWO.

6.1.5 A separate Sub-Work Order (SWO) SHALL be initiated for each of the following instances:

1. Work activities occurring on different area (Functional Equipment Groups, FEGs). Whoever determined this shall contact the RWG planner.

2. Work activities required to be performed at different times or different Work Planning Codes (WPCs), such as Pre-outage, Outage, and Post-outage. Whoever determined this shall contact the RWG planner.

NOTE

Late dates with project numbers may be associated with dispositions from Engineering. The late date specifies when the disposition expires.

3. WHEN Engineering has provided a late date and project number in the problem description field, THEN the RWG planner is to copy and paste those late date(s) and project number(s) into the first sentence on the work description field on page one and the first sentence on the summary/instruction field on page three of the implementing WO/SWO.

4. All OPS Post Maintenance Tests (PMTs).

5. Volumetric NDE (radiography and ultrasonic testing).

6. Any activities requiring detailed planning by another functional work group.

7. Insulation removal/installation.

8. Activities requiring different mode restraints.

9. Disjointed or segmented work activities.

10. Activities involving more than one line number of a particular project.

11. A separate WO/SWO for ASME as opposed to Non-ASME Work SHOULD be utilized to best accommodate ASME Section XI & R program requirements. Coordinate with the ASME Repair Coordinator/Welding Engineer for exceptions.

12. Engineering Evaluation/Disposition as outlined in step 6.1.4.

13. A WO/SWOs addressing justification for the retargeting of a Safety Significant SSC WO/SWO that is to correct a deficiency.

14. WR/WO that identifies Boric Acid Crystal Buildup and/or leakage on an SSC requires a SWO to be generated and sent to the Boric Acid Corrosion Control Engineer for evaluation.

15. Installation of Temporary Personnel Protective Grounds for work that will require their use. [Commitment step 3.2.18]

    a. Electrical Maintenance is the functional group for installation of grounds. Therefore, Electrical Maintenance may utilize a separate step to perform this activity in lieu of them creating a separate SWO. All other disciplines are required to create a SWO to Electrical Maintenance for installation of grounds. Refer to AI 16-003, Installation of Grounds.

6.1.6 WHEN generating a new SWO, THEN copy the template information from the existing WO, as appropriate. IF any of the fields are required to be changed, THEN contact IPS as applicable (refer to Attachment B, step B.3.5).

6.1.7 The scope of work in a WO/SWO **shall** be as concise as practical. However, the RWG planner **shall** ensure that the work description field includes:

- Clear description of the work activity.
- Required Plant Conditions necessary to perform the work activity, including an in-service activity, if known.
- A note if the scope of work affects Operability, if known.
- Specific identification and description of conditions relative to parts known or suspect of being deficient (i.e., IF a part is a suspect 10 CFR Part 21 issue, THEN the part shall be identified and clearly stated that it may be a 10 CFR Part 21 defective item). [Step 3.2.9]

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- IF the scope of work is either outage or pre-outage, THEN identify as such in the work description field (page 1 on the WO/SWO screen) and the summary/instruction field (page 3 of WO/SWO screen).

6.1.8 The planner shall develop other SWO/WO Steps as needed. IF generating a WO/SWO Step for craft other than the lead RWG, THEN ensure they have been coordinated with and agree to the use of a step in lieu of a separate SWO.

6.1.9 IF a WO is assigned which involves dual train work, THEN the RWG planner will ensure that separate WO/SWO are generated for each train and clearly identify the applicable train in each WO/SWO. The WO/SWO is to be written and planned to ensure the work is performed only on one safety train. The single train WO/SWO will ensure those activities do not compromise any risks associated with dual train work (Reference AP 16C-006, MPAC Work Controls and AP 22C-005, IPS DAILY Scheduling [Step 3.2.3].

NOTE

A quality work package is an assembly of documents with technically correct supplemental instructions and permits necessary for effective and efficient implementation by the assigned work group. The package should be a workable collection of documents and instructions that assumes the implementer possesses the necessary skills to implement the task.

6.1.10 The RWG planner SHALL provide work instructions in sufficient detail for qualified workers to perform the specified task. The RWG planner SHALL include contingencies where a potential need exists. [Step 3.2.1]

1. Work instructions shall be sufficiently detailed for a qualified individual to perform the required function without direct supervision.

NOTES

- **Actions may unintentionally be performed incorrectly or omitted if work instructions lack needed information. On the other hand, excessive detail can result in the work instructions being time consuming or in steps being missed due to the user scanning over the instructions.**
- **Additional guidance for step development, organization, language and content may be found in AP 15C-001, Procedure Writer's Guide. These rules are not required, but may be used as a reference.**

2. The following factors should be considered when determining the appropriate level of detail:
   - User knowledge and skills
   - Complexity of task
   - Task frequency
   - Consequence of error
   - Past experience in implementing the procedure
3. Elements to consider for WO/SWO content are provided in Attachment A, Work Order Planning Tool. [Step 3.2.1]
4. The level of detail provided in work instructions shall be appropriate to ensure personnel safety, equipment protection and completion of the activity.
5. WHEN specific criteria are required, THEN the criteria must contain sufficient detail and instructions must provide for subsequent actions or notifications.
6. Quality Control inspections are to be integrated into the WO/SWO using AP 20G-001, Control of Inspection Planning and Inspection Activities.

NOTE

Evidence preservation is critical in order to determine an accurate root cause for a component or part failure.

7. IF evidence preservation is appropriate, THEN the RWG planner **SHALL** include a step/instruction in the WO/SWO for removal and retention in accordance with AP 24E-001, Identification and Control of Materials, Parts, and Components.

   a. Instructions **SHALL** clearly provide direction to the Technician of what to do with failed components/parts removed that are considered as deficient. (e.g., scrap, rebuild etc.). Refer to AP 16C-006, MPAC Work Request/Work Order Control Process. [Step 3.2.9]

8. The instructions shall provide for restoration to ensure that the component is returned to its design configuration and any ancillary work is properly restored. [Step 3.2.14]

6.1.11 Work Orders shall be implemented in accordance with AI 16C-008, Work Order Implementation.

6.1.12 Preventive Maintenance WO/SWOs are defined and shall be planned in accordance with AP 16B-003, Planning and Scheduling Preventive Maintenance.

6.1.13 Work instructions shall include the use of approved procedures and Core Work Instructions (CWI), when applicable. This provides a consistent level of review, approval and control appropriate for the scope of work activity.

6.1.14 IF a new WO/SWO is written for Troubleshooting THEN ensure the TS activity is screened in accordance with AP 16C-006, MPAC Work Request/Work Order Process Controls.

6.1.15 The WO/SWO forms may not have the same physical appearance as the electronic version of the WO/SWO due to the printing functions of the MPAC system.

NOTES

- **Status progression from one WO/SWO status to another is predetermined and guides the user to the next available status. The progression of this status is considered an electronic signature and will serve as a controlled audit trail.**
- **WO/SWO will sometimes involve the removal of a component for a maintenance activity which may be a designated containment closure isolation. Procedures STS GP-006, Containment Closure Verification and STS GP-007, Containment Penetration Isolation Verification, identify the containment isolation components.**

6.1.16 When the WO/SWO involves temporary containment closure isolation devices the WO/SWO SHALL identify the containment closure boundary and provide information necessary for effective closure. The WO/SWO SHALL be coordinated with Engineering and Operations to ensure the integrity of the closure. [Step 3.2.8]

6.1.17 IF the work involves a containment penetration (regarded as a containment isolation) and the work could potentially be scoped for an outage activity or shutdown conditions, THEN ensure the requirements of AP 21D-004, Control of Containment Penetrations During Shutdown Operations, are identified. [Step 3.2.12]

6.1.18 IF the work scope includes the removal of a safety related snubber (for any reason), THEN a pre-removal inspection is required per CNT-MM-300, Fabrication, Installation, and Removal of Component Support. (Refer to 3.1.58)

6.1.19 The RWG planner should consider providing additional work instructions when the workflow is interrupted and branches to a secondary activity that is to be performed as a part of the primary work evolution (e.g., release of clearances, fill and venting, energizing, etc.).

1. Judgment for controlling the workflow "hand-offs" should consider complexity of the work evolution, safety of personnel and equipment, and duration of the work interruption.

