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10 CFR 50, Appendix E

Serial: RNP-RA/17-0086

**DEC 14 2017**

United States Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2  
DOCKET NO. 50-261/RENEWED LICENSE NO. DPR-23

**TRANSMITTAL OF EMERGENCY PROCEDURE REVISION AND  
10 CFR 50.54(q) SUMMARY OF ANALYSES**

Ladies and Gentlemen:

In accordance with 10 CFR 50.4(b)(5) and Appendix E to 10 CFR 50, Duke Energy Progress, LLC is transmitting a revision to the H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2, Emergency Plan Implementing Procedure.

A description of the procedure change is provided on the "Summary of Changes" page included within the emergency procedure. Please replace the superseded procedure with the enclosed revision. The procedure revision and effective date is listed in Attachment I to this letter.

In accordance with 10 CFR 50.54(q)(5), Attachments II and III include a summary of the analyses associated with the procedure change provided in Attachment I.

This document contains no new Regulatory Commitments.

If you have any questions concerning this matter, please contact Tony Pilo, Manager – Nuclear Regulatory Affairs at (843) 951-1409.

Sincerely,

Charles E. Sherman  
Director – Nuc Org Effectiveness

CES/cac

Attachments:

- I. Procedure Revision and Effective Date
- II. 10 CFR 50.54(q) Screening Evaluation Form
- III. 10 CFR 50.54(q) Effectiveness Evaluation Form

Enclosure

- c: NRC Regional Administrator, NRC, Region II  
NRC Resident Inspector, HBRSEP  
Mr. Dennis Galvin, NRC Project Manager, NRR (w/o Enclosure)

**H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2**

**Procedure Revision and Effective Date**

<b>Procedure</b>	<b>Revision No.</b>	<b>Effective Date</b>
AOP-034, "Security Events"	29	12/12/17

**H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2**

**10 CFR 50.54(q) Screening Evaluation Form**

## &lt;&lt; 10 CFR 50.54(q) Screening Evaluation Form &gt;&gt;

Screening and Evaluation Number	Applicable Sites	
EREG #: <u>2165200</u>	BNP	<input type="checkbox"/>
	CNS	<input type="checkbox"/>
	CR3	<input type="checkbox"/>
	HNP	<input type="checkbox"/>
5AD #: <u>1974717</u>	MNS	<input type="checkbox"/>
	ONS	<input type="checkbox"/>
	RNP	<input checked="" type="checkbox"/>
	GO	<input type="checkbox"/>
Document and Revision AOP-034, Security Events, Revision 29		

**Part I. Description of Activity Being Reviewed (event or action, or series of actions that may result in a change to the emergency plan or affect the implementation of the emergency plan):**

The following are the proposed changes for procedure AOP-034, Security Events, Revision 29:

- Purpose & Entry Conditions, Step 3 and Step 4: Step Added two new sections, major action categories and Time Critical/Time Sensitive Actions (TCAs/TSAs) in AOP-034.
- CAUTION before Main Body, Step 1: This CAUTION is similar to a caution in new Attachment 9. It is placed at the front of all the procedure steps to help prevent a "pre-emptive" DW Pump "D" start prior to the selected E-Buss transferring to EDG power.
- NOTES before Main Body, Step 1:
  - Reminds the users that Steps 1 through 9 should be performed in a concurrent or parallel manner.
  - Reminds the users that Steps 26 & 27 may need to be performed early or out of sequence during some Security Events.
- Step 1.a.: Revised Step 1a. into three sub-steps to incorporate revised and new instructions for Auxiliary Building Operator (AO) after dispatch: Step 1.a.1) directs Operator to obtain Pre-Stage Copies of AOP-034 and EPP-28. Step 1.a.2) directs the AO to perform new Attachment 9, Deepwell Cooling, electrical alignments without starting DW Pump "D". Step 1.a.3) directs the AO to stand by in EDG Room "B".
- Steps 2, 3 & 4 with NOTE before Step 2: New Continuous Action Steps (CAS) to address NCR 1947438, RNP 2015 TS Inspection, for fast breaking events.
- Step 6 Table: Combined line items #2 and #3 since they both direct going to Step 5. No change in meaning or intent.

<< 10 CFR 50.54(q) Screening Evaluation Form >>

**Part I. Description of Activity Being Reviewed (Continued)**

- Step 7 RNO (Response Not Obtained): Performance of the Attachment 11 electrical alignments is necessary to restore DW Pump "D" to the normal, standby, status.
- New NOTE before Step \*10: New NOTE concerns the use of the Security Radios kept in the Control Room. These radios may be used to monitor the Security related radio transmissions to assist with threat assessment. Radio monitoring is not required when a Security Officer is posted in the Control Room.
- Step \*10: Revised the "Threat Nullified" actions. Old actions were to "Return to Procedure & Step in effect." That would not be possible after an attack, the damage to the plant must be assessed. Even if the threat were nullified prior to tripping the reactor, the applicable action in Attachment 11 must be addressed. The new action directs the use of the following procedures and new attachment for the development of recovery plans:
  - EPEOF-10, Recovery Manager and Recovery Operations
  - AD-EP-ALL-0110, Recovery
  - AD-WC-ALL-0380, Outage Command and Control
  - AD-OP-ALL-0102, Operational Decision Making
  - Attachment 11, Restoration From Deepwell Pump "D" Operations
- Step 20.b RNO. Added an additional contingency action that states: "IF the SDAFW Pump is NOT available, THEN PERFORM the applicable actions found in OP-402, Auxiliary Feedwater System, while NOT placing people in harms way."
- Step 28, NOTE 1 & 2: 1st NOTE explains the intent of Step 28. Copied from the Basis Document. 2nd NOTE reminds users to use EOP Supplement "F" when changing loads on an EDG.
- Step \*29, NOTES: Step \*29 directs the use of Attachment 7 to restore off-site power to the E-Busses. Attachment 7 contains these same NOTES at the entry to the Attachment. Intent is to help with Control Room decision making when determining IF Attachment 7 should be performed. Information was copied from the Basis Document.
- Step \*30.a: Added a new Step \*30.a to check that the Reactor is SHUTDOWN.  
  
The RNO for \*30.a states: "WHEN The Reactor is EITHER SHUTDOWN OR TRIPPED while in this procedure, THEN PERFORM an APPLICABILITY DETERMINATION for EPP-28, Loss Of Ultimate Heat Sink."
- NOTE before Step 36: Repeat of the new NOTE before Step \*10 concerning Security Radios.
- CAUTION Before Step 38: New CAUTION to remind the users that 10CFR50.54x declaring may be necessary if EOP and/or AOP actions must be bypassed or delayed due to the Security Situation. AD-OP-ALL-1000 contains an attachment that must be completed for a 10CFR50.54x situation.

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**Part I. Description of Activity Being Reviewed (Continued)**

- Attachment 2, Step 1 Note: Old Attachment 2, Step 2 Note was relocated/added to Step 1 Note.
- Attachment 2, Steps 2, 3 & 4 with NOTE before Step 2: Same as Main Body Steps 2, 3 & 4.
- Attachment 2, Table in Step 5: Combined the two line items for "Less than Five Minutes" and "Impacted Has Occurred." Both conditions require the same response, GO TO Step 19.
- Attachment 2, Table in Step 5: Revised the "Threat Nullified" actions. Old actions were to "Return to Procedure & Step in effect." That would not be possible after an attack, the damage to the plant must be assessed. The new action directs the use of the following procedures and new attachment for the development of recovery plans:
  - EPEOF-10, Recovery Manager and Recovery Operations
  - AD-EP-ALL-0110, Recovery
  - AD-WC-ALL-0380, Outage Command and Control
  - AD-OP-ALL-0102, Operational Decision Making
  - Attachment 11, Restoration From Deepwell Pump "D" Operations
- Attachment 2, NOTE before Step 6: New NOTE drawn from the AOP-034 Basis Document. Gives a BRIEF explanation of the decision logic used in Step 6. A form of this NOTE was used before in Old Step 5. Old Step 5 note has been deleted. This type of information needs to be given PRIOR to the PA announcements for ERO activation and Site Evacuation.
- Attachment 2, Step 6: Complete re-structure of step to allow for a possible Aircraft Attack during an outage OR IF the Time-To-Attack is rapidly changing.
  - Steps 6.a checks for the plant configuration (non-outage or off-normal hours) with the 6.a RNO actions for an outage or if the time to attack is changing while working this step.
  - Steps 6.b through 6.h AER are the directions to evacuate the site with the ERO reporting to the Remote Emergency Response Facility.
  - Step 6.i through 6.n are entered from the Step 6.a RNO.
- Attachment 2, NOTE at Step 7: New NOTE concerns the use of the Security Radios kept in the Control Room. Same as the NOTE before Main Body Steps \*10 and 36.
- Attachment 2, Step 7: Combined old Steps 4, 5 & 6 into current Step 7. This gives a small improvement in the step progression time line.
- Attachment 2, Step 17: This is old Step 16. Old step just said to "RETURN TO Step 1. New Step 17 now states: "Observe The NOTE Prior To Step 1 And RETURN TO Steps 1 through 5 To Re-assess The Threat Situation." Re-worded step based on Basis Document information and new steps.

<< 10 CFR 50.54(q) Screening Evaluation Form >>

**Part I. Description of Activity Being Reviewed (Continued)**

- Attachment 2, Step 19: New contingency action in Step 19.b (old 18.b) RNO. The new contingency states: "IF the SDAFW Pump is NOT available, THEN PERFORM the applicable actions found in OP-402, Auxiliary Feedwater System while NOT placing people in harms way."
- Attachment 2, NOTE before Step 20: New first NOTE is similar to the new NOTE before Step 6. Gives a quick explanation of the basis for sending the ERO to the ON-SITE facilities.
- Attachment 2, Step 26 RNO: This is old step 25. RNO is now the same as Attachment 2, Step 17.
- Attachment 2, NOTE at Step 27: NOTE reminds users to use EOP Supplement "F" when changing loads on an EDG.
- Attachment 2, Step 31 RNO: This is old step 30. Same as Attachment 2, Steps 17 & 26.
- Attachment 2, Step 33 (Old Step 32): New NOTE before Step 33. Reminds users of possible need for procedures EDMG-000 and EPSPA-05 use in parallel with AOP-041.
- Attachment 2, Step 36: This is old step 35. Replaced the Step 36.a RNO statement with the revised directions found in Main Body, Step 10 table, and the table in Step 5 of this attachment. Added a new bullet to step 36A RNO that states: "IF EPP-28 is not applicable, THEN GO TO Main Body, Step 5, to re-assess plant conditions." This RNO assumes that the Aircraft Attack is done BUT that the overall threat is not nullified.
- Attachment 5, 2nd NOTE before Step 1 New NOTE: Reminds users that Attachment 5 is intended to be performed in PARALLEL with the other actions in AOP-034.
- Attachment 5, Step 7.c: Old Step 7.c just stated to "STOP RCS Depressurization." New Step 7.c states: "CONTROL RCS Pressure to MAINTAIN BETWEEN 1950 psig to 1900 psig while performing Step 8."
- Attachment 5, Step 21 NOTE: New NOTE that defines the RCS Temperature and Pressure Control Bands that will be checked/established in Steps 21 through 24.
- Attachment 6, Step 1, New CAUTION Note: Addresses potential for EDGs pre-lube to be in progress as directed in the FOP.

New Step 1.a with RNO: Addresses potential that EDG "B" may, or may not, be running with the output breaker open.

<< 10 CFR 50.54(q) Screening Evaluation Form >>

**Part I. Description of Activity Being Reviewed (Continued)**

- Attachment 7, Step 1: Revised step to read "CHECK Emergency Bus - DEENERGIZED FROM STOPPING AN EDG IN EPP-28 OR from Attachment 9, Deepwell Cooling OR Attachment 10, Rapid Start of Deepwell Pump "D".
- Attachment 7, Step 8 Note: Added information that Breaker 52/11A will be manipulated in Step 20.c. Intent is to help the users with prioritization and timing of when the Security Officer will be needed.
- Attachment 7, Step \*20 New NOTE along with new Step 20.a: Depending on what the Security Event was and depending on what caused the loss of power to the E-Busses, it is possible that MCC-3 may now be energized. IF the various MCC-3 powered loads indicate power is restored to MCC-3, THEN it is not necessary to dispatch an Operator with armed escort to operate Breaker 52/11A.
- Attachment 7, Step 22: New Step 22. Check for need to energize Emergency Buss E-1 from Off-Site source. IF E-1 it is already energized, THEN the actions in Step 23 (old Step 22) are not needed.
- Attachment 8: Attachment 8 has been converted from an MS Word table to a VE-PROMS table. No changes in text.
- Attachment 9: The intent of this attachment is for the non-rapid alignment and possible start of DW Pump "D" Steps, information and equipment nomenclature drawn from EPP-28, Loss of Ultimate Heat Sink, Attachment 6, Start and Loading of the EDGs, and OST-414, E-1 and E-2 Power Supply to Deepwell Pump D Functional Test. The design intent of Attachment 9 is that the threat is external to the Auxiliary Building AND will stay external to the Auxiliary Building.
- Attachment 10: The intent of this attachment is for the RAPID alignment and start of DW Pump "D". A rapid alignment and start would be required ONLY IF Security declares a HOSTILE ACTION on the Site. Attachment 10 is invoked from either the Procedure Main Body, Step \*2, OR Attachment 2, Step \*2. Performance of this attachment works under the assumption that the selected EDG was given a forced start via the Blackout Sequence either just prior to or in parallel to the Auxiliary Building Operator receiving direction to perform the attachment.

Steps, information and equipment nomenclature drawn from Attachment 6, Start and Loading of the EDGs, and OST-414, E-1 and E-2 Power Supply to Deepwell Pump D Functional Test.

Attachment 10 assumes that the threat may enter the Auxiliary Building, thus the 1st Level Hallway (Fire Detection Zones 11, 12 and 13) may become an active shooter area with the EDG Rooms still safe and protected.

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**Part I. Description of Activity Being Reviewed (Continued)**

- Attachment 11: New attachment concerning restoration after Deepwell Pump "D" Operations. The intent of Attachment 11, Restoration From Deepwell Pump "D" Operations, is to restore the EDG Service Water cooling flow path, the pump flow path, and the pump controls to the normal standby condition.

Attachment 11 directly supports Main Body Step 7 RNO when the security threat is not verified as credible or has been nullified PRIOR to operation of Deepwell Pump "D".

At the direction of the Shift Manager, this attachment may be used as part of the post-event restoration activities when the Emergency Busses are powered from Off-Site power with BOTH EDGs shutdown. As a minimum, it is expected that the ELECTRICAL PORTIONS of DW Pump "D" will need to be restored to the NORMAL, MCC-11 supply, alignment. IF DW Pump "D" is used for EDG cooling, THEN the applicable valves will need to be restored and the SW piping down stream of BOTH EDGs will need to be refilled to minimize the potential for a water hammer during a subsequent EDG start.

- Continuous Action Summary (CAS) Pages Revised as applicable to reflect the previously listed changes including new Continuous Actions in Attachments 9 & 10.

**Part II. Activity Previously Reviewed?**

Is this activity Fully bounded by an NRC approved 10 CFR 50.90 submittal or Alert and Notification System Design Report?

If yes, identify bounding source document number or approval reference and ensure the basis for concluding the source document fully bounds the proposed change is documented below:

Justification:

Yes

☐

No

☒

10 CFR 50.54(q) Effectiveness Evaluation is not required. Enter justification below and complete Attachment 4, Part V.

Continue to Attachment 4, 10 CFR 50.54(q) Screening Evaluation Form, Part III

Bounding document attached (optional)

☐

<< 10 CFR 50.54(q) Screening Evaluation Form >>

Part III. Editorial Change	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
<p>Is this activity an editorial or typographical change only, such as formatting, paragraph numbering, spelling, or punctuation that does not change intent?</p> <p>The following proposed changes in Revision 29 of AOP-034, Security Events, meet the criteria of editorial as provided in AD-EP-ALL-0602, Emergency Plan Change Screening and Effectiveness Evaluations 10 CFR 50.54(Q):</p> <ul style="list-style-type: none"> <li>Step 6 Table: Combined line items #2 and #3 since they both direct going to Step 5. <u>Justification:</u> Format change with no change in meaning or intent.</li> <li>Attachment 2, Step 1 Note: Old Attachment 2, Step 2 Note was relocated/added to Step 1 Note. <u>Justification:</u> Format change with no change in meaning or intent.</li> <li>Attachment 2, Table in Step 5: Combined the two line items for "Less than Five Minutes" and "Impacted Has Occurred." Both conditions require the same response, GO TO Step 19. <u>Justification:</u> Format change with no change in meaning or intent.</li> <li>Attachment 2, Step 7: Combined old Steps 4, 5 &amp; 6 into current Step 7. <u>Justification:</u> Format change with no change in meaning or intent.</li> <li>Attachment 8: Attachment 8 has been converted from an MS Word table to a VE-PROMS table. <u>Justification:</u> Administrative upgrade of table with procedure software program called VE-PROMS. No changes in text has occurred.</li> </ul>	<p>10 CFR 50.54(q) Effectiveness Evaluation is not required. Enter justification and complete Attachment 4, Part V.</p>	<p>Continue to Attachment 4, Part IV and address non editorial changes</p>		