6.1.20 The RWG planner shall notify the Clearance Order Group if changes are made that could impact Clearance Orders.

6.1.21 Assets should not be changed on a WO/SWO that is listed on a clearance.

6.1.22 The RWG planner shall follow information contained in Attachment C for developing work instructions for repair of damaged threads in electrical and HVAC safety related sheet metal cabinet. (Refer to Attachment C)

6.1.23 WO/SWO involving welding are to be processed in accordance with AP 29F-002, Control of Welding Operations, and applicable implementing procedures.

6.1.24 Quality Inspection points are placed within the body of work instructions in accordance with AP 20G-001, Control of Inspection Planning and Inspection Activities. These Quality Inspection points identifies that a QC inspector/examiner involvement is required prior to, during, or after the activity being performed.

- Example - A Quality Control Witness point is identified by the letters QCW placed prior to the activity step in the work instruction. A QCW must have QC inspector/examiner present prior to the activity being performed.
- Example - A Quality Control Verification point is identified by the letters QCV placed prior to the activity step in the work instruction. A QCV inspection point for a work step or activity is for a QC inspection to be performed on accomplished work. The activity may be performed without QC being present prior to the activity, however, the work is not accepted until the inspection is completed.
- Example - QC/INT is to be placed prior to the activity when all inspections for the activity are contained in the referenced integrated procedure.

6.1.25 QC Pre-Work Reviews:

1. Those WOs/SWOs that require QC Pre-Work Reviews are defined and identified in accordance with AP 20G-001, CONTROL OF INSPECTION PLANNING AND INSPECTION ACTIVITIES.

NOTES

- **Automatic Work Orders (AWO) are WOs/SWOs generated from the PM system which are automatically progressed to a status of Parts Shortage, Ready to Schedule, or Ready to Work without any planner intervention.**
- **These WOs/SWOs are identified by the Planner Info. Template containing a "Parts Shortage" or "Ready to Work with Parts Order" in the New Status field.**

2. Automatic work orders will show approval in the notes section of the PWO.

3. Any revision to or creation of an automatic work order may require QC review in accordance with AP 20G-001, CONTROL OF INSPECTION PLANNING AND INSPECTION ACTIVITIES.

6.1.26 Control of items (materials, parts and components) not under warehouse control and those items removed from the plant shall be in accordance with AP 24E-001, Identification and Control of Materials, Parts, and Components.

6.1.27 Warehouse stock return and receipt of rebuilt (refurbished) items, cannibalized parts, reusable parts, vendor/supplier rebuild, and site fabricated items shall be in accordance with AP 24E-005, Rebuild/Reusable Items.

6.1.28 Parts, Components, Equipment and/or items that are identified as a deficiency not yet installed in the plant shall be identified in accordance with AP 24H-003, Commodity Discrepancies.

6.1.29 Replacement Items (Materials, Parts, and Components) shall be selected in accordance with AP 24E-006, Replacement Item Selection.

6.1.30 WO/SWO revisions shall be processed in accordance with the criteria stated in Attachment E.

6.2 Work Order/Sub Work Order Review

6.2.1 Planner Initial Review and Input

1. RWG Planner initial review shall consist of the following:

   - Reviewing the problem and work descriptions to verify that the work to be performed will correct the identified problem and that the work description adequately summarizes the work to be performed.

   - Reviewing WO/SWO screen pages 1-4 and template screen information for accuracy. Complete template information per paragraph 6.3.

   - Performing a WO/SWO query of the asset to determine if other open WOs/SWOs are already identified on the component. Combine the WOs/SWOs when feasible.

NOTE

Troubleshooting WO/SWO require risk screening and specific instructions in accordance with AP 16C-006.

   - IF the WO/SWO being planned was not originally identified as Troubleshooting (TS) and troubleshooting is required THEN, generate a new WR for the troubleshooting activity.

NOTES

- **The job duration should be wrench time. Additional time should not be included in the job duration in anticipation of scope growth. [Step 3.2.10]**
- **For TSEO work, the job duration will be adjusted during fragnet development based on the overall scope (taking into consideration any overlap work) and duplicated step N/A'd. The work packages need to be updated to reflect the agreed upon man-hour duration. [Step 3.2.10]**

   - Enter the appropriate craft code and crew code (if known). Enter the initial estimate of persons and hours.

NOTE

Peer review criteria and review requirements are controlled by Maintenance department expectations and do not affect other work groups. All other work groups may progress work orders using the status, "Peer Review Not Required (I1)"

6.2.2 Peer Review

1. Work Orders requiring peer review shall be progressed to the status "In Planning Peer Review (IB)"

   - After satisfactory peer review, the WO shall be progressed to the status "Peer Review Complete (I2)"

2. All other work orders may be progressed to the status "Peer Review Not Required (I1)"

6.2.3 QC Pre-Work Review

1. Work Orders requiring QC pre-work reviews per AP 20G-001, "Control of Inspection Planning and Inspection Activities," should be progressed to one of the following statuses:

   * "In Planning QC (IQ)" for normal WOs ready for QC review.

   * "QC Review PM (PQ)" for PWOs ready for QC review.

   * "QC Welding Review (AQ)" for ASME/Welding WOs ready for QC review.

2. QC shall review those WOs with a status as shown above per AP 20G-001, "Control of Inspection Planning and Inspection Activities." Hold points may be modified, deleted, or corrected during this review.

3. After satisfactory completion of the QC pre-work review, QC shall progress the package to the available status as shown below depending on the type of package under review.

   * "In Planning QC Reviewed (IX)" for normal WOs where QC review is complete.

* "Update PM QC Reviewed (PR)" for PWO WOs where QC review is complete.

* "In Planning Welding (IW)", for ASME/Welding WOs where QC review is complete.

6.3 Work Order Templates

6.3.1 The RWG Planner will review the WO/SWO templates for accuracy and complete as appropriate.

6.3.2 SE Template

1. Review for accuracy. IF discrepancies are found, THEN coordinate any changes with the SE/SFT.

2. IF the NCR block is checked, THEN information will be needed for the NCR Template as discussed in paragraph 6.3.5. Additionally, the action code on page 1 of the originating WO screen SHALL be identified as a NC (nonconformance). However, IF the NCR block is checked, but the deficient condition identified is not a nonconformance, THEN contact the SE/SFT to coordinate any changes.

3. IF the NCR block is not checked, but a NCR condition is thought to exist, THEN contact the SE/SFT before checking the NCR Block or changing the action code on page 1.

6.3.3 IPS Template

1. Review for accuracy. IF discrepancies are found, THEN coordinate any changes with the IPS, Superintendent Daily Scheduling/designee.

6.3.4 CDR Template

1. A CDR Planner will complete this template per AP 24H-003, Commodity Discrepancies. This information should not be updated by anyone other than the RWG CDR planner.

6.3.5 NCR Template

1. Processing of nonconformance (NC) will be in accordance with AP 16C-006, MPAC Work Request/Work Order Process Control.

6.3.6 Planner Info Template

1. Control Copy Designator (CCD) is used to keep track of revisions to work instructions prior to a WO/SWO becoming a "Controlled Document". A WO/SWO is considered a Controlled Document after any signatures have been applied to the paper copy.

NOTE

When a controlled copy is desired, the CCD field will be changed to "A", the Curator MPAC report updated and then printed. The printed WO/SWO shall have the same CCD designator as the electronic record.

2. IF any further changes are made to the electronic Work Instructions prior to performance in the plant, THEN the CCD SHALL be advanced by one letter (i.e., A to B, B to C, C to D, etc.).

3. Revision of a WO/SWO is used when a change is made to the electronic WO/SWO after authorization to start work has been obtained (as applicable) and the WO/SWO is statused as "progressing". This field may not be maintained (updated) when revisions are made by pen and ink.

4. Work Safety Class identifies the safety classification of the work being performed, not necessarily the safety class of the asset.

5. The program group of blocks (from EQ program through GL 89-10 MOV) identifies different programs affecting different assets. Program information relative to each asset can be found on the Asset Template in Modules/Asset Management/Asset. The RWG planner should check the appropriate blocks based on the asset template information.

6. Engineering Priority is a field that Engineering can use. Other work groups should not use this field.

7. Governing Code is used to identify ASME Section XI work and "R" work (NB-23).

   a. ASME Section XI work includes work on items constructed to ASME Class 1, 2, 3, CC, or MC. Refer to AP 16A-003, ASME SECTION XI REPAIR/REPLACEMENT PROGRAM, for specific guidance. Work under the alternative requirements for small items as defined by AP 16A-003 is included in the scope of Section XI work.

1) Work under the alternative requirements for items rotated from stock, as defined by AP 16A-003 is not included in the scope of Section XI work. Therefore, governing code is N/A.

b. "R" work includes work on items constructed to ASME Sections I or IV, and Section VIII Division 1. Refer to AP 16A-001, 'R' PROGRAM REPAIR/ALTERATIONS, for specific guidance.

8. Code Class is used to identify the ASME Code Class of work, and includes Class 1, 2, 3, CC, or MC.

9. Code Program is the applicable ASME Section XI or "R" Code program.

a. Code Program is N/A for work under the alternative requirements for items rotated from stock as defined by AP 16A-003.

10. R/R Plan is a field where a Repair/Replacement Plan number is entered for ASME Section XI work.

a. R/R Plan is N/A for work under the alternative requirements for small items and for work under the alternative requirements for items rotated from stock as defined by AP 16A-003.

b. All other ASME Section XI work is documented on a R/R Plan.

11. The "PM Basis" field is utilized by the RWG Preventive Maintenance (PM) planner to identify the basis for the PM activity. Therefore, other planners should avoid making changes to this field.

12. The "User Defined" field can be used by any RWG planner to enter any information regarding planning use. IF information already exists in this field, THEN changes should be avoided.

6.4 Work Order Steps

6.4.1 Steps should be initiated or arranged in a logical sequence to reflect the flow of fieldwork.

1. Steps may be added, removed or inserted by using the edit function at the WO/SWO Step page.

a. IF any of the steps in the WO/SWO are statused "scheduled", THEN the revision insert functions will not be available.

b. AFTER the WO/SWO has been pulled into the IPS schedule process THEN an error will be generated if attempting to use the insert remove or copy step features. Contact IPS to make any changes.

6.4.2 For WOs/SWOs that include de-termination/re-termination of conductors, removal/reinstallation type activities, the RWG Planner should initiate a separate step for each activity.

1. Daily work activities may use steps to the extent practical to identify multi-discipline activities.

   a. The flow of the work as well as the timeliness of the discipline interface should be considered when creating steps.

2. Refuel work activities should use SWOs to identify multi-discipline activities to minimize hand-offs and lost packages. The exception to this would be if two or more disciplines are working together and it would make more sense to perform as a Step vs. SWO. For Refuel WOs/SWOs there SHALL be concurrence by all affected RWGs before creating steps involving multi-disciplines.

3. IF the activity requires polar crane time, THEN identify the need by checking the polar crane in the permits module. This will identify that the activity requires polar crane "hook time" to aid in the development of a polar crane schedule.

6.4.3 WO/SWO Step instructions may be generated as:

1. Step Text,

   OR

2. Through Curator work instruction attachment.

   a. IF using curator work instructions, THEN the RWG Planner **SHALL** enter "See attached work instructions" in the Step Text (Summary/Instructions) field.

6.4.4 A fixed number of characters from the beginning of the step text will be transferred to the schedule (maximum 250). This text should be a short concise summary of the work to be performed in that step.

6.4.5 When opening work instructions from the GWI or word template screen, a dialog box will appear on the screen. This information is used for the work Instruction header of the printed WO/SWO package. The following information should be entered for the Initial Entry on the dialog box (subsequent screens should be canceled).

- The WO/SWO year prefix may be entered in the WO/SWO box (i.e., 99 for 1999 or 00 for 2000).
- The six digit WO/SWO base number AND the three digit suffix number may be entered in the sequence block (e.g., 127734-001).
  - For PWO's the file number may be used in place of the WO number.
- The applicable step number(s) may be entered in the step block (e.g., 1 or 1,2,4 or 1-5)

6.4.6 Work instructions initiated from the GWI or Word template may have QC inspection points added by selecting the QC button, highlighting the appropriate keyword, subtitle, and work task, then pressing the OK button.

1. The RWG Planner should refer to the Quality Control Inspection Manual (QCIM) for guidance in planning QC inspections.
2. IF the appropriate QC inspection attribute is not located in the QCIM database, THEN contact QC.

6.4.7 Work instructions initiated in GWI or Word templates may have "Boxes" entered in the work instructions containing Cautions, Notes, QC information, Warnings or other data.

- Selecting the "Box" button on the Word screen, selecting the appropriate box content and pressing the OK button will access the blocks.

6.4.8 Work instructions initiated from the GWI or Word templates may also have several different types of sign off blocks entered into the instructions. Sign-offs should be used when there is a consequence for error if the step is not performed correctly.

1. Selecting the Initials button on the Word screen and selecting one of the following may access these sign off blocks:
   * Check Box, This box is used as an aid in tracking work progression.

* Worker sign off, This block is used in the same application as the check box, but provides a method for the worker to initial and date each step completion.

* Second verification, This block is used for critical steps where verification and compliance to the work instructions is warranted.

* Worker Signature, Is normally used to document completion of a section or sequence of work activities. This block may also be used when a high awareness of documented completion is warranted.

6.4.9 For work activities included in the ASME Section XI Repair/Replacement Program or 'R' Repair/Alterations Program, the WOs Step instructions should be initiated in the template format. This format may require pre-work review sign-offs from the following entities:

- RWG Supervisor
- Welding Engineering
- ISI Coordinator (N/A for 'R' Program)
- QC
- ANI/ANII

1. Welding Engineering pre-work review sign-off is not required for mechanical (no welding) work under the alternative requirements for small items as defined by AP 16A-003.

2. ISI and ANI/ANII pre-work review sign-offs are not required for work under the alternative requirements for small items or alternative requirements for items rotated from stock as defined by AP 16A-003.

3. NDE or VT work instructions may be initiated by utilizing either step text (summary/instructions on page 3 of the MPAC screen) or the work order work instruction template (word document). These instructions require the following pre-work reviews:

   - Welding Engineering
   - ANI/ANII (NDE Work Orders Only)

6.4.10 Work instructions are intended to be followed in the sequence as written unless otherwise noted. The following is an example of what may appear in a WO/SWO when it is not required for the work instruction steps to be performed in a specific order. Typically, this is found in the general notes section of a WO/SWO.

EXAMPLE

Steps in the work instructions may be performed out of sequence provided they do not violate the instructions and are documented in the applicable sections. Contingent work steps that are not applicable due to the condition of the component are not required to be performed. All applicable sign-offs shall be marked "N/A".

6.4.11 IF it is determined that work instruction steps can be re-performed, THEN the following example statement may be used in the work instructions.

EXAMPLE

In the event steps within the instructions must be re-performed (in lieu of re-performing the entire instructions) adequate documentation may be maintained by re-signing the work instructions.

6.5 Work Order Documents

6.5.1 Documents can be attached to the WO/SWO by using the Curator Work Order Folder. When the WO/SWO is printed, the documents included in the Curator documents folder will also be printed if it has been assigned a print sequence number.

6.5.2 The RWG planner must ensure the appropriate revision and any associated changes on all working or reference documents are current when planning the WO/SWO.

6.5.3 Working documents are required to successfully document a work activity and/or related inspections.

6.5.4 Procedure and instruction levels of use, continuous and reference, are defined in AP 15C-002, Procedure Use and Adherence.

6.5.5 The following are examples of documents that should be included in the Curator Work Order folder and listed in the WO/SWO working document section of the step instructions:

1. Procedures, forms and Core Work Instructions that require data entry, signatures or completion of check blocks during the implementation of the work.

2. Continuous Use procedures as defined by procedure AP 15C-002.

3. Drawings that are required to be in the field to perform work.

4. Technical Manuals or portions of Technical Manuals that are required to be in the field to perform the work.

6.5.6 In those cases where documents are NOT entered in the Curator Work Order folder or work instructions, and are intended to be used in the field, the documents should be attached to the WO/SWO after being printed but prior to work implementation. It is recommended to coordinate this with the RWG.

6.5.7 A print sequence number is only required if document is needed in the field and can be successfully printed through Curator. IF the print sequence number is utilized, THEN the number must be specified for each document listed in the Curator Work Order folder. The typical sequence should be in the following order:

1. MPAC Report
2. Work Instructions
3. Forms and Procedures that have sign-off steps
4. Procedures and/or Core Work Instructions
5. Drawings and Technical Manuals
6. Other documents

6.5.8 Documents used to plan a WO/SWO may be entered in the Notes section of the WO/SWO with a subject similar to "Planning Documents" or attached in Curator without a print sequence number.

6.5.9 Documents that will be used to implement the work activity should be listed in the WO/SWO and reflect the latest revision, as applicable.

6.6 Permits

6.6.1 Permits will be specified at the WO/SWO Step level using the permits module. Access to the permits module is gained through Links/Permits. Refer to Attachment D for examples of Permits.