<< 10 CFR 50.54(q) Screening Evaluation Form >>

Part IV. Emergency Planning Element and Function Screen (Reference Attachment 1, Considerations for Addressing Screening Criteria)		
Does this activity involve any of the following, including program elements from NUREG-0654/FEMA REP-1 Section II? If answer is yes, then check box.		
1	10 CFR 50.47(b)(1) Assignment of Responsibility (Organization Control)	
1a	Responsibility for emergency response is assigned.	<input type="checkbox"/>
1b	The response organization has the staff to respond and to augment staff on a continuing basis (24-7 staffing) in accordance with the emergency plan.	<input type="checkbox"/>
2	10 CFR 50.47(b)(2) Onsite Emergency Organization	
2a	Process ensures that onshift emergency response responsibilities are staffed and assigned	<input type="checkbox"/>
2b	The process for timely augmentation of onshift staff is established and maintained.	<input checked="" type="checkbox"/>
3	10 CFR 50.47(b)(3) Emergency Response Support and Resources	
3a	Arrangements for requesting and using off site assistance have been made.	<input type="checkbox"/>
3b	State and local staff can be accommodated at the EOF in accordance with the emergency plan. (NA for CR3)	<input type="checkbox"/>
4	10 CFR 50.47(b)(4) Emergency Classification System	
4a	A standard scheme of emergency classification and action levels is in use. (Requires final approval of Screen and Evaluation by EP CFAM.)	<input type="checkbox"/>
5	10 CFR 50.47(b)(5) Notification Methods and Procedures	
5a	Procedures for notification of State and local governmental agencies are capable of alerting them of the declared emergency within 15 minutes (60 minutes for CR3) after declaration of an emergency and providing follow-up notification.	<input type="checkbox"/>
5b	Administrative and physical means have been established for alerting and providing prompt instructions to the public within the plume exposure pathway. (NA for CR3)	<input type="checkbox"/>
5c	The public ANS meets the design requirements of FEMA-REP-10, Guide for Evaluation of Alert and Notification Systems for Nuclear Power Plants, or complies with the licensee's FEMA-approved ANS design report and supporting FEMA approval letter. (NA for CR3)	<input type="checkbox"/>
6	10 CFR 50.47(b)(6) Emergency Communications	
6a	Systems are established for prompt communication among principal emergency response organizations.	<input type="checkbox"/>
6b	Systems are established for prompt communication to emergency response personnel.	<input checked="" type="checkbox"/>
7	10 CFR 50.47(b)(7) Public Education and Information	
7a	Emergency preparedness information is made available to the public on a periodic basis within the plume exposure pathway emergency planning zone (EPZ). (NA for CR3)	<input type="checkbox"/>
7b	Coordinated dissemination of public information during emergencies is established.	<input type="checkbox"/>
8	10 CFR 50.47(b)(8) Emergency Facilities and Equipment	
8a	Adequate facilities are maintained to support emergency response.	<input type="checkbox"/>
8b	Adequate equipment is maintained to support emergency response.	<input type="checkbox"/>

## &lt;&lt; 10 CFR 50.54(q) Screening Evaluation Form &gt;&gt;

Part IV. Emergency Planning Element and Function Screen (Continued)		
9	10 CFR 50.47(b)(9) Accident Assessment	
9a	Methods, systems, and equipment for assessment of radioactive releases are in use.	<input type="checkbox"/>
10	10 CFR 50.47(b)(10) Protective Response	
10a	A range of public PARs is available for implementation during emergencies. (NA for CR3)	<input type="checkbox"/>
10b	Evacuation time estimates for the population located in the plume exposure pathway EPZ are available to support the formulation of PARs and have been provided to State and local governmental authorities. (NA for CR3)	<input type="checkbox"/>
10c	A range of protective actions is available for plant emergency workers during emergencies, including those for hostile action events.	<input checked="" type="checkbox"/>
10d	KI is available for implementation as a protective action recommendation in those jurisdictions that chose to provide KI to the public.	<input type="checkbox"/>
11	10 CFR 50.47(b)(11) Radiological Exposure Control	
11a	The resources for controlling radiological exposures for emergency workers are established.	<input type="checkbox"/>
12	10 CFR 50.47(b)(12) Medical and Public Health Support	
12a	Arrangements are made for medical services for contaminated, injured individuals.	<input type="checkbox"/>
13	10 CFR 50.47(b)(13) Recovery Planning and Post-accident Operations	
13a	Plans for recovery and reentry are developed.	<input checked="" type="checkbox"/>
14	10 CFR 50.47(b)(14) Drills and Exercises	
14a	A drill and exercise program (including radiological, medical, health physics and other program areas) is established.	<input type="checkbox"/>
14b	Drills, exercises, and training evolutions that provide performance opportunities to develop, maintain, and demonstrate key skills are assessed via a formal critique process in order to identify weaknesses.	<input type="checkbox"/>
14c	Identified weaknesses are corrected.	<input type="checkbox"/>
15	10 CFR 50.47(b)(15) Emergency Response Training	
15a	Training is provided to emergency responders.	<input type="checkbox"/>
16	10 CFR 50.47(b)(16) Emergency Plan Maintenance	
16a	Responsibility for emergency plan development and review is established.	<input type="checkbox"/>
16b	Planners responsible for emergency plan development and maintenance are properly trained.	<input type="checkbox"/>

<< 10 CFR 50.54(q) Screening Evaluation Form >>

PART IV. Conclusion

If no Part IV criteria are checked, a 10 CFR 50.54(q) Effectiveness Evaluation is not required, then complete Attachment 4, 10 CFR 50.54(q) Screening Evaluation Form, Part V. ATTACHMENT 4

Justification:

If any Attachment 4, 10 CFR 50.54(q) Screening Evaluation Form, Part IV criteria are checked, then complete Attachment 4, 10 CFR 50.54(q) Screening Evaluation Form, Part V and perform a 10 CFR 50.54(q) Effectiveness Evaluation. Program Element 4a requires final approval of Screen and Evaluation by EP CFAM.

The following proposed changes itemized below were screened in accordance with AD-EP-ALL-0602, Emergency Plan Change Screening And Effectiveness Evaluations 10 CFR 50.54(Q) and determined to **not** meet the criteria listed in the Emergency Planning Standards, Elements, or Functions.

Justification: These changes are informational notes for Operations and Operator actions related to structures, systems, and components; therefore, these changes are screened and/or evaluated in accordance with AD-LS-ALL-0008, 10 CFR 50.59 Review Process:

- CAUTION before Main Body, Step 1: This CAUTION is similar to a caution in new Attachment 9. It is placed at the front of all the procedure steps to help prevent a "pre-emptive" DW Pump "D" start prior to the selected E-Buss transferring to EDG power.
- Step 1.a.: Revised Step 1a. into three sub-steps to incorporate revised and new instructions for Auxiliary Building Operator (AO) after dispatch: Step 1.a.1) directs Operator to obtain Pre-Stage Copies of AOP-034 and EPP-28. Step 1.a.2) directs the AO to perform new Attachment 9, Deepwell Cooling, electrical alignments without starting DW Pump "D". Step 1.a.3) directs the AO to stand by in EDG Room "B".
- Steps 2, 3 & 4 with NOTE before Step 2: New Continuous Action Steps (CAS) to address NCR 1947438, RNP 2015 TS Inspection, for fast breaking events.
- Step 7 RNO (Response Not Obtained): Performance of the Attachment 11 electrical alignments is necessary to restore DW Pump "D" to the normal, standby, status.
- Step 20.b RNO. Added an additional contingency action that states: "IF the SDAFW Pump is NOT available, THEN PERFORM the applicable actions found in OP-402, Auxiliary Feedwater System, while NOT placing people in harms way."
- Step 28, NOTE 1 & 2: 1st NOTE explains the intent of Step 28. Copied from the Basis Document. 2nd NOTE reminds users to use EOP Supplement "F" when changing loads on an EDG.
- Step \*29, NOTES: Step \*29 directs the use of Attachment 7 to restore off-site power to the E-Busses. Attachment 7 contains these same NOTES at the entry to the Attachment. Intent is to help with Control Room decision making when determining IF Attachment 7 should be performed. Information was copied from the Basis Document.

<< 10 CFR 50.54(q) Screening Evaluation Form >>

**PART IV. Conclusion (Continued) (Changes not to be included in the 10 CFR 50.54(q) Evaluation)**

- Step \*30.a: Added a new Step \*30.a to check that the Reactor is SHUTDOWN.

The RNO for \*30.a states: "WHEN The Reactor is EITHER SHUTDOWN OR TRIPPED while in this procedure, THEN PERFORM an APPLICABILITY DETERMINATION for EPP-28, Loss Of Ultimate Heat Sink."

- CAUTION Before Step 38: New CAUTION to remind the users that 10CFR50.54x declaring may be necessary if EOP and/or AOP actions must be bypassed or delayed due to the Security Situation. AD-OP-ALL-1000 contains an attachment that must be completed for a 10CFR50.54x situation.
- Attachment 2, Steps 2, 3 & 4 with NOTE before Step 2: Same as Main Body Steps 2, 3 & 4.
- Attachment 2, Step 17: This is old Step 16. Old step just said to "RETURN TO Step 1. New Step 17 now states: "Observe The NOTE Prior To Step 1 And RETURN TO Steps 1 through 5 To Re-assess The Threat Situation." Re-worded step based on Basis Document information and new steps.
- Attachment 2, Step 19: New contingency action in Step 19.b (old 18.b) RNO. The new contingency states: "IF the SDAFW Pump is NOT available, THEN PERFORM the applicable actions found in OP-402, Auxiliary Feedwater System while NOT placing people in harms way."
- Attachment 2, Step 26 RNO: This is old step 25. RNO is now the same as Attachment 2, Step 17.
- Attachment 2, NOTE at Step 27: NOTE reminds users to use EOP Supplement "F" when changing loads on an EDG.
- Attachment 2, Step 31 RNO: This is old step 30. Same as Attachment 2, Steps 17 & 26.
- Attachment 5, 2nd NOTE before Step 1 New NOTE: Reminds users that Attachment 5 is intended to be performed in PARALLEL with the other actions in AOP-034.
- Attachment 5, Step 7.c: Old Step 7.c just stated to "STOP RCS Depressurization." New Step 7.c states: "CONTROL RCS Pressure to MAINTAIN BETWEEN 1950 psig to 1900 psig while performing Step 8."
- Attachment 5, Step 21 NOTE: New NOTE that defines the RCS Temperature and Pressure Control Bands that will be checked/established in Steps 21 through 24.
- Attachment 6, Step 1, New CAUTION Note: Addresses potential for EDGs pre-lube to be in progress as directed in the FOP.

<< 10 CFR 50.54(q) Screening Evaluation Form >>

**PART IV. Conclusion (Continued) (Changes not to be included in the 10 CFR 50.54(q) Evaluation)**

- New Step 1.a with RNO: Addresses potential that EDG "B" may, or may not, be running with the output breaker open.
- Attachment 7, Step 1: Revised step to read "CHECK Emergency Bus - DEENERGIZED FROM STOPPING AN EDG IN EPP-28 OR from Attachment 9, Deepwell Cooling OR Attachment 10, Rapid Start of Deepwell Pump "D".
- Attachment 7, Step 8 Note: Added information that Breaker 52/11A will be manipulated in Step 20.c. Intent is to help the users with prioritization and timing of when the Security Officer will be needed.
- Attachment 7, Step \*20 New NOTE along with new Step 20.a: Depending on what the Security Event was and depending on what caused the loss of power to the E-Busses, it is possible that MCC-3 may now be energized. IF the various MCC-3 powered loads indicate power is restored to MCC-3, THEN it is not necessary to dispatch an Operator with armed escort to operate Breaker 52/11A.
- Attachment 7, Step 22: New Step 22. Check for need to energize Emergency Buss E-1 from Off-Site source. IF E-1 it is already energized, THEN the actions in Step 23 (old Step 22) are not needed.
- Attachment 9: The intent of this attachment is for the non-rapid alignment and possible start of DW Pump "D" Steps, information and equipment nomenclature drawn from EPP-28, Loss of Ultimate Heat Sink, Attachment 6, Start and Loading of the EDGs, and OST-414, E-1 and E-2 Power Supply to Deepwell Pump D Functional Test. The design intent of Attachment 9 is that the threat is external to the Auxiliary Building AND will stay external to the Auxiliary Building.
- Attachment 10: The intent of this attachment is for the RAPID alignment and start of DW Pump "D". A rapid alignment and start would be required ONLY IF Security declares a HOSTILE ACTION on the Site.

Attachment 10 is invoked from either the Procedure Main Body, Step \*2, OR Attachment 2, Step \*2. Performance of this attachment works under the assumption that the selected EDG was given a forced start via the Blackout Sequence either just prior to or in parallel to the Auxiliary Building Operator receiving direction to perform the attachment.

Steps, information and equipment nomenclature drawn from Attachment 6, Start and Loading of the EDGs, and OST-414, E-1 and E-2 Power Supply to Deepwell Pump D Functional Test. Attachment 10 assumes that the threat may enter the Auxiliary Building, thus the 1st Level Hallway (Fire Detection Zones 11, 12 and 13) may become an active shooter area with the EDG Rooms still safe and protected.

## &lt;&lt; 10 CFR 50.54(q) Screening Evaluation Form &gt;&gt;

**PART IV. Conclusion (Continued) (Changes not to be included in the 10 CFR 50.54(q) Evaluation)**

- Attachment 11: New attachment concerning restoration after Deepwell Pump "D" Operations. The intent of Attachment 11, Restoration From Deepwell Pump "D" Operations, is to restore the EDG Service Water cooling flow path, the pump flow path, and the pump controls to the normal standby condition. Attachment 11 directly supports Main Body Step 7 RNO when the security threat is not verified as credible or has been nullified PRIOR to operation of Deepwell Pump "D". At the direction of the Shift Manager, this attachment may be used as part of the post-event restoration activities when the Emergency Busses are powered from Off-Site power with BOTH EDGs shutdown. As a minimum, it is expected that the ELECTRICAL PORTIONS of DW Pump "D" will need to be restored to the NORMAL, MCC-11 supply, alignment. IF DW Pump "D" is used for EDG cooling, THEN the applicable valves will need to be restored and the SW piping down stream of BOTH EDGs will need to be refilled to minimize the potential for a water hammer during a subsequent EDG start.
- Continuous Action Summary (CAS) Pages Revised as applicable to reflect the previously listed changes including new Continuous Actions in Attachments 9 & 10.

**Part V. Signatures:**

Preparer Name (Print): Lisa Hall	Preparer Signature: 	Date: 12/14/17
Reviewer Name (Print): Mathew Nelson	Reviewer Signature: Mathew Nelson PER TELECOM Post 12/14/17	Date: 12/14/17
Approver (EP Manager Name (Print): Dave Pitsley	Approver Signature: 	Date: 12/14/17
Approver (CFAM, as required) Name (Print): N/A	Approver Signature: N/A	Date: N/A

QA RECORD

**H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2**

**10 CFR 50.54(g) Effectiveness Evaluation Form**

## &lt;&lt; 10 CFR 50.54(q) Effectiveness Evaluation Form &gt;&gt;

Screening and Evaluation Number	Applicable Sites
EREG #: <u>2165200</u>	BNP <input type="checkbox"/>
	CNS <input type="checkbox"/>
	CR3 <input type="checkbox"/>
	HNP <input type="checkbox"/>
5AD #: <u>1974717</u>	MNS <input type="checkbox"/>
	ONS <input type="checkbox"/>
	RNP <input checked="" type="checkbox"/>
	GO <input type="checkbox"/>
Document and Revision AOP-034, Security Events, Revision 29	

**Part I. Description of Proposed Change:**

The following are the proposed changes for procedure AOP-034, Security Events, Revision 29:

- Purpose & Entry Conditions, Step 3 and Step 4: Step Added two new sections, major action categories and Time Critical/Time Sensitive Actions (TCAs/TSAs) in AOP-034.
- NOTES before Main Body, Step 1:
  - Reminds the users that Steps 1 through 9 should be performed in a concurrent or parallel manner.
  - Reminds the users that Steps 26 & 27 may need to be performed early or out of sequence during some Security Events.
- New NOTE before Step \*10: New NOTE concerns the use of the Security Radios kept in the Control Room. These radios may be used to monitor the Security related radio transmissions to assist with threat assessment. Radio monitoring is not required when a Security Officer is posted in the Control Room.
- Step \*10: Revised the "Threat Nullified" actions. Old actions were to "Return to Procedure & Step in effect." That would not be possible after an attack, the damage to the plant must be assessed. Even if the threat were nullified prior to tripping the reactor, the applicable action in Attachment 11 must be addressed. The new action directs the use of the following procedures and new attachment for the development of recovery plans:
  - EPEOF-10, Recovery Manager and Recovery Operations
  - AD-EP-ALL-0110, Recovery
  - AD-WC-ALL-0380, Outage Command and Control
  - AD-OP-ALL-0102, Operational Decision Making
  - Attachment 11, Restoration From Deepwell Pump "D" Operations

## &lt;&lt; 10 CFR 50.54(q) Effectiveness Evaluation Form &gt;&gt;

**Part I. Description of Proposed Change (Continued)**

- NOTE before Step 36: Repeat of the new NOTE before Step \*10 concerning Security Radios.
- Attachment 2, Table in Step 5: Revised the "Threat Nullified" actions. Old actions were to "Return to Procedure & Step in effect." That would not be possible after an attack, the damage to the plant must be assessed. The new action directs the use of the following procedures and new attachment for the development of recovery plans:
  - EPEOF-10, Recovery Manager and Recovery Operations
  - AD-EP-ALL-0110, Recovery
  - AD-WC-ALL-0380, Outage Command and Control
  - AD-OP-ALL-0102, Operational Decision Making
  - Attachment 11, Restoration From Deepwell Pump "D" Operations
- Attachment 2, NOTE before Step 6: New NOTE drawn from the AOP-034 Basis Document. Gives a BRIEF explanation of the decision logic used in Step 6. A form of this NOTE was used before in Old Step 5. Old Step 5 note has been deleted. This type of information needs to be given PRIOR to the PA announcements for ERO activation and Site Evacuation.
- Attachment 2, Step 6: Complete re-structure of step to allow for a possible Aircraft Attack during an outage OR IF the Time-To-Attack is rapidly changing. Re-Structure includes the following:
  - Steps 6.a checks for the plant configuration (non-outage or off-normal hours) with the 6.a RNO actions for an outage or if the time to attack is changing while working this step.
  - Steps 6.b through 6.h AER are the directions to evacuate the site with the ERO reporting to the Remote Emergency Response Facility.
  - Step 6.i through 6.n are entered from the Step 6.a RNO.
- Attachment 2, NOTE at Step 7: New NOTE concerns the use of the Security Radios kept in the Control Room. Same as the NOTE before Main Body Steps \*10 and 36.
- Attachment 2, NOTE before Step 20: New first NOTE is similar to the new NOTE before Step 6. Gives a quick explanation of the basis for sending the ERO to the ON-SITE facilities.
- Attachment 2, Step 33 (Old Step 32): New NOTE before Step 33. Reminds users of possible need for procedures EDMG-000 and EPSPA-05 use in parallel with AOP-041.
- Attachment 2, Step 36: This is old step 35. Replaced the Step 36.a RNO statement with the revised directions found in Main Body, Step 10 table, and the table in Step 5 of this attachment. Added a new bullet to step 36A RNO that states: "IF EPP-28 is not applicable, THEN GO TO Main Body, Step 5, to re-assess plant conditions." This RNO assumes that the Aircraft Attack is done BUT that the overall threat is not nullified.