1. The top half of the page is used to select the Step. IF there are more then six steps THEN the tab key may be used to scroll additional steps.

2. The bottom half of the page will be used to select all the permits for the step. After one is selected, a new permit can be added by selecting Edit/Add Row.

3. After all permits are selected for the step, select another step and select the permits for that step. Continue until all steps are complete.

4. Work Planners will communicate Clearance Order, Local Control and Flow Path Evaluation requirements to Preparers via the Clearance Order worksheet in the Permits application of EMPAC. Unless a Master Clearance Order is to be used, check boxes and comments should identify: [3.2.13] and [3.2.19]

   - Types of Energy Isolation.
   - Any needed cautions, notes and procedures.
   - Temporary and back-up power sources
   - Other special considerations

5. Save the information by selecting the save icon (that resembles a computer disc with an arrow pointing into the disc located at the upper left hand corner of the screen). Saving can be done as many times as needed during the permit selection process, but must be done when selection is complete.

6.6.2 WHEN Quality Control involvement is required in the implementation of the Work Order Step, THEN the Permits Module shall be used to identify QC support. WHEN ASME Section XI Repair/Replacement Program and 'R' Program Repairs/Alterations activities that COULD require AI/ANI/ANII involvement in the implementation of the Work Order Step, THEN the Permits Module should be used to identify AI/ANI/ANII support.

1. The Authorized Nuclear Inspector permit is not used for ASME Section XI work under the alternative requirements for small items, as defined in AP 16A-003.

2. The Authorized Nuclear Inspector permit is not used for work under the alternative requirements for items rotated from stock as defined in AP 16A-003.

NOTE

The scaffold group does not require the scaffold permit be sent via e-mail or hard copy in cases involving routine activities (i.e. PM etc.).

6.6.3 IF scaffolding is required, THEN check the scaffold box. For non-routine activities the RWG should send a scaffold permit to the scaffolding group via email or hard copy. IF there is a need to build a history, THEN it can be electronically placed in the Curator work folder.

6.6.4 RWPs may require more than one entry per step. For example, if the work instructions on a step involve breaching a contaminated system, RWP would be selected to signify the need for that permit and RWS would also be selected to communicate to Health Physics the type of work that was going to be performed. This is needed because the Permits module is being used in lieu of the RWP Request Form.

6.6.5 A CPI, Containment Penetration Integrity permit is required anytime the work step deals with containment penetration isolations. Applying this permit will require an Operations signature in the permits section of the printed Work Order. [This is a Preventative Action from PIR 2006-002804]

6.7 Parts Page

6.7.1 Parts page is found on page 4 of the MPAC Work Order screen. This is the screen the planner will use to enter parts and vendor support to perform the work activity.

6.7.2 There are 4 different part types, Direct, Stock, Service Labor, and Service Material.

1. "Direct" will be used to identify material that would be purchased with a company credit card.

2. "Stock" is used to identify material in the warehouse.

3. "Service Labor" is used to request and identify vendor support.

4. "Service Material" will be used to identify material that a vendor will supply, if material is not already included in a Service Labor contract.

6.7.3 "Stock" is the only type of material that will be required to be entered on the parts page.

6.7.4 The information on the parts page changes depending on the Part Type Selected. IF the wrong parts type is selected, THEN it must be deleted using Edit/Remove Row to make another selection. All underlined fields must be entered.

6.7.5 Material will normally be specified by the stock item number.

6.7.6 The stock item number consist of a 8 digit number is preceded by SR (Safety Related), SS (Special Scope) or NS (Non Nuclear Safety Related) which identifies the safety class of the material.

6.7.7 Material selection will be controlled by AP 24E-006, Replacement Item Selection.

6.7.8 Most of the fields will auto fill when the correct Stock Item/Part Number is ENTERED.

6.7.9 A "Stock Item/Part Number" can only be entered ONE time. IF additional entrees for the Stock Item/Part Number are required, THEN they can be hand written on the printed parts page, or they can be entered on the WO BOM FORM, APF 24E-001-03 and attached to the WO/SWO.

6.7.10 "Date Required" is the date that material/parts will be delivered.

6.7.11 "Deliver To" is a location that the warehouse will deliver material/parts. IF this field is blank, THEN the material will normally be delivered to the RWG planner.

6.7.12 The "Required Quantity" field is used to specify a required amount of the material/parts.

6.7.13 Material/parts selection and material/parts reserves will be performed using MPAC.

6.7.14 The RWG planner SHALL add Material Sub-division sheets to the WOs/SWOs as defined in AP 24E-001, Identification and Control of Materials, Parts, and Components.

6.7.15 IF QC material inspections are required per AP 24E-001, THEN an integrated inspection point, QC/INT, shall be added to the work instructions.

6.8 Close-In-Process

6.8.1 PM WOs are Closed In Process using AP 16B-003, Planning and Scheduling Preventive Maintenance Task.

6.8.2 A WO/SWO can be Closed-In-Process in accordance with the following reasons: [Step 3.2.5]

1. A duplicate WO/SWO exists

   a. IF the WO/SWO is Closed-In-Process based on a duplicate WO/SWO, THEN the WO/SWO being closed should refer to the WO that is being left open. Enter this information in the Work Description field on page 1 of the MPAC WO/SWO and/or the Summary/Instructions field on Page 3 of the MPAC WO/SWO screen.

2. A WO/SWO has been generated in error

   a. IF the WO/SWO is being Closed-In-Process based on the WO having been generated in error or the problem no longer exists, THEN the proper justification must be documented in the Work Description field on page 1 of the MPAC WO/SWO and/or the Summary/Instructions field on Page 3 of the MPAC WO/SWO.

3. The problem no longer exists

   a. IF the WO/SWO is being Closed-In-Process based on the WO having been generated on equipment that is abandoned in place, THEN the proper justification must be documented in the Work Description field, on page 1 of the MPAC WO/SWO screen and/or the Summary/Instructions field, on Page 3 of the MPAC WO/SWO screen.

4. A WO/SWO is deemed to no longer be cost effective and closure of the package does not significantly impact plant operations.

a. IF the WO/SWO is being Closed-In-Process having been deemed no longer to be cost effective and the closure of the WO/SWO does not significantly impact plant operations, THEN the proper evaluation and justification must be documented. Only the responsible discipline, Maintenance Superintendent, Outage Superintendent, Shift Manager or SE, may authorize this by documenting their approval in the WO/SWO notes.

6.8.3 A WO/SWO that is Closed-In-Process without any pre-approval signatures may be vaulted electronically after the proper documentation is added to the Description field, page 1 of the MPAC WO/SWO screen and/or the Summary/Instructions field on Page 3 of the MPAC WO/SWO screen. Progress the status to DN No Field Copies.

6.8.4 IF a WO/SWO has been printed and signatures obtained, THEN a WO/SWO revision is required and must receive the same review as the original WO/SWO. This action is required in addition to the above mentioned process for Close-In-Process.

6.8.5 IF a WR tag was utilized, THEN the RWG shall remove the tag.

6.9 Work Order Planning for Maintenance and Modification Activities

6.9.1 Due to the nature of modifications, close communication between implementing groups and Engineering is necessary to implement the modification.

6.9.2 Review the WO/SWO Data Fields and applicable WO/SWO Templates for accuracy and update data fields as appropriate.

6.9.3 IF the WO/SWO is used to implement a design change, THEN the RWG planner will verify the CCP/DCP number has been entered into the "Project Line Number" field on page 2 of MPAC screen.

- WOs/SWOs with an Action Code of CM or NCR that require a modification to implement a disposition should remain categorized as CM or NCR on the modification WO.

6.9.4 WO/SWO addressing CDRs shall be processed in accordance with this procedure and AP 24H-003, Commodity Discrepancy Report.

1. The CDR planner shall review the WO/SWO CDR template screen and complete as appropriate.

2. Recommended dispositions of Use-As-Is and Repair shall be forwarded to engineering using a SWO.

3. All fields on the WO/SWO CDR template shall be completed on the WO/SWO screen or form APF 24H-003-01.

   a. The Action Code for CDR WO/SWO shall be statused as a COMMODITY DISCREPANCY (CD). The Action code for a modification should be MO, Design Change, for all WOs/SWOs initiated to implement the modification.

6.9.5 The project number (Change Package) will be entered on Page 2 of all WO/SWO screens implementing the modification in the Project Line Number field. The project number must be approved before the project line number can be entered in the field.

6.9.6 WOs/SWOs implementing plant modifications should follow the same guidelines discussed in paragraph 6.1.

6.9.7 Steps within modification WOs/SWOs should follow the same guidelines contained in paragraphs 6.1 and 6.4.

6.9.8 Permits within modification WOs/SWOs should follow the same guidelines as contained in paragraph 6.6.

6.9.9 The Parts List on modification WOs/SWOs should follow the same guidelines contained in paragraph 6.7. In some modifications, there may be more of a need to use the WO BOM form (APF 24E-001-03) in conjunction with the Parts List.

6.9.10 WOs/SWOs should be generated to implement action items identified in Section II of the Pre-implementation Planning Review form (APF 05-002-07). The action code will be MO, page 2 of the WO screen will reference the change package number in the Project Line Number field, page 3 will specify the Craft as the group needed to implement the action item.

6.9.11 An explanation in the Summary/Instructions must be given in order for the action item to update correctly.

6.9.12 Items identified in Section II of the Pre-implementation Planning Review form (APF 05-002-07) must be completed prior to releasing the SSC to Operations. [Step 3.2.6]

1. The items should be added to the Operations PMT WO/SWO to verify their completion prior to releasing the SSC.

2. It will be necessary to verify the completion of the applicable items in the implementation WO/SWO.

6.9.13 Concurrent Modifications shall be performed in accordance with AP 05-001, Change Package Planning and Implementation, and AP 05-005, Design Implementation and Configuration Control of Modifications.

6.9.14 Concurrent Modification authorization.

1. First, the affected work organization shall contact Engineering supervision, and they must agree to proceed concurrently with the proposed modification.

2. Secondly, Engineering supervision and the control room Shift Manager or designee must also agree to proceed with part or all of a proposed modification as a concurrent modification.

6.9.15 Concurrent modification restrictions.

1. The affected component(s) shall be out-of-service.

2. Affected building structures may be included in a concurrent modification although they are not taken "out of service".

3. Concurrent modifications may be performed for items or activities governed by the ASME Code. For use on this issue of concurrent modifications, ASME items are items constructed to ASME B&PV Code Section I, III, IV, and VIII, Division 1 and are now under the jurisdiction of the ASME B&PV Code Section XI or the Kansas Boiler Safety Act. Reference AP 16A-001, 'R' Program Repairs/Alterations and AP 16A-003, Section XI Repair And Replacement Program, for additional conditions/limitations on the use of concurrent modification for ASME items.

4. The engineering change package must be approved and released for planning and all actions required by the change package, including compliance with the applicable Code requirements, must be implemented before the affected component is returned to service.

6.9.16 Concurrent modification implementation.

1. Work Orders or Sub Work Orders shall direct the concurrent modification. The Work Orders or Sub Work Orders shall:

a. Work Instructions shall state that a concurrent modification is being implemented and include the concurrent modification change package number.

b. Identify the concurrent change package number in the "project number" field OR in the "notes section".

c. Work Instructions shall describe the scope of the work to be performed as a concurrent modification as agreed to by Engineering, the affected Work Groups, and the Shift Manager or designee.

d. For ASME items, see AP 16A-001, 'R' Program Repairs/Alterations or AP 16A-003, Section XI Repair And Replacement Program, as applicable, for additional conditions/limitations on the use of concurrent modification and additional reviews required. The additional conditions/limitations and additional reviews shall be included in the Work Order Work Instructions.

e. IF the concurrent modification involves safety-related or special-scope components, THEN QC shall be involved, as required, to ensure necessary inspections are performed.

f. Contain instructions to review the approved change package after it is approved and released to verify all actions required by the change package, including compliance with the applicable Code requirements, are implemented before the affected component(s) are "returned to service". If applicable, this includes resolving action items in Section II of the APF-05-002-07, Pre-Implementation Planning Review, form.

6.9.17 AP 16E-002, Post Maintenance Testing provides detailed instructions on PMT identification, documentation, and the requirements for performing PMT. [Step 3.2.17]

6.10 Change Package Essential and Significant Drawing Updates

6.10.1 It is a NRC commitment that Essential Control Room Drawings (ECRD) and Section II items on the Pre-implementation Planning Review Form (APF 05-002-07) are to be revised prior to releasing the system or portion of the system to Operations following DCP/CCP partial or complete implementation. [Step 3.2.6]

1. WOs/SWOs implementing a modification activity should have a separate Step (or SWO) initiated for ECRDs and Section II updates.

2. ECRDs and Section II items require updating prior to removing the Clearance Order from the system/component after implementation of the modification.

3. It is the RWG planner's responsibility to identify the changes that need to be implemented.

4. Essential drawings shall be revised and released to Document Control for release within 24 hours of notification from the Responsible Work Group (RWG), that a modification is complete and ready to be placed in operation. Refer to AP 05-010, DESIGN DRAWINGS, for definition of Essential drawings. Revision of these drawings to signify completed modification(s) is a "return to service" prerequisite for any modified SSC.

5. Significant drawings should be revised and released to Document Control for release and distribution within 15 working days from notification from the RWO of modification completion and a desire to place the modified SSCs in operation. Refer to AP 05-010, DESIGN DRAWINGS, for definition of Significant Drawings. Revision and release of these documents to indicate completed modification(s) is NOT a "return to service" prerequisite for any modified SSC.

6. ECRD and Significant drawings can be found in Curator.

   - The update of ECRDs prevents the system/component from being declared operable.
   - The update of Significant Drawings does not prevent the system/component from being declared operable.

7. The list of ECRD's are indexed in the Change Package.

   a. Details may also be found by contacting Maintenance Planning who will obtain the information from the planning forms.

8. Items required to be completed prior to starting the implementation of a design change are to be identified and scheduled using a SWO.

9. The RWG planner will include a copy of the ECRD in change packages in order to expedite revision and issue.

   a. The Shift Manager will receive the ECRD copies. WHEN the craft notifies the SM/designee that the design change is complete, THEN the clearance order may be removed.

NOTE

Detailed direction must be given in the WO for updating ECRDs and Section II items when partial design changes are made, so that only the applicable portion of drawings, procedures, etc. will be updated.

10. WHEN a drawing shows both "A" and "B" Train configuration and the design change is implemented for both trains, THEN:

    - Only one train can be worked at a time (using separate WOs/SWOs if possible).
    - Partial implementation of the design change will be implemented as only one train can be taken out at a time.
    - The ECRDs that are within the WO/SWO will reflect only the work performed at this time.

6.10.2 A preferred method to accomplish the updates and notifications is as follows:

1. The RWG planner may initiate SWOs or Steps to update ECRD and Significant drawings, if required.

2. The RWG planner will generate a SWO/Step to update Section II items, if required.

3. The RWG planner will generate a SWO/Step to verify ECRD and Section II items are in the control room, if required.

NOTE

It is crucial that the work instructions include enough detail so Configuration Management and the organizations implementing Section II changes can make updates when design changes are partially implemented.

4. The RWG planner when ready, will status the WO/SWO as RTW.

5. The WO/SWO/Steps will be scheduled to work at the same time as the WO(s) implementing the design change.

6. Configuration Management will be responsible for updating ECRDs and Significant Drawings in accordance with AP 05-010, DESIGN DRAWINGS.

7. The SM/designee will be responsible for making notifications on Operations Procedures.

8. The RWG planner will close the WO/SWO upon completion.

6.11 Post Maintenance Testing

6.11.1 All maintenance and modification work activities should be evaluated for Post Maintenance Testing in accordance with AP 16E-002, Post Maintenance Testing Development.

6.11.2 Post Maintenance Testing (PMT) requiring other groups for performance (i.e. OPS/QC/Support Engineering) should be initiated on WOs/SWOs with the RWG and craft identified on the WO/SWO pages 2 and 3 respectively.

1. The procedure implementing the PMT shall be entered in the step summary/instruction field.

2. The RWG planner will develop instructions for OPS PMTs and when complete status as "In Planning Planner" and change RWG planner responsibility to OPS PMT coordinator.

3. PMT activities for components that are included in regularly scheduled Section XI VT-2 examinations (STS pressure tests) may reference the invoking pressure test procedure in the WO Step instructions. (EXAMPLE: For RPV head removal/re-installation, it is acceptable to state that PMT requirements for the RPV are included in STS PE-040A.) The PMT activity and subsequent actions are included and tracked under the implementing pressure test. A separate WO/SWO is not required.

6.11.3 IF the PMT is performed by the same RWG that performed the work activity, THEN the PMT may be planned as a Step activity as long as the step activity is being performed within the same time frame as original work activity (i.e. WPC is the same).