Attachment 6, 10 CFR 50.54(q) Initiating Condition (IC) and Emergency Action Level (EAL) and EAL  
Bases Validation and Verification (V&V) Form , is attached (required for IC or EAL change)Yes ☐No ☒

**<< 10 CFR 50.54(q) Effectiveness Evaluation Form >>**

**Part II. Description and Review of Licensing Basis Affected by the Proposed Change:**

The proposed changes listed in AOP-034, Security Events, Revision 29, included a review of the following Robinson Nuclear Plant (RNP) emergency plan licensing basis documents:

- PLP-007, Robinson Emergency Response Plan (Revision 0, dated 1982)
- PLP-007, Robinson Emergency Plan (Revision 88)
- NRC Correspondence – May 11, 1983: Subject: NUREG-0737 Item III.A.2.1 – Emergency Plan Upgrade To Meet Rule (H.B. Robinson Unit 2)
- H.B. Robinson Steam Electric Plant, Unit No. 2, Updated Final Safety Analysis Report, Chapter 13.3

This review concludes that the proposed changes to AOP-034, Security Events, Revision 29, continues to meet the intent and requirements established in the documents listed above.

**Part III. Description of How the Proposed Change Complies with Regulation and Commitments.**

If the emergency plan, modified as proposed, no longer complies with planning standards in 10 CFR 50.47(b) and the requirements in Appendix E to 10 CFR Part 50, then ensure the change is rejected, modified, or processed as an exemption request under 10 CFR 50.12, Specific Exemptions, rather than under 10 CFR 50.54(q):

The following proposed changes in Revision 29 of AOP-034, Security Events, listed below, are administrative in nature. The first proposed change adds a Major Action Category and a Time Critical or Time Sensitive Actions Category under the Purpose Section. The Major Action Category provides an overview of major Operations activities within the procedure. The Time Critical or Time Sensitive Category provides information that SGI information is under the control of Plant Security Program. This section discusses that Security related Time Critical Actions (TCAs) are specifically excluded from RNP Operations TCAs and Time Sensitive Actions (TSAs) Program. The second proposed change is an informational note reminding the user that main body steps one through nine should be performed in a concurrent or parallel manner to ensure maximum personnel and plant safety. The third proposed change is an informational note reminding the user that EDMG-000, Extreme Damage Initial Actions and EPSPA-05, Unified Incident Command may need to be used in parallel with AOP-041, Response to Fire Event. These proposed changes are not associated with any of the 10CFR50.47(b) Planning Standards nor the requirements in Appendix E to 10 CFR Part 50. Additionally, these changes do not meet the criteria of editorial as provided in AD-EP-ALL-0602, Emergency Plan Change Screening And Effectiveness Evaluations 10 CFR 50.54(Q) and will be addressed in Part V of this Evaluation.

- Purpose & Entry Conditions, Step 3 and Step 4: Step Added two new sections, major action categories and Time Critical/Time Sensitive Actions (TCAs/TSAs) in AOP-034.
- NOTES before Main Body, Step 1: Reminds the users that Steps 1 through 9 should be performed in a concurrent or parallel manner.
- Attachment 2, Step 33 (Old Step 32): New NOTE before Step 33. Reminds users of possible need for procedures EDMG-000 and EPSPA-05 use in parallel with AOP-041.

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**Part III. Description of How the Proposed Change Complies with Regulation/Commitments (Continued)**

The following proposed changes in Revision 29 of AOP-034, Security Events, listed below, are enhancing informational notes being added to the procedure to remind the user to consider monitoring Security Radios located in the Control Room to assist with threat assessment. These informational notes also state that Operations monitoring of Security Radios may be discontinued when a Security Officer is posted in the Control Room. Although the use of radios for monitoring to assist the Control Room in threat assessments is not specifically stated in the planning standards nor in the requirements of 10 CFR Part 50, Appendix E, this early monitoring technique supports providing the Control Room with insight into the hostile action based event and allows the Control Room to assess the threat early on to be able to provide protective measures for personnel and plant safety. These enhancing informational notes continue to support and comply with 10 CFR 50.47(b)(10) and 10 CFR 50, Appendix E, Section IV. I.

- New NOTE before Step \*10: New NOTE concerns the use of the Security Radios kept in the Control Room. These radios may be used to monitor the Security related radio transmissions to assist with threat assessment. Radio monitoring is not required when a Security Officer is posted in the Control Room.
- NOTE before Step 36: Repeat of the new NOTE before Step \*10 concerning Security Radios.
- Attachment 2, NOTE at Step 7: New NOTE concerns the use of the Security Radios kept in the Control Room. Same as the NOTE before Main Body Steps \*10 and 36.

The following proposed change in Revision 29 of AOP-034, Security Events, listed below, is an enhancing informational note being added to the procedure that reminds the user that depending on the kind or type of threat, coupled with the expected arrival time of the threat, to consider the protective measure of making a Site PA announcement stating "All personnel seek shelter. Do not move about the plant." The informational note also reminds Operations personnel to consider making an accelerated notification to the NRC of the security threat and/or event classification, in an early or out of sequence manner. The action to make the accelerated call to the NRC ensures that RNP can maintain constant communication within a required time frame with the NRC Headquarter Operations Center during a hostile action based event. This accelerated call ensures prompt, accurate notification, and continuous sharing of information with Federal emergency response organizations. This proposed change does not impact nor affect the regulations; however, this proposed change is an enhancement to the procedure and continues to support 10 CFR 50.47(b)(6) along with 10 CFR Part 50, Appendix E, Section IV.E.9 and 10 CFR 50.47(b)(10) along with 10 CFR 50, Appendix E, Section IV. I.

- NOTES before Main Body, Step 1: Reminds the users that Steps 26 & 27 may need to be performed early or out of sequence during some Security Events.

## &lt;&lt; 10 CFR 50.54(q) Effectiveness Evaluation Form &gt;&gt;

**Part III. Description of How the Proposed Change Complies with Regulation/Commitments (Continued)**

The following proposed changes in Revision 29 of AOP-034, Security Events, listed below, are enhancing informational notes being added to the procedure that reminds Operations that there is ERO facility activation guidance in the event of an impending Security threat. The first proposed change provides information to Operations personnel that during off normal hours when few personnel are on-site or when the expected threat arrival is 30 minutes or greater, the Remote Emergency Response Facility is the appropriate facility to direct ERO personnel to for activation. The first and second proposed change provides information to Operations personnel that during normal working hours when less than 30 minutes is available prior to the security threat and during outages with large number of personnel on-site, the on-site facilities are the appropriate facility to direct ERO personnel to for activation. This on-site activation will minimize congestion of personnel trying to leave the site and will speed up activation of the facilities. These proposed changes do not impact nor affect the regulations; however, these proposed changes are enhancements to the procedure and continue to support and comply with 10 CFR 50.47 and 10 CFR 50, Appendix E.

- Attachment 2, NOTE before Step 6: New NOTE drawn from the AOP-034 Basis Document. Gives a BRIEF explanation of the decision logic used in Step 6. A form of this NOTE was used before in Old Step 5. Old Step 5 note has been deleted. This type of information needs to be given PRIOR to the PA announcements for ERO activation and Site Evacuation.
- Attachment 2, NOTE before Step 20: New first NOTE is similar to the new NOTE before Step 6. Gives a quick explanation of the basis for sending the ERO to the ON-SITE facilities.

The following proposed change in Revision 29 of AOP-034, Security Events, listed below is an enhancement being added to the procedure that provides clarifying actions for the Control Room to take in the event of a possible aircraft threat during an outage with a large population of people On-Site OR if the aircraft threat time-to-attack is rapidly changing. This action provides for a specific Plant PA announcement to be made for all non-emergency response personnel to assemble in the interior of the lower level Administration Building as a protective measure and for Emergency Response Organization (ERO) personnel to go to their on-site Emergency Response Facility as a protective measures and to support facility activation. Once all individuals are in their reported areas, further instructions and protective guidance will provided based on plant threat assessments at that time. This proposed change does not impact nor affect the regulations; however, this proposed change is an enhancement to the procedure and continues to support 10 CFR 50.47(b)(2) along with 10 CFR Part 50, Appendix E, Sections IV.D.1 & IV.D.3 and 10 CFR 50.47(b)(10) along with 10 CFR 50, Appendix E, Section IV. I.

- Attachment 2, Step 6: Complete re-structure of step to allow for a possible Aircraft Attack during an outage OR IF the Time-To-Attack is rapidly changing. Re-Structure includes the following:
  - o Steps 6.a checks for the plant configuration (non-outage or off-normal hours) with the 6.a RNO actions for an outage or if the time to attack is changing while working this step.
  - o Steps 6.b through 6.h AER are the directions to evacuate the site with the ERO reporting to the Remote Emergency Response Facility.
  - o Step 6.i through 6.n are entered from the Step 6.a RNO.

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**Part III. Description of How the Proposed Change Complies with Regulation/Commitments (Continued)**

The following proposed changes in Revision 29 of AOP-034, Security Events, listed below, are operator actions that request Operations personnel, at the appropriate time, to evaluate any damage from the attack and then to assist/act in the development of recovery plans utilizing work control procedures and plant recovery procedures. These actions further state to either exit the step when exit strategies/recovery plans are developed and approved or reassess plant conditions in accordance with other applicable Operational procedures. These proposed changes do not impact nor affect the regulations; however, these proposed changes are enhancements to the procedure and continue to support and comply with 10 CFR 50.47(b)(13).

- Step \*10: Revised the "Threat Nullified" actions. Old actions were to "Return to Procedure & Step in effect." That would not be possible after an attack, the damage to the plant must be assessed. Even if the threat were nullified prior to tripping the reactor, the applicable action in Attachment 11 must be addressed. The new action directs the use of the following procedures and new attachment for the development of recovery plans:
  - EPEOF-10, Recovery Manager and Recovery Operations
  - AD-EP-ALL-0110, Recovery
  - AD-WC-ALL-0380, Outage Command and Control
  - AD-OP-ALL-0102, Operational Decision Making
  - Attachment 11, Restoration From Deepwell Pump "D" Operations
- Attachment 2, Table in Step 5: Revised the "Threat Nullified" actions. Old actions were to "Return to Procedure & Step in effect." That would not be possible after an attack, the damage to the plant must be assessed. The new action directs the use of the following procedures and new attachment for the development of recovery plans:
  - EPEOF-10, Recovery Manager and Recovery Operations
  - AD-EP-ALL-0110, Recovery
  - AD-WC-ALL-0380, Outage Command and Control
  - AD-OP-ALL-0102, Operational Decision Making
  - Attachment 11, Restoration From Deepwell Pump "D" Operations
- Attachment 2, Step 36: This is old step 35. Replaced the Step 36.a RNO statement with the revised directions found in Main Body, Step 10 table, and the table in Step 5 of this attachment. Added a new bullet to step 36A RNO that states: "IF EPP-28 is not applicable, THEN GO TO Main Body, Step 5, to re-assess plant conditions." This RNO assumes that the Aircraft Attack is done BUT that the overall threat is not nullified.

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Part IV. Description of Emergency Plan Planning Standards, Functions and Program Elements Affected by the Proposed Change (Address each function identified in Attachment 4, 10 CFR 50.54(q) Screening Evaluation Form, Part IV of associated Screen):

**50.47(b)(2), Onsite Emergency Organization**

**PLANNING STANDARD:** On-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available, and the interfaces among various onsite response activities and offsite support and response activities are specified.

**PS FUNCTIONS:**

2. Process for timely augmentation of on-shift staff is established and maintained.

**The applicable supporting requirement which is described in 10 CFR Part 50, Appendix E, Sections IV. C:**

**C. Activation of Emergency Organization**

1. The entire spectrum of emergency conditions that involve the alerting or activating of progressively larger segments of the total emergency organization shall be described. The communication steps to be taken to alert or activate emergency personnel under each class of emergency shall be described. Emergency action levels (based not only on onsite and offsite radiation monitoring information but also on readings from a number of sensors that indicate a potential emergency, such as the pressure in containment and the response of the Emergency Core Cooling System) for notification of offsite agencies shall be described. The existence, but not the details, of a message authentication scheme shall be noted for such agencies. The emergency classes defined shall include: (1) Notification of unusual events, (2) alert, (3) site area emergency, and (4) general emergency. These classes are further discussed in NUREG-0654; FEMA-REP- 1.
2. By June 20, 2012, nuclear power reactor licensees shall establish and maintain the capability to assess, classify, and declare an emergency condition within 15 minutes after the availability of indications to plant operators that an emergency action level has been exceeded and shall promptly declare the emergency condition as soon as possible following identification of the appropriate emergency classification level. Licensees shall not construe these criteria as a grace period to attempt to restore plant conditions to avoid declaring an emergency action due to an emergency action level that has been exceeded. Licensees shall not construe these criteria as preventing implementation of response actions deemed by the licensee to be necessary to protect public health and safety provided that any delay in declaration does not deny the State and local authorities the opportunity to implement measures necessary to protect the public health and safety.

**Program Elements**

**Onsite Emergency Organization**

On-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available, and the interfaces among various onsite response activities and offsite support and response activities are specified.

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**Part IV. Description of Emergency Plan Planning Standards, Functions and Program Elements Affected by the Proposed Change (Continued)**

**50.47(b)(6), Emergency Communications**

**PLANNING STANDARD:** Provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.

**PS FUNCTIONS:**

2. Systems are established for prompt communication to emergency response personnel.

**The applicable supporting requirement which is described in 10 CFR Part 50, Appendix E, Section IV.E.9.**

E. Emergency Facilities and Equipment (in part)

Adequate provisions shall be made and described for emergency facilities and equipment, including:

9. At least one onsite and one offsite communications system; each system shall have a backup power source. All communication plans shall have arrangements for emergencies, including titles and alternates for those in charge at both ends of the communication links and the primary and backup means of communication. Where consistent with the function of the governmental agency, these arrangements will include:

- b. Provision for communications with Federal emergency response organizations.
- c. Provision for communications among the nuclear power reactor control room, the onsite technical support center, and the near-site emergency operations facility; and among the nuclear facility, the principal State and local emergency operations centers, and the field assessment teams.
- d. Provisions for communications by the licensee with NRC Headquarters and the appropriate NRC Regional Office Operations Center from the nuclear power reactor control room, the onsite technical support center, and the emergency operations facility. Such communications shall be tested monthly.

**Program Elements**

**Emergency Communications**

Provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.

1. The communication plans for emergencies shall include organizational titles and alternates for both ends of the communication links. Each organization shall establish reliable primary and backup means of communication for licensees, local, and State response organizations. Such systems should be selected to be compatible with one another. Plan includes:

- Provision for communications as needed with Federal emergency response organizations;
- Provisions for alerting or activating emergency personnel in each response organization; and

## &lt;&lt; 10 CFR 50.54(q) Effectiveness Evaluation Form &gt;&gt;

**Part IV. Description of Emergency Plan Planning Standards, Functions and Program Elements Affected by the Proposed Change (Continued)**

- Provision for communication by the licensee with NRC headquarters and NRC Regional Office Emergency Operations Centers and the licensee's near-site Emergency Operations Facility and radiological monitoring team assembly area.

**50.47(b)(10). Emergency Protective Actions****RISK SIGNIFICANT PLANNING STANDARD:**

A range of protective actions has been developed for the plume exposure pathway EPZ for emergency workers and the public. In developing this range of actions, consideration has been given to evacuation, sheltering, and, as a supplement to these, the prophylactic use of potassium iodide (KI), as appropriate. Evacuation time estimates have been developed by applicants and licensees. Licensees shall update the evacuation time estimates on a periodic basis. Evacuation time estimates and updates must be submitted to the NRC for review to confirm adequacy. Guidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place, and protective actions for the ingestion exposure pathway EPZ appropriate to the locale have been developed.

**RSPS Functions**

1. A range of public PARs (excluding KI) is available for implementation during emergencies.
2. ETEs for the population located in the plume exposure pathway EPZ are available to support formulation of PARs and have been provided to State and local governmental authorities.

**PS Functions**

1. KI is available for implementation as a protective action recommendation in those jurisdictions that chose to provide KI to the public.
2. A range of protective actions is available for emergency workers during emergencies, including hostile action events.

**Supporting Requirements: 10 CFR 50, Appendix E, Section IV. I****I. Onsite Protective Actions During Hostile Action**

By June 20, 2012, for nuclear power reactor licensees, a range of protective actions to protect onsite personnel during hostile action must be developed to ensure the continued ability of the licensee to safely shut down the reactor and perform the functions of the licensee's emergency plan.

**Program Elements****Protective Response**

A range of protective actions have been developed for the plume exposure pathway EPZ for emergency workers and the public. Guidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place, and protective actions for the ingestion exposure pathway EPZ appropriate to the locale have been developed.