6.11.4 PMT is also used to change ECRD (Essential Control Room Drawings) and Section II of the planning sheets that have been incorporated, and that notification has been made to update Significant drawings.

1. Update of ECRDs and notification for significant drawing updates can be performed on the same step.

7.0 RECORDS

7.1 No Records are generated as a result of this procedure.

8.0 FORMS

8.1 None.

-END-

ATTACHMENT A
(Page 1 of 5)
WORK ORDER PLANNING TOOL

Purpose and Scope:	**SOURCE**
Ensure the description fits the activity	AI 16C-007
References:	**SOURCE**
Ensure that applicable reference documents and drawings are properly listed	AI 16C-007
List other WO's/SWO's to be worked with	AI 16C-007
List Reference and/or Work Documents, Design Documents, Specifications	AI 16C-007
Precautions & Limitations:	**SOURCE**
List instructions that generically address the precautions that the worker may encounter and any limitations that should be considered	Various
Provide for identified contingencies in accordance with AP 22C-007, DAILY AND OUTAGE CONTINGENCY PLANNING	AP 22C-007
Provide a sign-off for latest rev. of work documents as applicable	AI 16C-007
Provide for Warnings (Potential for unintentional equipment actuation)	Various
Provide for Warnings potential for human injury (i.e. Heat Stress, etc.)	Various AIF 14-002-01
BACINS/Boric Acid Corrosion Monitoring Program. IF yes, THEN inspect and evaluate	AP 16F-001
IF Welding or ASME Repair/Replacement is involved, THEN notify Welding Engineering. WCNOC Welding Program Manual	AP 29F-002
Insulation Removal/Reinstallation (MS-01) - action requires another work order	CNTF-MI-803-01 CNT-MI-804 CNTF-MI-805-01
Identify disinfection requirements for potable water systems KD & WD per AP 07A-001.	AP 07A-001
Identify System Cleanliness if applicable	APF 12-002-01
Identify FME needs if applicable	APF 12-003-01
Identify the need for material control as applicable	AP 24E-001
Pipe Hanger Disassembly/Pinning	CNT-MM-300 CNT-MM-301
Safety Related Snubber Removal/Replacement	CNT-MM-300 STS MT-027
Heavy Loads/Special Lifts and Lifting and Rigging	AP 14-001
Throttled Locked Valve Verifications including PMT	AP 21G-001

ATTACHMENT A
(Page 2 of 5)
WORK ORDER PLANNING TOOL

IF an ASME Class 1 component is disassembled (e.g., RCP, Valves or flow orifices up to and including second-off RCS check valve), THEN notify the ISI coordinator [Commitment Step 3.2.4]	AP 29A-002 WCRE-10
WHEN the activity is in response to a damaged safety-related support, THEN notify the ISI Engineer [Commitment Step 3.2.4]	AP 29A-002 WCRE-10
IF an IST Program Component, THEN notify the IST Coordinator	WCOP-02 AP 29B-002
IF the activity involves design change Implementation, THEN notify the implementing coordinator	AP 05-001 AP 05-005
M&TE Pre or Post Calibration	AP 16H-001
Master Lubrication List	AP 16-003
Fuse Verification and Control	AP 03A-001
WO Bill of Material	APF 24E-001-03
EQ Contingencies	APF 05G-005-01 EQSD III
IF the work involves a Containment isolation valve or component, THEN notify Operations and Engineering. Ensure the activity complies with AP 21D-004. [step 3.2.12]	STS PE-017 AP 21D-004
Notifications when work steps are completed	AI 16C-007
Provide Verification steps, as applicable	AP 20I-001 & AP 15C-002
Identify any support groups and/or permits (i.e., clearance order, fire permit, etc.)	AI 16C-007
Identify any dig permits, if needed	CNTF-MC-651-01
Identify Vendor involvement and ensure procedures are approved	AP 24B-001
Ensure QCI inspections are properly identified	AP 20G-001
Piping - M-02's, MS-01, MS-02, M-05's, M-09's	
Q-List - Identify Safety Class (SR, SS, NNSR)	
Identify ASME/Safety Class	
Component Status Inquiry Functions are provided by the Asset Number	
Parts and Materials:	**SOURCE**
Specify lubricants - Master Lubrication List	AP 16-003
IF lubricants are specified, THEN add step that IF transferred from one container to another, THEN a documented Independent Verification must be performed. [RCMS 90-148]	Commitment item is within MPM OS-001
Selection of material	AP 24E-006
EQSD III Contingencies. Provides equipment maintenance and replacement parts to preserve Environmental Qualification (EQ)	AP 05G-005 EQSD III

ATTACHMENT A
(Page 3 of 5)
WORK ORDER PLANNING TOOL

SCA (Safety Classification Analysis) for parts. Used when parts dedicated for use have a different Safety Class than the equipment	AP 24E-006
Parts order necessary? IF yes, THEN process a Material/ Service Requisition (MSR)	AP 24-002
Work Instructions:	**SOURCE**
Check for existing instructions/procedures (e.g., APs, AI, MCEs, MCMs, MGEs, MGMs, MPEs, MPMs, STSs, STNs, Pre-Plans, etc.)	AP 16C-006 AI 16C-007
Use vendor manual information, as applicable.	Vendor Specific
Revision numbers are required for Non-ASME work when documents are quoted or copied in whole or in part	
Include instruction as necessary when performing work on energized circuits	AP 16-001
Ensure problem description and/or work activity objective is clear	AI 16C-007
Job Oversight; e.g., notify appropriate groups when work steps are completed as necessary. IF applicable, THEN provide details	AI 16C-007
Pre and/or Post testing required (e.g., as-found, as-left)	
Negative Trend or, Common Mode Failure identified. IF Yes, THEN evaluate for method of resolution (e.g., EER, PIR, modify previous maintenance methods, condition monitor, etc.)	
Failure analysis required? IF yes, THEN initiate a Work Request	AP 28A-001 AI 28B-005
Work with other WO/SWO/WOS? IF yes, THEN reference the applicable WO's/SWO's/WOS's	AP 16C-006 AI 16C-007
Work on HVAC systems involving EPA regulated refrigerant	AI 07-006 AI 07A-017
Clean System Draining - for systems that are uncontaminated (i.e. Fire Protection, Essential Service Water, Potable Water, Aux Steam, Condensate) ensure planning and instructions include routing this water out to alternate drains (those other than Radwaste drains). [Commitment Step 3.2.11]	AI 16C-007
Pipe installation	AP 16G-002
Is work on an ASME I, III, IV, or VIII system or component? IF yes, THEN coordinate with Welding Engineering	AP 16A-003 AP 16A-001
Hanger Disassembly/Pinning - consider generating a separate Work Order to implement procedure requirements.	CNT-MM-300 CNT-MM-301

ATTACHMENT A
(Page 4 of 5)
WORK ORDER PLANNING TOOL

Include disinfection requirements for potable water systems KD & WD per AP 07A-001.	AP 07A-001
System Cleanliness required? IF yes, THEN provide requirements	APF 12-002-001
Does activity need FME addressed? IF yes, THEN provide requirements	APF 12-003-01
Identification and Control of Materials, Parts and Components? IF yes, THEN provide sign-off for workman unless the parts page or WO BOM is sufficient.	AP 24E-001
Heavy Loads and Special Lifts. Applicable to Containment Modes 3-6 and Spent Fuel Pool Area. IF yes, THEN provide procedure requirements.	AP 14-001
Lifting and Rigging? IF yes, THEN determine the procedure requirements for the workman.	AP 14-001
Prerequisite Lifting Device PM and/or Hook Inspection? IF Yes, THEN invoke procedure.	MGM MOOP-012
Potential unintentional equipment actuation (e.g., welding near Reactor Protection System, Electro-Hydraulic Control or Engineered Safeguards Features?). IF yes, THEN coordinate with Operations for contingencies or cautions.	AP 22C-007
Potential Exposure to hazardous chemicals or sewage (SP-803)? IF harsh chemicals (acids/caustics) are involved, THEN provide warnings and contingencies in case of spillage. [step 3.2.7] IF temporary equipment (i.e., pumps, hoses, pipelines, filters, containers) will be used during work processes involving harsh chemicals, THEN work instructions shall require verification of compatibility of the temporary equipment to the specific chemical involved. [Commitment Step 3.2.7] Provide any protective measures and/or cautions provided by the material safety data sheets (MSDS) found on the computer program: Chemical Control System (CCS). In case of raw sewage, wear protective equipment to minimize exposure. Contacted Safety Services for assistance	
Potential Radiation Release? IF yes, THEN coordinate with Operations	
Include Instructions as necessary to contain or control Cobalt bearing materials.	AI 05-010
E-Plan Equipment Out of Service? IF yes, THEN coordinate with Supervisor Emergency Planning.	

ATTACHMENT A
(Page 5 of 5)
WORK ORDER PLANNING TOOL

CCP/DCP Implementation? IF yes, THEN obtain PSRC approval prior to working. Coordinate with Implementation Coordinator.	AP 05-001
Temporary Modification Order Implementation? IF yes, THEN follow the guidelines of AP 21I-001, TEMPORARY MODIFICATIONS.	AP 21I-001
M&TE used required? IF yes, THEN require WC No., Cal Due Date and Sign-off with use Date. IF critical for work acceptance or inaccessible after work is completed, THEN consider a Pre and/or Post Calibration of the M&TE.	AP 16H-001
Applicable Verifications required for critical work steps.	AP 15C-002
Relief Valve Testing	AP 29B-002
Heat exchanger cleaning, tube plugging, visual examinations, etc., refer to AP 23L-002. [commitment step 3.2.15]	AP 23L-002
IF a proposed scheduled activity could result in manipulation of a component when the method of manipulation and the duration of time that the component will be out of its normal position/condition AND a potential flow path is created, THEN the Work Order Planner will ensure that the activity is identified as requiring evaluation in accordance with AP 21D-002. [Commitment Step 3.2.2]	AP 21D-002
Conduit, flex, and grounding? IF yes, THEN ensure working documents or instructions provide installation steps	
Restoration and Post Maintenance Testing:	**SOURCE**
Consider the implemented procedures recommended Post Maintenance Testing or Restoration Instructions	Procedure implemented in the work instruction
Predictive Maintenance	AI 23B-001
Consult PMT procedure for specific guidance.	AP 16E-002
Work Package Review:	SOURCE
Verify Controlled Copy of WO/SWO is current with Controlled Copy Designator.	AP 16C-006 AI 16C-007
Review prepared work instructions for clarity and completeness.	AP 16C-006
Referenced controlled documents are correct and current revisions as required.	AI 16C-007
Maintenance History reviewed.	AP 16C-006
Support Groups	AP 16C-008

-END-

ATTACHMENT B
(Page 1 of 2)
WORK ORDER COPY TOOL

B.0 The Work Order Copy Utility was developed as an aid to planning. This function is referred to as the "utility".

B.1 The utility allows planners to copy entire WOs/SWOs . The utility copies all or portions of any Work Order and the associated SWOs from one WO to another.

B.1.1 The ability to copy work orders will reduce preparation time for new WOs/SWOs that are related to equipment.

B.1.2 The utility, copies selected MPAC and CURATOR data, permits, forms, work instructions and procedures.

B.2 The instruction for how the utility works and a flow chart of the actual copy process are available in the WCNOC Paperless Environment under MPAC, Maintenance Help.

B.3 When copying Wos/SWOs it is important that planners be cognizant of certain potentials for error that are inherent in the process:

B.3.1 The program is designed to copy asset numbers onto WOs/SWOs. These asset numbers may require changing after the copy is complete if the new WOs/SWOs are not on the same equipment.

B.3.2 Information contained in text fields does not change automatically during the copy process. Each of the text fields should be reviewed to ensure that the information contained is pertinent to the work at hand. For example, if the copied Work Order is on PBG05A and the receiving WO is on PBG05B there may be other A-train components mentioned in the Step Text or Problem Description.

B.3.3 The request for Permits are copied during the WO Copy process. The Permits screen should be reviewed to ensure that all needed permits are applied and that all applied permits are needed.

ATTACHMENT B
(Page 2 of 2)
WORK ORDER COPY TOOL

B.3.4 After copying a package, all of the copied CURATOR documents (forms, work instructions, procedures etc.) SHALL be reviewed to ensure that all of the information contained is pertinent to the work activity. Examples would include forms that are partially filled out, work instructions that may be specific to a particular component and a drawing that is not applicable to the asset on the new WO/SWO.

B.3.5 During the copy process, The Work Planning Code (WPC) for any new SWOs is derived from the -000 "Copy To" WO. If the WPC on the new SWOs needs to be different from the -000, IPS will need to be contacted to change it.

-END-

ATTACHMENT C
(Page 1 of 2)

INSTRUCTIONS FOR DAMAGED THREADS IN SAFETY RELATED SHEET METAL CABINETS

C.0 The RWG planner shall use the following information to develop instructions for repair of Damaged Threads in Electrical and HVAC safety related sheet metal cabinets.

C.1 Threads for panel closure fasteners that are damaged to the extent that they cannot be tightened snug tight may be repaired by any of the following methods. Repair methods are listed in preferred order. (Reference CCP-5414) Fasteners may be Zinc Plated for corrosion resistance.

C.1.1 Damaged threads may be repaired using Cage Nuts (J type/clip-on, 1/4"-20, 3/8"-16). If required, safety related cage nuts should be procured in other sizes.

C.1.2 Damaged threaded holes can be repaired using "NUTSERT" nuts (1/4"-20) as described in disposition to WR 05221-88. If required, safety related "NUTSERTS" should be procured in other sizes.

C.1.3 Threaded holes may be repaired by drilling out the damaged threads and tapping the hole to the next largest thread size, provided that the repaired hole is no closer to an edge of the material than a distance equal to the diameter of the original equipment bolt. (See Sketch) The edge spacing requirement shall not be interpreted to apply as an acceptance criterion for existing installations. An over sized fastener conforming to the grade requirements above can be used in the repaired hole. (See Startup Field Report 1-SU-49 for disposition describing this repair method).

ATTACHMENT C
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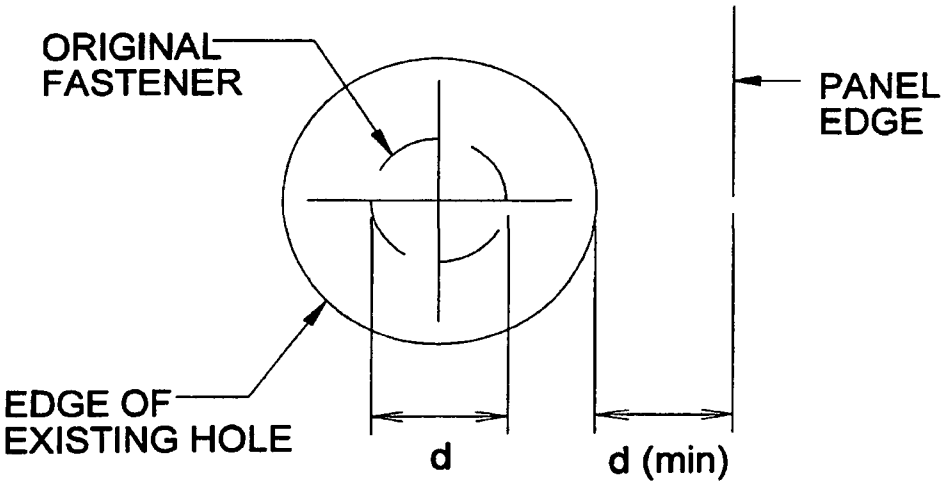
INSTRUCTIONS FOR DAMAGED THREADS IN SAFETY RELATED SHEET METAL CABINETS

Sketch For Drilling Out Damaged Threads



C.1.4 When threaded holes cannot be repaired by any of the above methods, it shall be permissible to replace the fastener. Drill a new hole in the panel and provide a new threaded hole in the cabinet in line with other fasteners along the same edge of the panel but displaced by two hole diameters from the unusable hole in either direction parallel to the edge of the panel. The new fastener and hole shall be the same size as the original equipment fasteners. Abandoned holes shall be filled with suitable plugs or by some other method identified as not used.

C.1.5 For any fastener threaded holes that cannot be repaired by any of the above methods, a SWO shall be initiated requesting engineering evaluation.

-END-

ATTACHMENT D
(Page 1 of 1)
PERMITS

D.0 The following are examples of some of the permits utilized at Wolf Creek Generating Station (WCGS). This is not an all-inclusive list.