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**Part IV. Description of Emergency Plan Planning Standards, Functions and Program Elements Affected by the Proposed Change (Continued)**

- Establish the means and time required to warn or advise onsite individuals and individuals who may be in areas controlled by the operator, including:
  - a. Employees not having emergency assignments;
  - b. Visitors;
  - c. Contractor and construction personnel; and
  - d. Other persons who may be in the public access areas on or passing through the site or owner controlled area.
- Make provisions for evacuation routes and transportation for onsite individuals to some suitable offsite location, including alternatives for inclement weather, high traffic density, and specific radiological conditions.
- Provide for radiological monitoring of people evacuated from the site.
- Provide for the evacuation of onsite non-essential personnel in the event of a Site or General Emergency and provide a decontamination capability at or near the monitoring point.
- Provide for a capability to account for all individuals onsite at the time of the emergency and ascertain the names of missing individuals within 30 minutes of the start of an emergency and account for all onsite individuals continuously thereafter.
- Make the following provisions for individuals remaining or arriving onsite during the emergency:
  - a. Individual respiratory protection;
  - b. Use of protective clothing; and
  - c. Use of radio-protective drugs, (e.g., individual thyroid protection)
- Establish a mechanism for recommending protective actions to the appropriate State and local authorities. These shall include Emergency Action Levels, corresponding to projected dose to the population-at-risk, in accordance with Appendix 1 and with the recommendations set forth in Tables 2.1 and 2.2 of the Manual of Protective Action Guides and Protective Actions for Nuclear Incidents (EPA-520/1-75-001). As specified in Appendix 1, prompt notification shall be made directly to the offsite authorities responsible for implementing protective measures within the plume exposure pathway Emergency Planning Zone.
- Plan contains time estimates for evacuation within the plume exposure EPZ.
- The organization's plans to implement protective measures for the plume exposure pathway shall include:
  - Maps showing evacuation routes, evacuation areas, preselected radiological sampling and monitoring points, relocation centers in host areas, and shelter areas; (identification of radiological sampling and monitoring points shall include the designators in Table J-1 or an equivalent uniform system described in the plan);
  - Maps showing population distribution around the nuclear facility. This shall be by evacuation areas (licensees shall also present the information in a sector format);
  - Means for notifying all segments of the transient and resident population;
- The bases for the choice of recommended protective actions from the plume exposure pathway during emergency conditions. This shall include expected local protection afforded in residential units or other shelter for direct and inhalation exposure, as well as evacuation time estimates.

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**Part IV. Description of Emergency Plan Planning Standards, Functions and Program Elements Affected by the Proposed Change (Continued)**

**50.47(b)(13): Recovery and Reentry Planning**

**PLANNING STANDARD:** General plans for recovery and reentry are developed.

**PS FUNCTION:** Plans for recovery and reentry are developed.

**Supporting Requirements:** None

**Program Elements**

Recover and Reentry Planning and Post-accident Operations

General plans for recovery and reentry are developed.

- Develop general plans and procedures for reentry and recovery and describe the means by which decisions to relax protective measures (e.g., allow reentry into an evacuated area) are reached. This process should consider both existing and potential conditions.
- Emergency Plan contains the position/title, authority and responsibilities of individuals who will fill key positions in the facility recovery organization. This organization includes technical personnel with responsibilities to develop, evaluate and direct recovery and reentry operations.
- Plan specifies means for informing members of the response organizations that a recovery operation is to be initiated, and of any changes in the organizational structure that may occur.
- Plan establishes a method for periodically estimating total population exposure.

## &lt;&lt; 10 CFR 50.54(q) Effectiveness Evaluation Form &gt;&gt;

## Part V. Description of Impact of the Proposed Change on the Effectiveness of Emergency Plan Functions:

The following proposed changes in Revision 29 of AOP-034, Security Events, listed below, are administrative in nature. The first proposed change adds a Major Action Category and a Time Critical or Time Sensitive Actions Category under the Purpose Section. The Major Action Category provides an overview of major Operations activities within the procedure. The Time Critical or Time Sensitive Category provides information that SGI information is under the control of Plant Security Program. This section discusses that Security related Time Critical Actions (TCAs) are specifically excluded from RNP Operations TCAs and Time Sensitive Actions (TSAs) Program. The second proposed change is an informational note reminding the user that main body steps one through nine should be performed in a concurrent or parallel manner to ensure maximum personnel and plant safety. The third proposed change is an informational note reminding the user that EDMG-000, Extreme Damage Initial Actions and EPSPA-05, Unified Incident Command may need to be used in parallel with AOP-041, Response to Fire Event. These changes were evaluated against PLP-007, Robinson Emergency Plan, Revision 88 and deemed to have no impact on the emergency plan nor the plan functions; therefore, these changes do not reduce the effectiveness of Robinson Emergency Plan.

- Purpose & Entry Conditions, Step 3 and Step 4: Step Added two new sections, major action categories and Time Critical/Time Sensitive Actions (TCAs/TSAs) in AOP-034.
- NOTES before Main Body, Step 1: Reminds the users that Steps 1 through 9 should be performed in a concurrent or parallel manner.
- Attachment 2, Step 33 (Old Step 32): New NOTE before Step 33. Reminds users of possible need for procedures EDMG-000 and EPSPA-05 use in parallel with AOP-041.

The following proposed changes in Revision 29 of AOP-034, Security Events, listed below are enhancing informational notes being added to the procedure to remind the user to consider monitoring the Security Radios located in the Control Room to assist with threat assessment. These changes were evaluated against PLP-007, Robinson Emergency Plan, Revision 88 and although various radios are listed in PLP-007, Section 6.1 Communication Systems, to be utilized as communication tools, there is no reference in the plan for the use of radios for monitoring a threat. Turning the Security radio on prior to a Security Officer reaching the control room will allow Control Room personnel to monitor the threat activities being reported by Security and therefore is an insightful protective measure to take for monitoring the potential threat. These proposed changes are enhancements to the procedure and have no impact on the emergency plan nor the plan functions; therefore, these changes do not reduce the effectiveness of Robinson Emergency Plan.

- New NOTE before Step \*10: New NOTE concerns the use of the Security Radios kept in the Control Room. These radios may be used to monitor the Security related radio transmissions to assist with threat assessment. Radio monitoring is not required when a Security Officer is posted in the Control Room.
- NOTE before Step 36: Repeat of the new NOTE before Step \*10 concerning Security Radios.
- Attachment 2, NOTE at Step 7: New NOTE concerns the use of the Security Radios kept in the Control Room. Same as the NOTE before Main Body Steps \*10 and 36.

<< 10 CFR 50.54(q) Effectiveness Evaluation Form >>

**Part V. Description of Impact of the Proposed Change on the Effectiveness of Emergency Plan Functions: (Continued)**

The following proposed change in Revision 29 of AOP-034, Security Events, listed below, is an enhancing informational note being added to the procedure that reminds the user that depending on the kind or type of threat, coupled with the expected arrival time of the threat, to consider the protective measure of making a Site PA announcement stating "All personnel seek shelter. Do not move about the plant." The informational note also reminds Operations personnel to consider making an accelerated notification to the NRC of the security threat and/or event classification, in an early or out of sequence manner. This note stating to make the accelerated call to the NRC earlier, if able, ensures that RNP can maintain constant communication within a required time frame with the NRC Headquarter Operations Center during a hostile action based event. This accelerated call ensures prompt, accurate notification, and continuous sharing of information with Federal emergency response organizations. These changes were evaluated against PLP-007, Robinson Emergency Plan, Revision 88 and deemed to be have no impact on the emergency plan nor the plan functions; therefore, these changes do not reduce the effectiveness of Robinson Emergency Plan.

- NOTES before Main Body, Step 1: Reminds the users that Steps 26 & 27 may need to be performed early or out of sequence during some Security Events.

The following proposed changes in Revision 29 of AOP-034, Security Events, listed below, are enhancing informational notes being added to the procedure that reminds Operations that there is ERO facility activation guidance in the event of an impending Security threat. The first proposed change provides information to Operations personnel that during off normal hours when few personnel are on-site or when the expected threat arrival is 30 minutes or greater, the Remote Emergency Response Facility is the appropriate facility to direct ERO personnel to for activation. The first and second proposed change provides information to Operations personnel that during normal working hours when less than 30 minutes is available prior to the security threat and during outages with large number of personnel on-site, the on-site facilities are the appropriate facility to direct ERO personnel to for activation. This on-site activation will minimize congestion of personnel trying to leave the site and will speed up activation of the facilities. Providing informational guidance to Operations for the appropriate location for ERO facility response in the event of an impending Security threat, continues to support the Operational decision making process to relocate site personnel or conduct a site evacuation in a timely manner which will allow for increased protection of plant personnel. A review of the proposed changes against PLP-007, Robinson Emergency Plan, resulted in no impact to the emergency plan nor the plan functions; therefore, these changes do not reduce the effectiveness of Robinson Emergency Plan.

- Attachment 2, NOTE before Step 6: New NOTE drawn from the AOP-034 Basis Document. Gives a BRIEF explanation of the decision logic used in Step 6. A form of this NOTE was used before in Old Step 5. Old Step 5 note has been deleted. This type of information needs to be given PRIOR to the PA announcements for ERO activation and Site Evacuation.
- Attachment 2, NOTE before Step 20: New first NOTE is similar to the new NOTE before Step 6. Gives a quick explanation of the basis for sending the ERO to the ON-SITE facilities.

## &lt;&lt; 10 CFR 50.54(q) Effectiveness Evaluation Form &gt;&gt;

**Part V. Description of Impact of the Proposed Change on the Effectiveness of Emergency Plan Functions: (Continued)**

The following proposed change in Revision 29 of AOP-034, Security Events, listed below, is an enhancement being added to the procedure that provides clarifying actions for the Control Room to take in the event of a possible aircraft threat during an outage with a large population of people on-site OR if the aircraft threat time-to-attack is rapidly changing. These actions provide for a specific Plant PA announcement to be made for all non-emergency response personnel to assemble in the interior of the lower level Administration Building as a protective measure and for Emergency Response Organization (ERO) personnel to go to their on-site Emergency Response Facility as a protective measures and to support facility activation. Once all individuals are in their reported areas, further instructions and guidance will provided based on plant threat assessments at that time. A review of the proposed changes against PLP-007, Robinson Emergency Plan, specifically Section 5.3.2, Onsite Emergency Response Organization, Section 5.3.5, Notification and Activation, and Section 5.4, Emergency Measures, resulted in no impact to the emergency plan nor the plan functions; therefore, these changes do not reduce the effectiveness of Robinson Emergency Plan.

- Attachment 2, Step 6: Complete re-structure of step to allow for a possible Aircraft Attack during an outage OR IF the Time-To-Attack is rapidly changing. Re-Structure includes the following:
  - o Steps 6.a checks for the plant configuration (non-outage or off-normal hours) with the 6.a RNO actions for an outage or if the time to attack is changing while working this step.
  - o Steps 6.b through 6.h AER are the directions to evacuate the site with the ERO reporting to the Remote Emergency Response Facility.
  - o Step 6.i through 6.n are entered from the Step 6.a RNO.

The following proposed changes in Revision 29 of AOP-034, Security Events are operator actions that request Operations personnel to evaluate any damage from the attack and then develop recovery plans based on the use of work control procedures and plant recovery procedures. These actions further state to either exit the step when exit strategies and recovery plans are developed/approved or reassess plant conditions in accordance with other applicable Operational procedures. These proposed changes continue to support the ERO in taking actions after an emergency to restore RNP and the surrounding environment, as nearly as possible, to its pre-emergency condition. These actions are pre-planned in order to minimize radiation exposure or other hazards to recovery personnel. A review of the proposed changes against PLP-007, Robinson Emergency Plan, specifically Section 5.7, Recovery, resulted in no impact to the emergency plan nor the plan functions; therefore, these changes do not reduce the effectiveness of Robinson Emergency Plan.

- Step \*10: Revised the "Threat Nullified" actions. Old actions were to "Return to Procedure & Step in effect." That would not be possible after an attack, the damage to the plant must be assessed. Even if the threat were nullified prior to tripping the reactor, the applicable action in Attachment 11 must be addressed. The new action directs the use of the following procedures and new attachment for the development of recovery plans:
  - o EPEOF-10, Recovery Manager and Recovery Operations
  - o AD-EP-ALL-0110, Recovery
  - o AD-WC-ALL-0380, Outage Command and Control
  - o AD-OP-ALL-0102, Operational Decision Making
  - o Attachment 11, Restoration From Deepwell Pump "D" Operations

**<< 10 CFR 50.54(q) Effectiveness Evaluation Form >>**

**Part V. Description of Impact of the Proposed Change on the Effectiveness of Emergency Plan Functions: (Continued)**

- Attachment 2, Table in Step 5: Revised the "Threat Nullified" actions. Old actions were to "Return to Procedure & Step in effect." That would not be possible after an attack, the damage to the plant must be assessed. The new action directs the use of the following procedures and new attachment for the development of recovery plans:
  - EPEOF-10, Recovery Manager and Recovery Operations
  - AD-EP-ALL-0110, Recovery
  - AD-WC-ALL-0380, Outage Command and Control
  - AD-OP-ALL-0102, Operational Decision Making
  - Attachment 11, Restoration From Deepwell Pump "D" Operations
- Attachment 2, Step 36: This is old step 35. Replaced the Step 36.a RNO statement with the revised directions found in Main Body, Step 10 table, and the table in Step 5 of this attachment. Added a new bullet to step 36A RNO that states: "IF EPP-28 is not applicable, THEN GO TO Main Body, Step 5, to re-assess plant conditions." This RNO assumes that the Aircraft Attack is done BUT that the overall threat is not nullified.

The proposed changes to AOP-034, Security Events, Revision 29, continue to provide assurance that the ERO has the ability and capability to:

- Respond to an emergency;
- Perform functions in a timely manner;
- Effectively identify and take measures to ensure protection of the public health and safety; and
- Effectively use response equipment and emergency response procedures.

## &lt;&lt; 10 CFR 50.54(q) Effectiveness Evaluation Form &gt;&gt;

Part VI. Evaluation Conclusion.			
Answer the following questions about the proposed change.			
1	Does the proposed change comply with 10 CFR 50.47(b) and 10 CFR 50 Appendix E?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
2	Does the proposed change maintain the effectiveness of the emergency plan (i.e., no reduction in effectiveness)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
3	Does the proposed change maintain the current Emergency Action Level (EAL) scheme?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
4	Choose one of the following conclusions:		
a	The activity does continue to comply with the requirements of 10 CFR 50.47(b) and 10 CFR 50, Appendix E, and the activity does not constitute a reduction in effectiveness or change in the current Emergency Action Level (EAL) scheme. Therefore, the activity can be implemented without prior NRC approval.	<input checked="" type="checkbox"/>	
b	The activity does not continue to comply with the requirements of 10 CFR 50.47(b) or 10 CFR 50 Appendix E or the activity does constitute a reduction in effectiveness or EAL scheme change. Therefore, the activity cannot be implemented without prior NRC approval.	<input type="checkbox"/>	
Part VII. Disposition of Proposed Change Requiring Prior NRC Approval			
Will the proposed change determined to require prior NRC approval be either revised or rejected?		Yes <input type="checkbox"/>	No <input type="checkbox"/>
If No, then initiate a License Amendment Request in accordance 10 CFR 50.90 and AD-LS-ALL-0002, Regulatory Correspondence, and include the tracking number:_____.			





Continuous Use

**AOP-034**

# **SECURITY EVENTS**

REVISION 29

Purpose and Entry Conditions

(Page 1 of 1)

**1. PURPOSE**

The purpose of this procedure is to provide instructions to respond to a threat to the facility from external security events.

**NOTE**

This procedure is NOT intended for a Bomb Threat. AD-SY-ALL-0250, Security Events, provides actions for a Bomb Threat.

**2. ENTRY CONDITIONS**

- a. On receipt of communication of a specific threat against RNP.
- b. On notification by Security Personnel that an actual attack on the facility is in progress.

**3. MAJOR ACTION CATEGORIES**

- a. Dispatch assigned operators, determine threat relevance, make notifications.
- b. Perform required actions depending on kind or type of threat including either sheltering people OR a Site Evacuation if time allows.
- c. Stabilize the plant depending on the type of attack couple with the impact (damage) from the attack.

**4. TIME CRITICAL OR TIME SENSITIVE ACTIONS**

AOP-034 contains Time Constrained Actions as listed in the RNP Security Plan. Security related time-constrained actions are assumed to be Safeguards Information (SGI) under the control of the Plant Security Program. The Security Program already identifies, tracks, and validates these actions. Therefore, security related TCAs are specifically excluded from the RNP Operations TCA/TSA Program.

- END -

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

\*\*\*\*\*

CAUTION

Deepwell Pump "D" should not be started while the selected E-Buss is aligned to an Off-Site Power feed. DW Pump "D" will trip from loss of power IF the selected E-Buss loses power. DW Pump "D" may be started from the EDG once the EDG is providing power to the E-Buss.

\*\*\*\*\*

NOTE

- Steps 1 through 9 should be performed in a concurrent or parallel manner to ensure the maximum personnel and plant safety.
- Depending on the kind or type of threat coupled with the expected arrival time of the threat, it may be prudent to perform the necessary Site PA announcements from Step 26 and the NRC Accelerated Call in Step 27 in an early or out of sequence manner.

**1. DISPATCH Assigned Operators:**

- a. DISPATCH the Auxiliary Building Operator(s) To:
  - 1) Obtain The Pre-staged Copies Of AOP-034 and EPP-28
  - 2) PERFORM the AOP-034 Attachment 9, Deepwell Cooling, ELECTRICAL ALIGNMENTS without starting DW Pump "D"
  - 3) STAND BY in EDG Room "B"
- b. CHECK plant status - MODE 5  
OR 6
- b. GO TO Step 2.
- c. DISPATCH CCW Pump Room Operator to the CCW Pump Room with a copy of EPP-28

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

NOTE

Steps 2, 3 and 4 are pre-planned conditional action contingency steps to address rapidly breaking events. (REF: NCR 1947438)

\* 2.