* Scaffolding Request (SCA)
* Fire Impairments (FIP)
* Breach Authorizations (NE)
* Ignition Sources (ISP)
* Flow Path Evaluations (FPE)
* Combustible Materials (CP)
* Clearance Orders (CO)
* Local Control Clearances (LC)
* Confined Space (CSP)
* Dig Permit (DP)
* Energized Circuit Work (ECW)
* Non-Plant Clearance Order (NCO)
* Radiation Work (RWP)
    * RWP - System Breach (RWS)
    * RWP - Ventilation, Other (RWX)
    * RWP - Weld, Grind, Cut (RWW)
    * RWP - Tighten packing, Boric Acid Removal (RWT)
    * RWP - Volatile Liquids (RWY)
    * RWP - System Venting, Draining (RWV)
    * RWP - Radioactive Source - transport (RWR)
* Chemical Release (CRP)
* Containment Penetration Integrity (CPI)

-END-

ATTACHMENT E
(Page 1 of 6)
WORK ORDER REVISIONS

E.0 The purpose of this attachment is to describe the revision process for Work Order (WO)/Sub Work Order (SWO) that have received authorization to start work.

E.1 Each revision shall be evaluated (as a minimum) for:

E.1.1 Operations impact. IF the revision potentially impacts operations or clearance orders, THEN coordinate with Operations.

E.1.2 Radiological impact. IF the revision potentially affects the radiological conditions of the work activity, THEN coordinate with Health Physics for a RWP revision.

E.1.3 IF the revision affects the job duration, THEN coordinate the expected durations with IPS Work Week Manager (WWM), Outage Control Center Representative, and/or the Control Room.

E.1.4 The RWG planner should coordinate changes in the work scope with affected support groups, as appropriate.

E.2 Listed below are the options for revising a WO/SWO. For all options listed, a Work Order Revision Sheet APF 16C-006-003 is required.

E.2.1 Option 1-The RWG Planner may elect to revise a WO/SWO by using the MPAC electronic process. The affected portion(s) of the WO/SWO revised shall be reprinted, and incorporated in the original WO/SWO.

E.2.2 Option 2- The RWG Planner may elect to revise a WO/SWO by using the Work Order Revision Sheet APF 16C-006-003.

E.2.3 Option 3- The RWG Planner may elect to revise a WO/SWO by using hand written deletion or addition, revising the affected portion(s) of the WO/SWO.

E.3 Method for revising a WO/SWO

E.3.1 IF a revision is required to a WO/SWO, THEN it shall be documented by placing a revision number with a triangle placed around the revision number.

1. The Revision Number shall appear at the location of the change, no matter what option is used.

ATTACHMENT E
(Page 2 of 6)
WORK ORDER REVISIONS

E.3.2 The following shall be documented on the WO Revision Sheet, APF-16C-006-03 and shall be completed by the RWG planner, as required.

1. WO number, WO Step, and Revision number.

2. Any additional Post Maintenance Testing required.

3. Reason for the revision.

4. Description of the revision.

5. Obtain necessary reviews for the revision.

E.3.3 Revision requirements:

1. Deletions shall be documented by drawing a single line through the item being revised, initialing and dating adjacent to the deleted item.

2. Additions shall be documented by initialing and dating adjacent to the item being revised. This includes the addition of materials to a BOM.

E.3.4 Any revision to a WO/SWO requires the same level of review and approval as the original WO/SWO.

1. QC Review is required for revisions to ASME Section XI Repair/Replacement Program, 'R' Program Repairs/Alterations, Safety Related, and other WOs requesting QC Inspection Services.

2. SM/SE approval is required if the revision affects Plant Operations or affects Retest Requirements [Step 3.2.16].

3. ASME Section XI, ASME Section III, or R program WO revisions, other than Pressure Test, shall require ANII/ANI/AI Review. QC/RWG planner shall obtain this review and signature when required.

   a. ANI/ANII review/approval is not required for WO/SWO revisions for work under the alternative requirements for small items or alternative requirements for items rotated from stock as defined by AP 16A-003.

ATTACHMENT E
(Page 3 of 6)
WORK ORDER REVISIONS

NOTE

Any change made to the Work Order prior to obtaining authorization to start work, or start of work when authorization is not required is controlled by a Copy Control Designator in accordance with step 6.3.6-2.

E.4 Work Order Revision Sheets (and revision numbers) are NOT REQUIRED on revisions when all of the following conditions are met:

E.4.1 The revision involves a change which is limited to the work instruction, and/or associated procedures or forms, during implementation of the Work Order.

E.4.2 The change does not affect the scope or ASME Examinations. (Refer to section E.5)

E.4.3 The change does not affect an approved Engineering Disposition.

E.4.4 The change does not affect a deficiency disposition.

NOTE

Changes to a WO/SWO that do not require a WO Revision Sheet will be documented by drawing a single line through the item being changed and initialing and dating adjacent to the change. Changes that are made in this manner implies the planner making the change has evaluated the change and no further explanations are required.

E.4.5 The change is documented by completing ALL of the following:

1. The Worker contacts the Group Supervisor and/or planner for verbal approval before implementing the change.
2. The Worker documents the change and the people contacted, then initials and dates the entry.
3. The planner coordinates with QC, as necessary for any changes that affect QC Hold Points.

ATTACHMENT E
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WORK ORDER REVISIONS

E.5 ASME Section XI, ASME Section III, or R Program WO/SWO

E.5.1 WHEN revisions or changes are made to materials, procedures, instructions, checklists, or referenced documents are identified, THEN the Welding Engineer shall evaluate the change to determine whether a revision to the WO/SWO is needed. Except as provided in E.5.2, the WO/SWO shall be revised when:

1. Making changes to specified ASME code material requirements or for the addition of new ASME code material to be used or installed shall be in accordance with AP 24E-006, Replacement Item Selection.

2. Adding a new checklist/datasheet for welding, heat treatment, bending or forming, or hydrostatic pressure test.

3. Updating the revision level and associated changes of documents referenced in the WO/SWO when the revision affects the Code activities being performed. (OR)

4. The change or revision changes the text of the WO/SWO instructions.

5. Refer to AP 16A-001, R Program Repair/Alterations or AP 16A-003 ASME Section XI Repair and Replacement Program as applicable.

E.5.2 The WO/SWO does not need to be revised when:

1. Making Weld Data Sheet or Post-weld Heat Treatment Data Sheet revisions.

2. Updating the revision level and associated changes of referenced QC inspection or examination procedures on either the WO/SWO or the Weld Data Sheet or Post-weld Heat Treatment Data Sheet provided the change is made and initialed by QC or Welding Engineer.

3. Changing hydrostatic pressure test checklists providing the change is made and initialed by the Welding Engineer, except that changes to the required test pressures, over pressure protection set point ranges, test boundaries, or ANI hold points require WO/SWO revision.

ATTACHMENT E
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WORK ORDER REVISIONS

4. Making minor changes such as typographical errors, transposition errors, editorial changes, or update of referenced document revision levels and associated changes provided each change is made and initialed by the Welding Engineer/designee.

5. Refer to AP 16A-001, R Program Repair/Alterations or AP 16A-003 ASME Section XI Repair and Replacement Program as applicable.

E.6 NON-ASME

E.6.1 Safety Related, Special Scope, and NNSR WOs/SWOs

1. WHEN revisions or changes made to materials, procedures, instructions, checklists, or referenced documents are identified, THEN the Group Supervisor/designee shall evaluate the change to determine whether a revision to the WO/SWO is needed.

2. The WO/SWO shall be revised when:

   a. Making changes to specified material requirements or for the addition of new materials to be used or installed shall be in accordance with AP 24E-006, Replacement Item Selection.

   b. Adding a new checklist/datasheets such as; for welding, heat treatment, bending or forming, or hydrostatic pressure test.

   c. Changes to acceptance criteria.

   d. The change or revision changes the scope or intent of the WO/SWO instructions.

ATTACHMENT E
(Page 6 of 6)
WORK ORDER REVISIONS

3. The WO/SWO does not need revised when:

   a. Adding miscellaneous material (i.e. fasteners, consumables) in accordance with AP 24E-006, Replacement Item Selection.

   b. Making Weld Data Sheet or Post-weld Heat Treatment Data Sheet revisions.

   c. Updating the revision level and associated changes of referenced QC inspection or examination procedures on either the WO/SWO or the Weld Data Sheet or Post-weld Heat Treatment Data Sheet provided the change is made and initialed by QC or Welding Engineer.

   d. Changing hydrostatic pressure test checklists providing the change is made and initialed by the Test Engineer.

   e. Making minor changes such as typographical errors, transposition errors, editorial changes, or update of referenced document revision levels and associated changes provided each is made and initialed by the group supervisor/designee.

-END-