**CHECK That Security Called Via The Dedicated Line To Report A HOSTILE ACTION - THEN PERFORM The Following:**

- ACTUATE Control Room Door Disable pushbutton
- TRIP the Reactor AND GO TO EOP-E-0, Reactor Trip Or Safety Injection, while CONTINUING with this procedure.
- ENSURE the SDAFW Pump is running with valves properly aligned.
- IF EDG "B" is either OPERABLE OR AVAILABLE, THEN OPEN the NORMAL POWER supply breaker to EMERGENCY BUSS E-2, BKR 52/28B, 480V BUS E2 MAIN. OBSERVE that Emergency Diesel Generator "B" STARTS AND ASSUMES Blackout Loads via sequencer.
- DIRECT the Auxiliary Building Operator to perform a RAPID START of Deep Well Pump "D" IAW Attachment 10, Rapid Start Of Deepwell Pump "D", with alignment to the EDG that was started above.

IF at any time Security calls via the Dedicated Line to report a HOSTILE ACTION, THEN PERFORM the actions in Step 2.

- IF EDG "B" is neither OPERABLE NOR AVAILABLE, THEN OPEN the NORMAL POWER supply breaker to EMERGENCY BUSS E-1, BKR 52/18B, 480V BUS E1 MAIN. OBSERVE that Emergency Diesel Generator "A" STARTS AND ASSUMES Blackout Loads via sequencer.

## STEP

## ACTION/EXPECTED RESPONSE

## RESPONSE NOT OBTAINED

- \* 3. **CHECK There Is A VERIFIED CREDIBLE THREAT With GREATER THAN 5 Minutes But LESS THAN 10 Minutes Until Threat Arrival - THEN PERFORM The Following:**

- PLACE the EDG "A" and EDG "B" RTGB Switches in the START position AND CHECK that the DIESEL START White Lights are ILLUMINATED.
- DIRECT the Auxiliary Building Operator to REVIEW BOTH Attachment 9, Deepwell Cooling, AND Attachment 10, Rapid Start Of Deepwell Pump "D", for possible Deep Well Pump "D" operation.

IF at any time there is a VERIFIED CREDIBLE THREAT with GREATER THAN 5 minutes but LESS THAN 10 minutes until threat arrival, THEN PERFORM the actions in Step 3.

## STEP

## ACTION/EXPECTED RESPONSE

## RESPONSE NOT OBTAINED

\* 4.

**CHECK There Are Indications That Off-site Power To EITHER Emergency Buss Has Been COMPROMISED OR LOST Due To The Security Threat - THEN PERFORM the following:**

- ACTUATE Control Room Door Disable pushbutton.
- TRIP the Reactor AND GO TO EOP-E-0, Reactor Trip Or Safety Injection, while CONTINUING with this procedure.
- ENSURE the SDAFW Pump is running with valves properly aligned.
- OPEN the NORMAL POWER supply breakers to BOTH EMERGENCY BUSSES, BKR 52/18B, 480B BUS E1 MAIN, AND BKR 52/28B, 480V BUS E2 MAIN. OBSERVE that both Emergency Diesel Generators START AND ASSUME Blackout Loads via sequencer.
- DIRECT the Auxiliary Building Operator to OPERATE Deep Well Pump "D" IAW Attachment 9, Deepwell Cooling.

IF at any time there are indications that Off-Site power to EITHER Emergency Buss has been COMPROMISED OR LOST due to the Security Threat, THEN PERFORM the actions in Step 4.

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

NOTE

The accelerated call made to the NRC in Step 27 should be initiated within 15 minutes of discovery of an imminent threat or attack against the station. This accelerated call will not be allowed to interfere with plant or personnel safety or physical security response.

- \* 5. **Document relevant times in the table below:**

Contact Time			
Contact Source			
Time of expected Attack / Impact (T-0)			
Time Five Minutes prior to expected Attack / Impact (T-5)			
Time 30 Minutes prior to expected Attack / Impact (T-30)			
Time Five Minutes after expected Attack / Impact (T+5)			

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

NOTE

Threat messages received from the NRC are authenticated using the code provided daily during the NRC plant status update call. The codes are valid for 24 hours from 0800 to 0800 the following day.

6. **PERFORM Action For Applicable Threat:**

THREAT	ACTION
Attack In Progress	GO TO Step 9.
Threat Message Received from Plant Security <b>AND / OR</b> Threat Message Received from NRC <u>AND</u> Authentication Code Confirmed	GO TO Step 8.
All Other Threat Messages Received	Perform Attachment 1, Credibility Evaluation, prior to continuing.

7. **CHECK Threat Status From Attachment 1 - VERIFIED CREDIBLE**

PERFORM the applicable actions in Attachment 11, Restoration From Deepwell Pump "D" Operations.

RETURN TO procedure and Step in effect.

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

8. **NOTIFY Plant Personnel Of Impending Attack**

- a. PLACE VLC Switch in EMERG position
- b. ANNOUNCE available information:
  - Nature of Attack
  - Expected time of Attack
- c. REPEAT Announcement
- d. PLACE VLC Switch in NORM position

9. **CHECK Threat - AIRCRAFT ATTACK**

Go to step 10.

- **GO TO Attachment 2, Aircraft Attack**

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

NOTE

- Action sequences may repeat while awaiting the next decision point. Actions should be verified to be complete or in progress during subsequent passes.
- PA Announcements may be repeated or withheld as directed by SM /CRS
- Consider monitoring the Security Radios located in the Control Room to assist with threat assessment. Operations monitoring of Security Radios may be discontinued when a Security Officer is posted in the Control Room.

**\*10. PERFORM ACTION For The  
Conditions Indicated:**

Condition / Time relative to expected Attack	ACTION
Attack In Progress or Less than Five minutes prior to expected Attack (T-5)	GO TO Step 20.
Less than 30 minutes prior to expected Attack (T-30)	OBSERVE the NOTE before Step 18 <u>AND</u> GO TO Step 18.
Greater than 30 minutes prior to expected Attack (T-30)	GO TO Step 11.
Threat has been Nullified	<p><b>1.</b> NOTIFY NRC within five minutes AFTER expected Attack time (T+5) and Attack has <u>NOT</u> occurred.</p> <p><b>2.</b> REQUEST Plant Staff EVALUATE any damage from the attack <u>AND THEN</u> DEVELOP RECOVERY PLANS based on the following procedures:</p> <ul style="list-style-type: none"> <li>• EPEOF-10, Recovery Manager And Recovery Operations;</li> <li>• AD-EP-ALL-0110, Recovery</li> <li>• AD-WC-ALL-0380, Outage Command and Control, the sections concerning Emergent Issues Management and Communications;</li> <li>• AD-OP-ALL-0102, Operational Decision Making;</li> <li>• AOP-034, Attachment 11, Restoration From Deepwell Pump "D" Operations.</li> </ul> <p><b>3. WHEN</b> the exit strategies and Recovery Plans are developed and approved, <b>THEN</b> EXIT to the approved Recovery Plans.</p>

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
11.	<b>CONTACT Plant General Manager To Discuss The Event And Determine The Need For Plant Shutdown / Site Evacuation</b>	CONTACT Station Duty Manager.
a.	CHECK Plant Shutdown - DIRECTED	a. GO TO Step 12.
b.	TRIP the Reactor <u>AND</u> GO TO EOP-E-0, Reactor Trip Or Safety Injection while CONTINUING WITH this procedure	
12.	<b>NOTIFY The Fire Brigade Incident Commander Of The Nature Of The Threat</b>	
13.	<b>INITIATE Call Out For Selected Support Personnel Using Attachment 3, Offsite Fire Brigade Notification for Security Events</b>	
14.	<b>IMPLEMENT EALs</b>	
15.	<b>CHECK Availability And Expedite Return To Service Of Any Of The Following Equipment:</b>	
	<ul style="list-style-type: none"> <li>Emergency Diesel Generators</li> <li>Safeguards Systems</li> <li>DSDG</li> </ul>	
16.	<b>FILL The Following Tanks To Maximum Capacity Allowed By Procedure</b>	
	<ul style="list-style-type: none"> <li>CST</li> <li>PWST</li> </ul>	
17.	<b>CHECK Preemptive Evacuation - DESIRED</b>	GO TO Step 33.

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

NOTE

When moving personnel about the plant to respond to events, such as requesting the Emergency Communicator to the Control Room, consideration should be given to the type of threat, possible routes, and whether a Security escort is necessary.

18. **PERFORM Site Evacuation AND  
DIRECT ERO Personnel to  
Remote Facilities**

- a. PLACE VLC Switch in EMERG Position
- b. PLACE AND HOLD Evacuation Alarm Switch to SITE Position for 5 Seconds
- c. PERFORM the following PA Announcement:

**"Security Announcement: Plant Attack Expected."**

**"ALL Non-Essential Personnel EVACUATE the Site"**

**"ALL ERO Personnel not performing plant actions GO TO the Remote Emergency Response Facility"**

- d. PLACE AND HOLD Evacuation Alarm Switch to SITE Position for 5 Seconds
- e. REPEAT Announcement
- f. PLACE VLC Switch in NORM Position

19. **CHECK Time To Anticipated  
Attack- LESS THAN 30 MINUTES**

GO TO Step 33.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
20.	<b>CHECK Trip Breakers - CLOSED</b>	GO TO step 21.
	a. TRIP the Reactor <u>AND</u> GO TO EOP-E-0, Reactor Trip Or Safety Injection while CONTINUING WITH this procedure	
	b. CHECK SDAFW Pump - RUNNING	b. ATTEMPT to start the SDAFW Pump from the RTGB.  IF the SDAFW Pump is <u>NOT</u> available, <u>THEN</u> PERFORM the applicable actions found in OP-402, Auxiliary Feedwater System, while <u>NOT</u> placing people in harms way.
21.	<b>ACTUATE CONTROL ROOM DOOR DISABLE Pushbutton</b>	
22.	<b>CHECK Control Room Ventilation System - ALIGNED FOR EMERGENCY RECIRCULATION</b>	ALIGN ventilation:  a. START CONT RM AIR CLEANING, HVE-19A <u>OR</u> HVE-19B.  b. PLACE CONT RM AIR EXHAUST, HVE-16 switch to STOP.  c. CHECK the following dampers CLOSED:  • CR-D1A-SA, CR EXH DMPR  • CR-D1B-SB, CR EXH DMPR  d. CLOSE the following dampers:  • OUTSIDE AIR DAMPER "A"  • OUTSIDE AIR DAMPER "B"
23.	<b>INITIATE Call Out For Selected Support Personnel Using Attachment 3, Offsite Fire Brigade Notification for Security Events</b>	

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

24. **IMPLEMENT EALs**25. **CHECK Attack Status - IN  
PROGRESS Or IMMINENT (Less  
Than 5 minutes)**

GO TO Step 32.

26. **PERFORM PA Announcement:**

- a. PLACE VLC Switch in EMERG  
Position
- b. PERFORM the Following  
Announcement:

**"ALL Personnel Seek Shelter  
DO NOT Move about the Plant"**

- c. REPEAT PA Announcement
- d. PLACE VLC Switch in NORM  
Position

NOTE

This accelerated call shall not be allowed to interfere with plant or personnel safety or physical security response.

27. **NOTIFY NRC Via NRC ENS  
Phone:**

"This is Robinson Nuclear Plant"

"A Land / Water Attack is Imminent / In Progress / Repelled"

"The event has been classified as \_\_\_\_\_" (Only if EP Classification  
has been performed)

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

NOTE

- The intent of Step 28 is for the Emergency Busses to be energized from the EDGs when the time to attack is less than 5 minutes.
- EOP Supplement F, EDG Capability Load List, should be used as a reference while starting and stopping E-Buss loads being carried by an EDG.

**28. CHECK Emergency Busses -  
ENERGIZED BY EDGs**

START And LOAD the EDGs using Attachment 6, Start and Loading of the EDGs while CONTINUING WITH this procedure.

NOTE

- Attachment 7 is entered when the Emergency Busses that were energized from the EDGs become de-energized for reasons other than this procedure or EPP-28 actions.
- The intent of Attachment 7 is to restore power to the Emergency Busses when EOP-ECA-0.0, LOSS OF ALL AC POWER actions can not be performed or are unsuccessful in energizing an Emergency Bus due to the Security Event in progress.

**\*29. CHECK Emergency Busses -  
REMAINED ENERGIZED BY EDGs**

IF Power is lost to the Emergency Busses after alignment to the EDGs, THEN ATTEMPT to restore power to Emergency Busses using Attachment 7, Energizing the Emergency Busses from an Offsite Source.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
*30.	<b>DETERMINE EPP-28 Applicability:</b>	
	a. Reactor is SHUTDOWN <ul style="list-style-type: none"> <li>Previously shutdown prior to AOP-034 entry</li> </ul> <p style="text-align: center;"><u>OR</u></p> <ul style="list-style-type: none"> <li>Tripped / Shutdown as part of AOP-034 actions</li> </ul>	a. <u>WHEN</u> The Reactor is EITHER SHUTDOWN <u>OR</u> TRIPPED while in this procedure, <u>THEN</u> PERFORM an APPLICABILITY DETERMINATION for EPP-28, Loss Of Ultimate Heat Sink.  Go To Step 31.
	b. CHECK either event - IN PROGRESS <ul style="list-style-type: none"> <li>Total loss of SW</li> </ul> <p style="text-align: center;"><u>OR</u></p> <ul style="list-style-type: none"> <li>Loss of Lake Robinson Dam Integrity</li> </ul>	b. <u>IF</u> EITHER a Loss of all SW <u>OR</u> Dam Integrity occurs, <u>THEN</u> PERFORM EPP-28, Loss Of Ultimate Heat Sink, while continuing with this procedure.  Go To Step 31.
	c. PERFORM EPP-28, Loss Of Ultimate Heat Sink, while continuing with this procedure	
31.	<b>CONTACT Security To Check Status Of Law Enforcement Personnel Called In</b>	
32.	<b>CHECK RCS Temperature - GREATER THAN 350°F</b>	GO TO Step 33.
	a. INITIATE Cooldown using Attachment 5, RCS Cooldown while continuing.	
33.	<b>CHECK Original Threat Notification Source - WAS NRC</b>	ESTABLISH continuous communication with the NRC HQ Operations Center at the earliest practical time.
34.	<b>CHECK Fuel Movement - STOPPED</b>	STOP Fuel Movement.
35.	<b>CHECK CV Closure - ESTABLISHED</b>	<u>WHEN</u> conditions allow, <u>THEN</u> IMPLEMENT CV Closure.

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

NOTE

Consider monitoring the Security Radios located in the Control Room to assist with threat assessment. Operations monitoring of Security Radios may be discontinued when a Security Officer is posted in the Control Room.

36. **MAINTAIN Contact With Security  
For Updates On The Threat**

NOTE

Consideration should be given to the location and type of threat when attempting to contact personnel so their safety is not compromised.

37. **CONTACT Shift Personnel For  
Accountability And Sharing Of  
Pertinent Information Regarding  
The Threat**

\*\*\*\*\*

CAUTION

The decision to either bypass or delay the performance of EOP and/or AOP actions due to the Security Situation may necessitate the invoking of 10CFR50.54x as described in AD-OP-ALL-1000, Conduct Of Operations.

\*\*\*\*\*

38. **CONSIDER The Following For  
Non-Vital Area Actions:**

- NOT performing EOP/AOP Actions in non-vital areas
- Limiting personnel actions to areas within the vital areas
- Where access to non-vital areas is required, contact Security to determine if an armed escort is available and to provide expected movement of the operator

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

39. **CONSIDER The Need To  
Pre-Stage Off-Site Assistance At  
A Location Nearby**

- Ambulance
- Fire Trucks

40. **CHECK TS For Applicable Action  
Statements**

41. **RETURN TO Step 10**

- END -

Attachment 1Credibility Evaluation

(Page 1 of 2)

NOTE

IF at any time during performance of this attachment verification of the threat is received from the NRC with the proper Authentication Code OR Plant Security, THEN the threat is considered credible.

1. **IF the caller is from a Federal or State Agency other than the NRC OR the NRC Authentication Code was NOT valid, THEN PERFORM the following:**
  - a. OBTAIN the following information from the caller:
    - Name
    - Position/Title
    - Estimated time event will occur
  - b. CONTACT the NRC via NRC ENS phone AND request assistance for verification of threat credibility.
2. **MAINTAIN continuous communication with multiple aircraft threat notification agencies until the NRC acknowledges that the NRC will provide threat information to RNP.**
3. **IF the caller is NOT from a Federal OR State Agency, THEN ATTEMPT to ascertain the following information via questioning the caller:**
  - Is the caller rational OR sober?
  - Ask the caller when the event will occur.
  - Does the caller know the specifics concerning the plant?
  - Ask the caller why they are making the call.
  - As a final question, ask the caller his/her name.
4. **IF the call is received directly in the Control Room, THEN NOTIFY Security that a threat call has been received.**

Attachment 1Credibility Evaluation

(Page 2 of 2)

5. **If time permits, THEN CONTACT the Plant General Manager or On-Call Manager for consultation.**
6. **WHEN a determination for credibility is made, THEN RETURN to the Main Body, Steps 6 and 7.**

- END -

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 2Aircraft Attack

(Page 1 of 20)

NOTE

- EDMG-000, Extreme Damage Initial Actions, provides guidance for the SEC to assess results and ensure initial response for an extreme damage initiating event following relocation of designated shift personnel due to an aircraft attack.
- Action sequences may repeat while awaiting the next decision point. Actions should be verified to be complete or in progress during subsequent passes.
- PA Announcements may be repeated or withheld as directed by SM/CRS.

1. **ESTABLISH And MAINTAIN Communications:**

- |  |  |
|--|--|
| a. CHECK original threat source - NRC                                | a. ESTABLISH continuous communication with the NRC HQ Operations Center at the earliest practical time.                                  |
| b. CHECK NRC Acknowledges NRC will provide threat information to RNP | b. MAINTAIN continuous communication with original threat notification source until NRC Acknowledges it will provide threat information. |

## STEP

## ACTION/EXPECTED RESPONSE

## RESPONSE NOT OBTAINED

Attachment 2

Aircraft Attack

(Page 2 of 20)

NOTE

Steps 2, 3 and 4 are pre-planned conditional action contingency steps to address rapidly breaking events. (REF: NCR 1947438)

\* 2.

**CHECK That Security Called Via The Dedicated Line To Report A HOSTILE ACTION - THEN PERFORM The Following:**

- ACTUATE Control Room Door Disable pushbutton
- TRIP the Reactor AND GO TO EOP-E-0, Reactor Trip Or Safety Injection, while CONTINUING with this procedure.
- ENSURE the SDAFW Pump is running with valves properly aligned.
- IF EDG "B" is either OPERABLE OR AVAILABLE, THEN OPEN the NORMAL POWER supply breaker to EMERGENCY BUSS E-2, BKR 52/28B, 480V BUS E2 MAIN. OBSERVE that Emergency Diesel Generator "B" STARTS AND ASSUMES Blackout Loads via sequencer.
- DIRECT the Auxiliary Building Operator to perform a RAPID START of Deep Well Pump "D" IAW Attachment 10, Rapid Start Of Deepwell Pump "D", with alignment to the EDG that was started above.

IF at any time Security calls via the Dedicated Line to report a HOSTILE ACTION, THEN PERFORM the actions in Step 2.

- IF EDG "B" is neither OPERABLE NOR AVAILABLE, THEN OPEN the NORMAL POWER supply breaker to EMERGENCY BUSS E-1, BKR 52/18B, 480V BUS E1 MAIN. OBSERVE that Emergency Diesel Generator "A" STARTS AND ASSUMES Blackout Loads via sequencer.

## STEP

## ACTION/EXPECTED RESPONSE

## RESPONSE NOT OBTAINED

Attachment 2

Aircraft Attack

(Page 3 of 20)

- \* 3. **CHECK There Is A VERIFIED CREDIBLE THREAT With GREATER THAN 5 Minutes But LESS THAN 10 Minutes Until Threat Arrival - THEN PERFORM The Following:**

- PLACE the EDG "A" and EDG "B" RTGB Switches in the START position AND CHECK that the DIESEL START White Lights are ILLUMINATED.
- DIRECT the Auxiliary Building Operator to REVIEW BOTH Attachment 9, Deepwell Cooling, AND Attachment 10, Rapid Start Of Deepwell Pump "D", for possible Deep Well Pump "D" operation.

IF at any time there is a VERIFIED CREDIBLE THREAT with GREATER THAN 5 minutes but LESS THAN 10 minutes until threat arrival, THEN PERFORM the actions in Step 3.

## STEP

## ACTION/EXPECTED RESPONSE

## RESPONSE NOT OBTAINED

Attachment 2

Aircraft Attack

(Page 4 of 20)

- \* 4. **CHECK There Are Indications That Off-site Power To EITHER Emergency Buss Has Been COMPROMISED OR LOST Due To The Security Threat - THEN PERFORM the following:**

- ACTUATE Control Room Door Disable pushbutton.
- TRIP the Reactor AND GO TO EOP-E-0, Reactor Trip Or Safety Injection, while CONTINUING with this procedure.
- ENSURE the SDAFW Pump is running with valves properly aligned.
- OPEN the NORMAL POWER supply breakers to BOTH EMERGENCY BUSSES, BKR 52/18B, 480B BUS E1 MAIN, AND BKR 52/28B, 480V BUS E2 MAIN. OBSERVE that both Emergency Diesel Generators START AND ASSUME Blackout Loads via sequencer.
- DIRECT the Auxiliary Building Operator to OPERATE Deep Well Pump "D" IAW Attachment 9, Deepwell Cooling.

IF at any time there are indications that Off-Site power to EITHER Emergency Buss has been COMPROMISED OR LOST due to the Security Threat, THEN PERFORM the actions in Step 4.

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 2Aircraft Attack

(Page 5 of 20)

**\* 5. PERFORM ACTION for conditions indicated:**

Condition / Time Relative To Expected Impact	ACTION
Less than Five minutes to expected Attack (T-5) <b>OR</b> Impact has Occurred	GO TO Step 19
Less than 30 minutes prior to expected Impact (T-30)	GO TO Step 18
Greater than 30 Minutes to expected Impact (T-30)	GO TO Step 6
Threat has been Nullified	<p><b>1.</b> NOTIFY NRC within five minutes AFTER expected Attack time (T+5) <u>AND</u> Attack has <u>NOT</u> occurred.</p> <p><b>2.</b> REQUEST Plant Staff EVALUATE any damage from the attack <u>AND THEN</u> DEVELOP RECOVERY PLANS based on the following procedures:</p> <ul style="list-style-type: none"> <li>• EPEOF-10, Recovery Manager And Recovery Operations;</li> <li>• AD-EP-ALL-0110, Recovery</li> <li>• AD-WC-ALL-0380, Outage Command and Control, the sections concerning Emergent Issues Management and Communications;</li> <li>• AD-OP-ALL-0102, Operational Decision Making;</li> <li>• AOP-034, Attachment 11, Restoration From Deepwell Pump "D" Operations.</li> </ul> <p><b>3. WHEN</b> the exit strategies and Recovery Plans are developed and approved, <b>THEN</b> EXIT to the approved Recovery Plans.</p>
Updated Estimated Time of Impact Obtained	<p>Make PA Announcement using VLC to Notify Plant Personnel of Update Impact time.</p> <p>GO TO Step 1.</p>

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 2Aircraft Attack

(Page 6 of 20)

NOTE

The ERO Facilities should be activated using the following guidance:

- During off normal hours when few personnel are on-site **or** when the expected threat arrival is 30 minutes or greater, the REMOTE Emergency Response Facility should be activated.
- During normal working hours when less than 30 minutes is available prior to the arrival of the aircraft **and** during outages with large number of personnel on-site, the local (On-Site) facilities should be activated.

6. **PERFORM Site Evacuation AND  
DIRECT ERO Personnel to the  
APPLICABLE Emergency  
Response Facilities (ERFs):**

a. Plant configuration is:

- NOT in an outage

OR

- This event is occurring during off normal hours

a. IF the plant is in an outage (large population of extra people on site)

OR

IF this event is occurring during normal work hours with time to attack now less than 30 minutes; THEN PERFORM Steps 6.i through 6.n.

b. PLACE VLC Switch in EMERG Position

c. PLACE And HOLD Evacuation Alarm Switch to SITE Position for 5 Seconds

(CONTINUED NEXT PAGE)

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 2Aircraft Attack

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## 6. (CONTINUED)

d. PERFORM PA Announcement:

**"Security Announcement: Aircraft Attack Expected at time \_\_\_\_."****"ALL Non-Essential Personnel EVACUATE the Site"****"ALL ERO Personnel not performing plant actions GO TO the Remote Emergency Response Facility"**e. PLACE And HOLD Evacuation  
Alarm Switch to SITE Position  
for 5 Secondsf. REPEAT Announcement in  
Step 6.dg. PLACE VLC Switch in NORM  
Positionh. Observe the NOTE before  
Step 7 AND CONTINUE with  
Step 7i. PLACE VLC Switch in EMERG  
Positionj. PLACE And HOLD Evacuation  
Alarm Switch to SITE Position  
for 5 Seconds

(CONTINUED NEXT PAGE)

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 2Aircraft Attack

(Page 8 of 20)

## 6. (CONTINUED)

k. PERFORM PA Announcement:

**"Security Announcement: Aircraft Attack Expected at time \_\_\_\_."****"ALL ERO Personnel not performing plant actions GO TO your assigned ON-SITE Emergency Response Facility."****"ALL remaining personnel assemble in the interior of the Lower Level Admin. Building."**l. PLACE And HOLD Evacuation  
Alarm Switch to SITE Position  
for 5 Secondsm. REPEAT the announcement in  
Step 6.kn. PLACE VLC Switch in NORM  
Position

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 2Aircraft Attack

(Page 9 of 20)

NOTE

Consider monitoring the Security Radios located in the Control Room to assist with threat assessment. Operations monitoring of Security Radios may be discontinued when a Security Officer is posted in the Control Room.

7. **CONTACT Security for  
PERFORMANCE of the following  
items:**

- |   |  |
|---|--|
| a. CHECK Notification Status -<br>SECURITY AWARE OF<br>THREAT   | a. NOTIFY Security of the status of<br>the threat.   |
| b. NOTIFY Security To Open PA<br>Gates For Evacuation While<br>Continuing To Defend Site  |  |
| c. INITIATE Call Out For Selected<br>Support Personnel Using<br>Attachment 3, Offsite Fire<br>Brigade Notification for Security<br>Events | c. <u>IF</u> Security reports they are<br>unable to support performance<br>of Attachment 3, <u>THEN</u> DIRECT<br>an available (extra) person in the<br>Control Room to PERFORM<br>Attachment 3. |

8. **IMPLEMENT EALs**

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 2Aircraft Attack

(Page 10 of 20)

9. **CHECK Control Room Ventilation System - ALIGNED FOR EMERGENCY RECIRCULATION**

ALIGN Ventilation:

- a. START CONT RM AIR CLEANING, HVE-19A OR HVE-19B.
- b. PLACE CONT RM AIR EXHAUST, HVE-16 switch to STOP.
- c. CHECK the following dampers Closed:
  - CR-D1A-SA, CR EXH DMPR
  - CR-D1B-SB, CR EXH DMPR
- d. CLOSE the following dampers:
  - OUTSIDE AIR DAMPER "A"
  - OUTSIDE AIR DAMPER "B"

- \*10. **CHECK Status Of Aircraft Profile - HAS BEEN DETERMINED THAT ATTACK ON RNP IS INTENDED**

GO TO Step 11.

- a. TRIP the Reactor and GO TO EOP-E-0, Reactor Trip Or Safety Injection while CONTINUING WITH this procedure
- b. CHECK SDAFW Pump - RUNNING
- b. ATTEMPT to start the SDAFW Pump from the RTGB.

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 2Aircraft Attack

(Page 11 of 20)

11. **DETERMINE Need For Outage Actions:**

- |  |                     |
|--|---------------------|
| a. CHECK Outage - IN PROGRESS                                    | a. GO TO Step 12.   |
| b. STOP refueling activities                                     |                     |
| c. CHECK personnel in the CV and SFP - EVACUATING                |                     |
| d. CHECK available time - WILL ALLOW ESTABLISHING CV CLOSURE     | d. GO TO Step 11.f. |
| e. IMPLEMENT CV Closure  |                     |
| f. FILL RCS to maximum allowable value for current configuration |                     |

12. **STOP Maintenance:**

- |   |  |
|---|--|
| a. STOP all testing in progress                       |  |
| b. CHECK systems needed for safe shutdown - AVAILABLE | b. CONTACT Maintenance to restore all systems needed for safe shutdown to service that have been removed for routine maintenance that can be readily restored. |

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 2Aircraft Attack

(Page 12 of 20)

**13. FILL Makeup Tanks:**

a. CHECK Plant Status -

- MODE 1 - 4

OR

- MODE 5, Loops Filled

b. FILL the CST to the maximum capacity allowed by procedure

c. FILL the PWST to the maximum capacity allowed by procedure

a. GO TO Step 13.c.

**14. CHECK Status Of SFP Systems:**

a. CHECK SFP Purification - IN SERVICE

b. REMOVE SFP Purification from service using OP-910, Spent Fuel Pit Cooling and Purification System

c. REDUCE SFP temperature to the minimum allowable

d. RAISE SFP level to the maximum allowable

a. GO TO Step 14.c.

**15. CONSIDER Need To Pre-Stage Off-Site Assistance At A Location Nearby**

- Ambulance
- Fire Trucks

**16. MONITOR Activities Associated With The Incoming Aircraft And Continue Preparation Activities**

## STEP

## ACTION/EXPECTED RESPONSE

## RESPONSE NOT OBTAINED

Attachment 2

Aircraft Attack

(Page 13 of 20)

17. **Observe The NOTE Prior To Step 1 And RETURN TO Steps 1 through 5 To Re-assess The Threat Situation**

18. **DETERMINE Need For Outage Actions:**

- a. CHECK Outage - IN PROGRESS
- b. STOP refueling activities
- c. CHECK personnel in CV and SFP - EVACUATING
- d. FILL RCS to maximum allowable for current configuration

a. GO TO Step 19.

19. **CHECK Trip Breakers - CLOSED**

- a. TRIP the Reactor and GO TO EOP-E-0, Reactor Trip Or Safety Injection while continuing with this procedure
- b. CHECK The SDAFW Pump - RUNNING

OBSERVE NOTES prior to Step 20 AND GO TO step 20.

b. ATTEMPT to start the SDAFW Pump from the RTGB.

IF the SDAFW Pump is NOT available, THEN PERFORM the applicable actions found in OP-402, Auxiliary Feedwater System while NOT placing people in harms way.

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 2Aircraft Attack

(Page 14 of 20)

NOTE

- During outages when large numbers of personnel are on-site or If less than 30 minutes is available, the local (On-Site) ERO facilities will be activated to minimize congestion of personnel trying to leave the site and to speed activation of the facilities.
- The assigned location for the CRS, RO and BOP is the Control Room.
- The assigned location for the SM, STA and CR-EC is the B.5.b area located in the South-West corner of the Admin Bldg.
- The assigned location for the Operations personnel outside the Control Room and the Shift RC & EC Techs is the PAP West Building Final Access Control area. The WCC SRO will need to bring the following documentation: EPCLA-01, EPNOT-01, AOP-034, AOP-041, EDMGs.
- Weather or hostile action could impede the relocation or evacuation of personnel

**20. NOTIFY PLANT PERSONNEL:**

- |  |  |
|--|--|
| a. CHECK conditions that would impede relocation / evacuation - NONE | a. PERFORM applicable announcements based on current conditions. |
| b. PLACE VLC Switch in EMERG position                                |  |

(CONTINUED NEXT PAGE)

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 2Aircraft Attack

(Page 15 of 20)

20. (CONTINUED)

c. PERFORM PA announcement:

**"Security Announcement: Aircraft Impact Expected at time \_\_\_\_\_"****"Designated shift personnel report to your assigned location"****"ALL Emergency Response Personnel assemble in the EOF/TSC"****"ALL remaining site personnel assemble in the interior of the Lower Level Admin. Building"**d. PLACE and HOLD Evacuation  
Alarm Switch to SITE for 5  
seconds

e. REPEAT PA Announcement

f. PLACE and HOLD Evacuation  
Alarm switch to SITE for 5  
secondsg. PLACE VLC switch in NORM  
position

## STEP

## ACTION/EXPECTED RESPONSE

## RESPONSE NOT OBTAINED

Attachment 2Aircraft Attack

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21. **CHECK Control Room Ventilation System - ALIGNED FOR EMERGENCY RECIRCULATION**

ALIGN Ventilation:

- a. START CONT RM AIR CLEANING, HVE-19A or HVE-19B.
- b. PLACE CONT RM AIR EXHAUST, HVE-16 switch to STOP.
- c. CHECK the following dampers Closed:
  - CR-D1A-SA, CR EXH DMPR
  - CR-D1B-SB, CR EXH DMPR
- d. CLOSE the following dampers:
  - OUTSIDE AIR DAMPER "A"
  - OUTSIDE AIR DAMPER "B"

22. **CHECK Notification Status - SECURITY AWARE OF THREAT**

NOTIFY Security of the status of the threat.

23. **INITIATE Call Out For Selected Support Personnel Using Attachment 3, Offsite Fire Brigade Notification for Security Events**

24. **IMPLEMENT EALs**

## STEP

## ACTION/EXPECTED RESPONSE

## RESPONSE NOT OBTAINED

Attachment 2

Aircraft Attack

(Page 17 of 20)

25. **CHECK Time Of Threat - DURING DAYLIGHT HOURS**

At Unit 2 Lighting Control Panel  
TURN the following lights OFF:

- Turbine Deck and Transformer Yard
- Unit 2 Switchyard

CONTACT Security to  
EXTINGUISH High Mast Lighting  
using Attachment 4, Exterior  
Lighting Reduction.

IF Security is unable to extinguish  
the High Mast Lighting, THEN  
CONTACT WCC to BRIEF available  
operations personnel regarding the  
purpose and life safety  
considerations and DISPATCH to  
perform Attachment 4, Exterior  
Lighting Reduction.

26. **CHECK Status Of Aircraft Impact - EXPECTED IN LESS THAN 5 MINUTES**

OBSERVE the NOTES prior to  
Step 1 AND RETURN TO Steps 1  
through 5 to re-assess the threat  
situation.

NOTE

EOP Supplement F, EDG Capability Load List, should be used as a reference while starting and stopping E-Buss loads being carried by an EDG.

27. **CHECK Emergency Busses - ENERGIZED BY EDGs**

START and LOAD the EDGs using  
Attachment 6, Start and Loading of  
the EDGs while continuing with this  
procedure.

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 2Aircraft Attack

(Page 18 of 20)

28. **STOP Auxiliary Building Ventilation:**

- a. PLACE the selector switch for the in service REACTOR AUX BLDG EXH FAN in STOP:
  - HVE-2A
  - HVE-2B

29. **ACTUATE CONTROL ROOM DOOR DISABLE Pushbutton**

30. **DETERMINE Need For Refueling Actions:**

- a. CHECK Refueling - IN PROGRESS
- b. STOP refueling activities
- c. CHECK Personnel In CV AND SFP - EVACUATING

a. GO TO Step 31.

31. **CHECK Status Of Aircraft - HAS IMPACTED**

OBSERVE the NOTES prior to Step 1 AND RETURN TO Steps 1 through 5 to re-assess the threat situation.

32. **CHECK Continuous Communication With NRC HQ Operations Center - MAINTAINED**

ESTABLISH continuous communication with the NRC HQ Operations Center at the earliest practical time.

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 2Aircraft Attack

(Page 19 of 20)

NOTE

Depending on the type of aircraft involved and the size of the fire, it may be necessary to invoke procedures EDMG-000, Extreme Damage Initial Actions, AND EPSPA-05, Unified Incident Command, in parallel with AOP-041, Response To Fire Event.

33. **RESPOND To Crash Using  
AOP-041, Response To Fire Event**

\*34. **CHECK Emergency Busses -  
REMAINED ENERGIZED BY EDGs**

IF power is lost to the Emergency Busses after alignment to the EDGs, THEN ATTEMPT to restore power to Emergency Busses using Attachment 7, Energizing the Emergency Busses from an Offsite Source.

35. **NOTIFY HP To Initiate Local  
Monitoring Of Auxiliary Building  
Due To Securing Of Building  
Ventilation**

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 2Aircraft Attack

(Page 20 of 20)

36. **DETERMINE EPP-28 Applicability:**

## a. CHECK either of the below events - IN PROGRESS

- Total loss of SW

OR

- Loss of Lake Robinson Dam Integrity

a. REQUEST Plant Staff EVALUATE any damage from the attack AND THEN DEVELOP RECOVERY PLANS based on the following procedures:

- EPEOF-10, Recovery Manager And Recovery Operations;
- AD-EP-ALL-0110, Recovery;
- AD-WC-ALL-0380, Outage Command And Control, the sections concerning "Emergent Issues Management And Communications;"
- AD-OP-ALL-0102, Operational Decision Making;
- AOP-034, Attachment 11, Restoration From Deepwell Pump "D" Operations.
- IF EPP-28 entry is not applicable, THEN GO TO Main Body, Step 5, to re-asses plant conditions.

## b. GO TO EPP-28, Loss Of Ultimate Heat Sink

- END -

Attachment 3Offsite Fire Brigade Notification for Security Events

(Page 1 of 1)

1. **IF The Threat Is An Aircraft Attack AND Greater Than Or Equal To 5 Minutes From Impact, THEN NOTIFY Security In The SAS (ext. 1272 / 1273) To Send Message FIRE BRIGADE - REPORT TO STATION 8 Using The Corporate Paging Application AND EXIT This Attachment.**
2. **LOG Onto The Corporate Paging System On The Emergency Communicator's computer or Shift Manager's computer:**
  - SELECT Start > All Programs > DAE > Shortcuts Tab  
> Search Corporate Paging Application> Select Corporate Paging Application and Run Application.
3. **SELECT Fire Brigade from the "Select a Recipient" Section On The Left Lower Half Of The Screen (Contact Group Filter).**
4. **SELECT "FIRE BRIGADE - REPORT TO STATION 8" From The "Message Information" Section At The Top Of The Screen.**
5. **SELECT "Send Message" Button.**
6. **NOTIFY The CR-SEC/SM That Call Out For Selected Support Personnel In Accordance With Attachment 3, Offsite Fire Brigade Notification for Security Events, Is Complete.**

- END -

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 4Exterior Lighting Reduction

(Page 1 of 1)

\*\*\*\*\*

CAUTION

Performance of this Attachment shall NOT prevent personnel from sheltering at least 10 minutes prior to anticipated impact.

\*\*\*\*\*

NOTE

- Turning off exterior lighting may make the plant structures more difficult to see and target from the air at night. The control locations for exterior lighting are listed in order of greatest effect, however they all may not be accessible given the time frame and security situation.
- Actions may be performed in any sequence or simultaneously as resources permit.

1. **TURN OFF High Mast Lights By  
Taking The Switch On The  
Associated Panel To OFF:**

- Central Alarm Station, Building  
466 inside SD-09 (Main PA  
Lighting):
  - Panel LC-E1
  - Panel LC-E2
- ISFSI Storage Building  
Electrical Room (ISFSI  
Lighting):
  - Panel LC1
- PAP West, west wall inside  
Door #21(Intake Lighting)  
(Security Key may be required):
  - Panel TB-C

- END -

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 5RCS Cooldown

(Page 1 of 13)

NOTE

- Cooldown actions in this Attachment may conflict with EOP-ES-0.1 actions for plant stabilization. For a Security Event, the actions to cooldown and depressurize the plant are necessary to enhance Reactor Core Safety.
- The actions in Attachment 5 are intended to be accomplished in parallel with any other applicable actions being performed in AOP-034.

1. **BORATE RCS To Cold Shutdown  
Boron Concentration While  
Continuing With This Procedure:**

a. ALIGN Charging Pump  
suction to the RWST

a. BORATE the RCS using ONE of  
the choices below:

- MOV-350

OR

- OP-301-1, Chemical and  
Volume Control System  
Boration and Dilution  
Operations.

2. **CHECK CRDM Cooling Fans -  
RUNNING**

START available CRDM Cooling  
Fans.

- HVH-5A
- HVH-5B

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 5RCS Cooldown

(Page 2 of 13)

\*\*\*\*\*

CAUTION

Excessive steam dump using the steam line PORVs may initiate a high steam line  $\Delta P$  SI.

\*\*\*\*\*

NOTE

Cooldown will only be performed to the point where RHR would normally be placed in service, however, RHR will NOT be placed in service.

**3. INITIATE RCS Cooldown To Mode 4:**

- |  |  |
|--|--|
| <p>a. CHECK RCPs - ALL STOPPED</p>   | <p>a. MAINTAIN cooldown rate in RCS cold legs less than 100°F/hr.</p> <p>GO TO Step 3.d.</p>   |
| <p>b. CHECK Status of CRDM Cooling Fans, HVH-5A <u>AND</u> HVH-5B - BOTH RUNNING</p>   | <p>b. MAINTAIN cooldown rate in RCS cold legs less than 10°F/hr <u>AND</u> subcooling greater than 100°F.</p> <p>GO TO Step 3.d.</p> |
| <p>c. MAINTAIN cooldown rate in RCS cold legs less than 25°F/hr</p>  |  |
| <p>d. MAINTAIN RCS temperature and pressure - WITHIN LIMITS OF CURVE 3.4, REACTOR COOLANT SYSTEM PRESSURE - TEMPERATURE LIMITATIONS FOR COOLDOWN</p> |  |

(CONTINUED NEXT PAGE)

## STEP

## ACTION/EXPECTED RESPONSE

## RESPONSE NOT OBTAINED

Attachment 5

RCS Cooldown

(Page 3 of 13)

3. (CONTINUED)

- e. CHECK steam dump to  
Condenser  
- AVAILABLE

- e. DUMP steam using STEAM  
LINE PORVs.

GO TO Step 3.g.

- f. DUMP steam to Condenser

- g. CONTROL feed flow to maintain  
S/G levels - BETWEEN 39% and  
50%

4. **CHECK RCS Temperature -  
LESS THAN 543°F**

WHEN RCS temperature  
is less than 543°F, THEN  
GO TO Step 5.

5. **RESTORE Steam Dumps:**

- a. CHECK steam dump to  
Condenser  
- AVAILABLE

- a. CONTINUE RCS Cooldown  
using STEAM LINE PORVs.

OBSERVE the Note prior to  
Step 6 and GO TO Step 6.

- b. Momentarily PLACE STEAM  
DUMP CONTROL Switch to  
BYPASS T-AVG INTLK position

- c. CHECK APP-006-F5, STEAM  
DUMP ARMED - ILLUMINATED

- d. CONTINUE RCS cooldown  
using Steam Dump to  
Condenser

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 5RCS Cooldown

(Page 4 of 13)

NOTE

Low Tavg SI initiation circuits will automatically unblock if Tavg increases to greater than 543°F.

6. **DEFEAT Low Tavg Safety  
Injection Signal:**

- a. Momentarily PLACE SAFETY  
INJECTION T-AVG Selector  
Switch to BLOCK position
- b. CHECK LO TEMP SAFETY  
INJECTION BLOCKED status  
light - ILLUMINATED

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 5RCS Cooldown

(Page 5 of 13)

NOTE

Supplement K is available for optimizing Auxiliary Spray below.

**7. DEPRESSURIZE RCS To 1950 PSIG:**

a. USE normal PZR Spray to depressurize RCS

a. DEPRESSURIZE the RCS as follows:

1) IF Letdown is in service, THEN PERFORM the following:

a) USE CVC-311, AUX PZR SPRAY VALVE, to depressurize the RCS to less than 1950 psig.

2) IF Letdown is isolated, THEN USE one PZR PORV to depressurize the RCS to less than 1950 psig.

GO TO Step 7.b.

b. CHECK RCS pressure - LESS THAN 1950 PSIG

b. WHEN RCS pressure is less than 1950 psig, THEN GO TO Step 7.c.

c. CONTROL RCS Pressure to MAINTAIN BETWEEN 1950 psig to 1900 psig while performing Step 8.

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 5RCS Cooldown

(Page 6 of 13)

NOTE

Low Pressure SI initiation circuits will automatically unblock if PZR pressure increases to greater than 2000 psig.

8. **DEFEAT Low Pressure Safety Injection Signal:**

- a. Momentarily PLACE PZR PRESS/HI STM LINE DP Switch to BLOCK position
- b. CHECK LO PRESS SAFETY INJECTION BLOCKED Status Light - ILLUMINATED

9. **MONITOR RCS Cooldown:**

RAISE steaming rate from intact S/Gs.

- CHECK Core exit T/Cs - LOWERING
- CHECK RCS hot leg temperatures - LOWERING
- CHECK RCS subcooling RISING

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 5RCS Cooldown

(Page 7 of 13)

10. **CONTINUE RCS Cooldown And Depressurization:**

- a. MAINTAIN cooldown rate in RCS cold legs AND Subcooling at previously determined values
- b. MAINTAIN RCS temperature and pressure - WITHIN LIMITS OF CURVE 3.4, REACTOR COOLANT SYSTEM PRESSURE - TEMPERATURE LIMITATIONS FOR COOLDOWN
- c. CONTROL feed flow to maintain S/G levels - BETWEEN 39% AND 50%

11. **CHECK For Steam Void In Reactor Vessel:**

GO TO Step 13.

- CHECK PZR level - LARGE UNEXPECTED VARIATIONS
- OR
- CHECK RVLIS upper range indication - LESS THAN 100%

12. **ATTEMPT To Collapse Voids:**

- a. CHECK PZR HTRs - AVAILABLE
- a. GO TO Step 13.
- b. REPRESSURIZE RCS within limits of Curve 3.4, Reactor Coolant System Pressure - Temperature Limitations For Cooldown

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 5RCS Cooldown

(Page 8 of 13)

- \*13. **CHECK RCS Pressure - LESS THAN 1000 PSIG**

WHEN RCS pressure is less than 1000 psig, THEN PERFORM Steps 14 through 19.

GO TO Step 20.

14. **PLACE Key Switches For Following Valves In The NORMAL Position**

- SI-862A
- SI-862B
- SI-863A
- SI-863B
- SI-864A
- SI-864B
- SI-866A
- SI-866B
- SI-869

15. **CHECK MCC-5 - ENERGIZED**

GO TO Step 17.

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 5RCS Cooldown

(Page 9 of 13)

NOTE

When moving personnel about the plant to respond to events, consideration should be given to the type of threat, possible routes, and whether a Security escort is necessary.

16. **Locally CLOSE Breakers For  
The Following Valves:**

- SI-878A, SI PUMPS A&B  
DISCHARGE CROSS  
CONNECT (MCC-5, CMPT 2C)
- SI-865C, ACCUMULATOR C  
DISCHARGE (MCC-5, CMPT  
9F)
- SI-865A, ACCUMULATOR A  
DISCHARGE (MCC-5, CMPT  
14F)

17. **CHECK MCC-6 - ENERGIZED**

GO TO Step 19.

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 5RCS Cooldown

(Page 10 of 13)

NOTE

When moving personnel about the plant to respond to events, consideration should be given to the type of threat, possible routes, and whether a Security escort is necessary.

18. **Locally CLOSE Breakers For The Following Valves:**

- SI-865B, ACCUMULATOR B DISCHARGE (MCC-6, CMPT 10J)
- SI-878B, SI PUMPS B&C (MCC-6, CMPT 15C) DISCHARGE CROSS CONNECT

19. **From The RTGB, CHECK ALL ACCUM DISCHS - CLOSED**

- SI-865A
- SI-865B
- SI-865C

VENT any unisolated accumulator:

- a. ENSURE SI-855, ACC NITROGEN ISO, is closed.
- b. OPEN the appropriate ACCUM VENT Valves:
  - SI-853A
  - SI-853B
  - SI-853C
- c. OPEN HIC-936, ACC VENT HDR FLOW.

20. **CHECK RCS Temperature - LESS THAN 360°F.**

RETURN TO Step 10.

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 5RCS Cooldown

(Page 11 of 13)

NOTE

The target control band for RCS temperature control is Cold Leg Temperatures between 360°F to 350°F with RCS pressure control between 375 psig and 325 psig. These bands will be checked/established in Steps 21 through 24.

**21. STABILIZE RCS Temperature:**

- a. STOP RCS cooldown
- b. MAINTAIN RCS cold leg temperature - LESS THAN OR EQUAL TO 360°F.

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 5RCS Cooldown

(Page 12 of 13)

NOTE

Supplement K is available for optimizing Auxiliary Spray below.

**22. DEPRESSURIZE RCS To  
375 PSIG:**

- a. USE normal PZR Spray to depressurize the RCS

- a. DEPRESSURIZE the RCS:

- 1) IF Letdown is in service, THEN PERFORM the following:

- a) USE CVC-311, AUX PZR SPRAY VALVE, to depressurize the RCS to less than 375 psig.

- 2) IF Letdown is isolated, THEN USE one PZR PORV to depressurize the RCS to less than 375 psig.

GO TO Step 22.b.

- b. CHECK RCS pressure - LESS THAN 375 PSIG

- b. WHEN RCS pressure less than 375 psig, THEN GO TO Step 22.c.

- c. STOP RCS depressurization

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 5RCS Cooldown

(Page 13 of 13)

**23. PLACE LTOPP In Service:**

- |  |                       |
|--|-----------------------|
| a. CHECK RCS temperature - LESS THAN 360°F               | a. RETURN TO Step 11. |
| b. CHECK RCS pressure - LESS THAN 375 PSIG               | b. RETURN TO Step 11. |
| c. PLACE PZR PORV switches to AUTO:                      |                       |
| • PCV-455C   |                       |
| • PCV-456  |                       |
| d. PLACE PZR PORV key operated switches to LOW PRESSURE: |                       |
| • PCV-455C   |                       |
| • PCV-456  |                       |

**24. MAINTAIN Current Plant Conditions:**

- RCS Temperature 350°F to 360°F
- RCS Pressure 325 PSIG to 375 psig

**25. CONTACT Plant Staff For Additional Guidance For Cooldown.**

- END -

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 6Start and Loading of the EDGs

(Page 1 of 4)

\*\*\*\*\*

CAUTION

Depending on the Security Event in progress, both EDG "A" and "B" may be receiving a pre-lube as directed in AOP-034 Continuous Action Step (CAS) actions. DO NOT delay the EDG Local Start actions just to allow the pre-lube to finish.

\*\*\*\*\*

NOTE

EDG "B" Is started first due to EPP-28 guidance for using EDG "B" as the first choice for "D" Deepwell Cooling.

**1. START EDG "B":**

- a. CHECK EDG "B" is NOT running
- a. IF EDG "B" is already running but not loaded, THEN CONTINUE with Step 2.
- b. At EDG "B" Engine Control Panel, Quickly PLACE the Local/Remote Switch in LOCAL
- c. CHECK White Local Light is ILLUMINATED
- d. DEPRESS START pushbutton

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 6Start and Loading of the EDGs

(Page 2 of 4)

**2. LOAD EDG "B":**

- |   |                  |
|---|------------------|
| a. CHECK EDG "B" - RUNNING  | a. GO TO Step 3. |
| b. ADJUST EDG "B" Speed Control<br>Lever to Indicate Generator<br>Frequency of 60 Hertz   |                  |
| c. ADJUST EDG "B" voltage using<br>Automatic Voltage Control Knob<br>to 480V on GENERATOR<br>voltmeter  |                  |
| d. NOTIFY Control Room to<br>perform the following:<br><br>1) OPEN 480V BUS E2 MAIN<br>BKR, 52/28B<br><br>2) CHECK CLOSED EMERG<br>DG B TO BUS E2 BKR<br>52/27B |                  |
| e. ADJUST EDG "B" Speed Control<br>Lever to indicate generator<br>frequency of 60 Hertz   |                  |
| f. ADJUST EDG "B" voltage using<br>Automatic Voltage Control Knob<br>to 480V on GENERATOR<br>voltmeter  |                  |

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 6Start and Loading of the EDGs

(Page 3 of 4)

3. **START EDG "A":**

- |  |                    |
|--|--------------------|
| a. CHECK EDG "A" - SHUTDOWN  | a. GO TO Step 4.   |
| b. CHECK EITHER:   | b. GO TO Step 3.f. |
| • EPP-28 - IN PROGRESS   |                    |
| <u>OR</u>  |                    |
| • Attachment 9 - IN PROGRESS   |                    |
| <u>OR</u>  |                    |
| • Attachment 10 - IN PROGRESS  |                    |
| c. CHECK EDG "B" - RUNNING   | c. GO TO Step 3.f. |
| d. NOTIFY Control Room that EDG "A" will <u>NOT</u> be started, Attachment 6 is complete |                    |
| e. EXIT This Attachment  |                    |
| f. At EDG "A" Engine Control Panel, Quickly PLACE the Local/Remote Switch in LOCAL       |                    |
| g. CHECK White Local Light is illuminated  |                    |
| h. DEPRESS START pushbutton  |                    |

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 6Start and Loading of the EDGs

(Page 4 of 4)

**4. LOAD EDG "A":**

- |   |                    |
|---|--------------------|
| a. CHECK EDG "A" - RUNNING  |                    |
| b. CHECK EPP-28 - IN PROGRESS   | b. GO TO Step 4.f. |
| c. CHECK EDG "B" - RUNNING LOADED   | c. GO TO Step 4.f. |
| d. NOTIFY the Control Room that EDG "A" will <u>NOT</u> be loaded, Attachment 6 is complete   |                    |
| e. EXIT this Attachment   |                    |
| f. ADJUST EDG "A" Speed Control Lever to indicate generator frequency of 60 Hertz             |                    |
| g. ADJUST EDG "A" voltage using Automatic Voltage Control Knob to 480V on GENERATOR voltmeter |                    |
| h. NOTIFY the Control Room to perform the following:  |                    |
| 1) OPEN 480V BUS E1 MAIN BKR, 52/18B  |                    |
| 2) CHECK CLOSED EMERG DG A TO BUS E1 BKR 52/17B   |                    |
| i. ADJUST EDG "A" Speed Control Lever to indicate generator frequency of 60 Hertz             |                    |
| j. ADJUST EDG "A" voltage using Automatic Voltage Control Knob to 480V on GENERATOR voltmeter |                    |

- END -

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 7Energizing the Emergency Busses from an Offsite Source

(Page 1 of 11)

NOTE

- Attachment 7 is entered when the Emergency Busses that were energized from the EDGs become de-energized.
- Attachment 7 will restore power to the Emergency Busses when EOP-ECA-0.0, LOSS OF ALL AC POWER actions can not be performed or are unsuccessful in energizing an Emergency Bus due to the Security Event in progress.

1. **CHECK Emergency Bus - DEENERGIZED FROM STOPPING AN EDG IN:**  
  
  - EPP-28, Loss Of Ultimate Heat Sink

OR

  - Attachment 9, Deepwell Cooling

OR

  - Attachment 10, Rapid Start Of Deepwell Pump "D"

GO TO Step 3.
2. **RETURN TO Main Body / Attachment 2 Step In Effect**
3. **CHECK Status Of Offsite Power - REMAINED AVAILABLE**  
  

GO TO Step 7.
4. **CLOSE 480V BUS E1 MAIN BKR 52/18B To Energize E1**
5. **CLOSE 480V BUS E2 MAIN BKR 52/28B To Energize E2**
6. **OBSERVE Caution Prior to Step 24 And GO TO Step 24**

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 7Energizing the Emergency Busses from an Offsite Source

(Page 2 of 11)

7. **CHECK Offsite Power -  
AVAILABLE**RETURN TO Main Body /  
**Attachment 2** Step In Effect.

- Startup Transformer -  
CAPABLE OF BEING  
ENERGIZED

AND

- 115KV Span Bus - ENERGI~~ZED~~  
OR CAPABLE OF BEING  
ENERGIZED

\*\*\*\*\*

CAUTION

Normal Radiation Protection Procedures are not applicable during the performance of this Attachment.

\*\*\*\*\*

NOTE

An Armed Officer will be required to escort an Operator to close breaker 52/11A in the 4KV Switchgear Room. This is required to provide cooling for the Startup Transformer. Breaker 52/11A will be manipulated in Step 20.c.

8. **NOTIFY Security Of Need For  
Armed Escort to the 4KV  
Switchgear Room**9. **CHECK the following 4KV  
Breakers OPEN:**

Manually OPEN Breakers.

- START-UP TO 4KV BUS 2  
BKR 52/12
- START-UP TRANSFORMER  
TO 4KV BUS 3 BKR 52/17

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 7Energizing the Emergency Busses from an Offsite Source

(Page 3 of 11)

NOTE

Breakers 52/22B and 52/29B are normally racked out unless SI PUMP "B" is aligned for service.

10. **CHECK Following Breakers  
TRIPPED OR RACKED OUT**

- 480V BUS E1 MAIN BKR,  
52/18B
- 480V BUS E2 MAIN BKR,  
52/28B
- EMERG DG A TO BUS E1  
BKR 52/17B
- EMERG DG B TO BUS E2  
BKR 52/27B
- 480V BUS E1 SUPPLY TO SI  
PUMP "B", 52/22B
- 480V BUS E2 SUPPLY TO SI  
PUMP "B", 52/29B
- 480V BUS 2A MAIN BKR,  
52/8B
- 480V BUS 2B MAIN BKR,  
52/9B
- SST-2A TO 480V SYSTEM  
BKR 52/1B
- 480V BUS 1 MAIN BKR 52/2B
- 480V BUS 3 MAIN BKR 52/15B
- SST-2C TO 480V SYSTEM  
BKR 52/16B

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 7Energizing the Emergency Busses from an Offsite Source

(Page 4 of 11)

11. **CHECK The Following Breaker Positions:** Manually OPEN Breakers.
- a. UNIT AUX TO 4KV BUS 1 BKR  
52/7 - OPEN
  - b. UNIT AUX TO 4KV BUS 4 BKR  
52/20 - OPEN
12. **PLACE Control Switches For BOTH Condenser Vacuum Pumps To STOP:**
- VACUUM PUMP A
  - VACUUM PUMP B
13. **PLACE Control Switches For BOTH EH Fluid Pumps To PULL-TO-LOCK**
- GOV FLUID PUMP A
  - GOV FLUID PUMP B

NOTE

Resetting the Lockout Relays is necessary to restore power to the Emergency Busses.

14. **CHECK Relays RESET, On Generator Protection Relay Panel in Control Room:** Manually RESET Lockout Relays.
- Generator Lockout Relay 86P
  - Generator Back-up Lockout Relay 86BU

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 7Energizing the Emergency Busses from an Offsite Source

(Page 5 of 11)

15. **CHECK 115KV Switchyard Span Bus - ENERGIZED**

WHEN the 115KV Switchyard Span Bus is energized, THEN GO TO Step 16.

\*\*\*\*\*

CAUTION

The length of time the Startup Transformer is energized without cooling fans running shall be minimized to prevent overheating and possible damage to the transformer. Without cooling fans the transformer can be maintained at rated voltage for 6 hours at no load without causing any damage.

\*\*\*\*\*

16. **CHECK LINE DISCONNECT SWITCH (Motor Operated Disconnect) - CLOSED**

Manually CLOSE Disconnect.

NOTE

When energizing a dead bus, the synchroscope will NOT come to the 12 o'clock position until after the breaker is closed and the dead bus is energized.

17. **ENERGIZE 4KV Bus 2:**

- a. INSERT key into STARTUP TRANSF synchroscope switch AND TURN switch to STARTUP BUS 2 position
- b. CLOSE START-UP TO 4KV BUS 2 BKR 52/12
- c. TURN synchroscope key switch to the MID POSITION

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 7Energizing the Emergency Busses from an Offsite Source

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18. **ENERGIZE 4KV Bus 1:**

- a. INSERT key into 4KV TIES synchroscope switch AND TURN switch to BUS 1 & 2 position.
- b. CLOSE 4KV BUS 1-2 TIE BKR 52/10
- c. TURN synchroscope key switch to the MID POSITION

NOTE

WHEN a breaker is operated to energize a dead-bus, the breaker switch should be held in the closed position for 4 to 8 seconds to allow time for the UV coil to be energized.

19. **CLOSE 480V BUS 2B MAIN BKR 52/9B To Energize 480V Bus 2B**

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 7Energizing the Emergency Busses from an Offsite Source

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NOTE

Refer to EDP-003, MCC Buses, for loads powered by MCC-3 that may be observed via RTGB indications.

**\*20. ENERGIZE MCC-3:**

- a. DETERMINE status of MCC-3 as follows:

1) RTGB indications for MCC-3 loads indicate that MCC-3 is ENERGIZED

2) CONTINUE with Step 20.d

- b. CHECK Armed Officer Available to escort an Operator to 4KV Switchgear Room

- c. Locally CLOSE breaker 52/11A, FEED TO MCC-3

- d. CHECK Startup Transformer Access- AVAILABLE

- e. PERFORM the following at the Startup Transformer:

- CHECK the cooling fans and oil pumps operating
- RESET local alarms

1) CONTINUE with Step 20.b.

- b. WHEN an Armed Officer escort is available, THEN ACCESS the 4KV Switchgear Room.

- d. WHEN access to the Startup Transformer is available, THEN PERFORM Step 20.e.

GO TO Step 21.

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 7Energizing the Emergency Busses from an Offsite Source

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21. **ENERGIZE 4KV Bus 3:**

- a. INSERT key into STARTUP TRANSF synchroscope switch AND TURN switch to STARTUP BUS 3 position.
- b. CLOSE START-UP TRANSFORMER TO 4KV BUS 3 BKR 52/17
- c. TURN synchroscope key switch to MID-POSITION

22. **CHECK the Status of 480V Bus E1 as follows:**

- |   |   |
|---|---|
| <ol style="list-style-type: none"><li>a. Bus E1 is ENERGIZED by either EDG "A" <u>OR</u> Off-Site Power feed</li><li>b. OBSERVE the <u>CAUTION</u> prior to Step 24 and CONTINUE with Step 24</li></ol> | <ol style="list-style-type: none"><li>a. CONTINUE with Step 23 to ENERGIZE 480V Bus E1.</li></ol> |
|---|---|

23. **ENERGIZE 480V Bus E1:**

- a. CLOSE 480V BUS E1 MAIN BKR 52/18B
- b. CHECK 480V Bus E1 is ENERGIZED

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 7Energizing the Emergency Busses from an Offsite Source

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\*\*\*\*\*

CAUTION

The allowable RCP Seal Cooling loss time is reduced from 15 minutes when Number 1 Seal Leakoff Flow is Greater Than 3.2 gpm.

\*\*\*\*\*

24. **ESTABLISH RCP Seal Cooling Alignment:**

- |   |  |
|---|--|
| <p>a. CHECK Highest RCP Number 1 Seal Leakoff - LESS THAN <u>OR</u> EQUAL TO 3.2 GPM</p>  | <p>a. DETERMINE Maximum Allowable Cooling Loss Time using Attachment 8, RCP No. 1 Seal Leak-off Vs. Time To Restore Cooling.</p>   |
| <p>b. CHECK Loss of RCP Seal Cooling has been Less Than:</p> <ul style="list-style-type: none"> <li>• 15 minutes</li> </ul> <p style="text-align: center;"><u>OR</u></p> <ul style="list-style-type: none"> <li>• Time Determined from Attachment 8, RCP No. 1 Seal Leak-off Vs. Time To Restore Cooling</li> </ul> | <p>b. ISOLATE Seal Cooling:</p> <ol style="list-style-type: none"> <li>1) CLOSE FCV-626, THERM BAR FLOW CONT.</li> <li>2) Locally CLOSE RCP SEAL WATER FLOW CONTROL VALVES:               <ul style="list-style-type: none"> <li>• CVC-297A</li> <li>• CVC-297B</li> <li>• CVC-297C</li> </ul> </li> <li>3) CLOSE CVC-381, SEAL WTR RETURN ISO.</li> </ol> |

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 7Energizing the Emergency Busses from an Offsite Source

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25. **ESTABLISH E1 Loads:**

- |   |   |
|---|---|
| a. CHECK Service Water Pump "A"<br>- SECURED FOR EPP-28       | a. START Service Water Pump "A".        |
| b. CHECK Service Water Pump "B"<br>- SECURED FOR EPP-28       | b. START Service Water Pump "B".        |
| c. START Component Cooling<br>Water Pump "B"                  |   |
| d. CHECK Motor Driven AFW<br>Pump "A" - SECURED FOR<br>EPP-28 | d. START Motor Driven AFW Pump<br>"A" . |

26. **ESTABLISH RCS Makeup:**

- |   |   |
|---|---|
| a. CHECK suction source for<br>Charging Pumps - AVAILABLE | a. ESTABLISH Charging Pump<br>Suction Source: <ul style="list-style-type: none"> <li>• VCT</li> </ul> <p style="text-align: center;"><u>OR</u></p> <ul style="list-style-type: none"> <li>• RWST</li> </ul> |
| b. START Charging Pump "B"                                |   |

27. **ENERGIZE 480V Bus E2:**

- |   |                   |
|---|-------------------|
| a. CHECK 480V Bus E2 -<br>DEENERGIZED   | a. GO TO Step 28. |
| b. CLOSE 480V BUS E2 MAIN<br>BKR 52/28B |                   |
| c. CHECK 480V Bus E2 is<br>ENERGIZED    |                   |

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 7Energizing the Emergency Busses from an Offsite Source

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28. **ESTABLISH The Following  
Component Alignment:**

- |   |  |
|---|--|
| a. CHECK Service Water Pumps -<br>TWO RUNNING                       | a. START Service Water Pumps<br>not secured by EPP-28 to<br>establish two running.             |
| b. CHECK Component Cooling<br>Water Pumps - AT LEAST ONE<br>RUNNING | b. START CCW Pumps to establish<br>at least one running.                                       |
| c. CHECK Motor Driven AFW<br>Pump - AT LEAST ONE<br>RUNNING         | c. START Motor Driven AFW<br>Pumps not secured by EPP-28<br>to establish at least one running. |
| d. CHECK RCS Makeup -<br>ADEQUATE                                   | d. START Charging Pump "C"   |

- END -

Attachment 8RCP No. 1 Seal Leak-off Vs. Time To Restore Cooling

(Page 1 of 1)

<b>No. 1 Seal Leak-Off (GPM)</b>	<b>Time (Minutes)</b>
3.21	15:00
3.32	14:30
3.44	14:00
3.56	13:30
3.70	13:00
3.85	12:30
4.01	12:00
4.18	11:30
4.37	11:00
4.58	10:30
4.81	10:00
5.06	9:30
5.34	9:00
5.66	8:30
6.01	8:00

- END -

Attachment 9Deepwell Cooling

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\*\*\*\*\*

CAUTION

- Entry into Attachment 9, Deepwell Cooling, is for the Security events that DO NOT require a rapid start of DW Pump "D." Rapid starts of DW Pump "D" are performed via Attachment 10, Rapid Start Of Deepwell Pump "D".
- Deepwell Pump "D" should not be started while the selected E-Buss is aligned to an Off-Site Power feed. DW Pump "D" will trip from loss of power IF the selected E-Buss loses power. DW Pump "D" may be started from the EDG once the EDG is providing power to the E-Buss.

\*\*\*\*\*

NOTE

If both EDGs are available (normal alignment), then "B" EDG is the preferred EDG to run with deepwell cooling. MCC-5 may be energized from the DSDG and supply some of the Train "A" loads at the discretion of the operator.

1. **Determine EDG That Will Be Aligned For Cooling from Deepwell Pump "D"**
  - a. IF EDG "B" will be aligned for DeepWell Cooling THEN OBSERVE NOTES prior to Step 2 AND CONTINUE with Step 2.
  - b. IF EDG "A" will be aligned for DeepWell Cooling THEN OBSERVE NOTES prior to Step 3 AND CONTINUE with Step 3.

Attachment 9Deepwell Cooling

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NOTE

- Deepwell Pump "D" control cabinets are located in the Auxiliary Building First Level near Security Door 25; across from Instrument Air Compressor "B. "
- The transfer switches operated in the following step are cycled through the desired positions by pulling down on the ratcheted handle located inside the door to the cabinet. Approximately 3 pulls per position rotation are required.
- It is acceptable to bypass Step 2.b notifications to the Control Room when it is obvious the EDG "B" is already running and carrying E-2 Buss loads.

**2. ELECTRICAL ALIGNMENT For Deepwell Cooling To "B" EDG:****a. ALIGN DEEPWELL PUMP "D" controls as follows:**

- 1) At the Deepwell Pump "D" Safety Train Power Transfer switch cabinet:
  - a) OPEN Deepwell Pump D Safety Train Power Transfer Switch Cabinet.
  - b) ENSURE SAF-TRN-TRFR-SW (Deepwell Pump D Safety Train Power Transfer Switch) is in EMER for MCC-18.
  - c) CLOSE Deepwell Pump D Safety Train Power Transfer Switch Cabinet.
- 2) At the Deepwell Pump "D" Normal / Emergency Transfer switch cabinet:
  - a) OPEN Deepwell Pump D Normal/Emergency Power Transfer Switch Cabinet.
  - b) ENSURE N/E-TRFR-SW (Deepwell Pump D Normal/Emergency Power Transfer Switch) is in EMER.
  - c) CLOSE Deepwell Pump D Normal/Emergency Power Transfer Switch Cabinet.

(CONTINUED NEXT PAGE)

Attachment 9Deepwell Cooling

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## 2. (CONTINUED)

## 3) ENSURE proper indications as follows:

- Deepwell Pump D Safety Train Power Transfer Switch Cabinet MCC-18 (Train B) Power Supply light is ILLUMINATED.
  - Deepwell Pump D Normal/Emergency Power Transfer Switch Cabinet Emergency Power Supply light is ILLUMINATED.
- b. INFORM Control Room that Deepwell Pump "D" is aligned to receive power from MCC-18 for cooling of EDG "B."
- c. OBSERVE CAUTIONS prior to Step 4 and GO TO Step 4.

Attachment 9Deepwell Cooling

(Page 4 of 12)

NOTE

- Deepwell Pump "D" control cabinets are located in the Auxiliary Building First Level near Security Door 25; across from Instrument Air Compressor "B. "
- The transfer switches operated in the following step are cycled through the desired positions by pulling down on the ratcheted handle located inside the door to the cabinet. Approximately 3 pulls per position rotation are required.
- It is acceptable to bypass Step 3.b notifications to the Control Room when it is obvious the EDG "A" is already running and carrying E-1 Buss loads.

**3. ELECTRICAL ALIGNMENT For Deepwell Cooling To "A" EDG:****a. ALIGN DEEPWELL PUMP "D" controls as follows:**

- 1) At the Deepwell Pump "D" Safety Train Power Transfer switch cabinet:
  - a) OPEN Deepwell Pump D Safety Train Power Transfer Switch Cabinet.
  - b) ENSURE SAF-TRN-TRFR-SW (Deepwell Pump D Safety Train Power Transfer Switch) is in NORM for MCC-16.
  - c) CLOSE Deepwell Pump D Safety Train Power Transfer Switch Cabinet.
- 2) At the Deepwell Pump "D" Normal / Emergency Transfer switch cabinet:
  - a) OPEN Deepwell Pump D Normal/Emergency Power Transfer Switch Cabinet.
  - b) ENSURE N/E-TRFR-SW (Deepwell Pump D Normal/Emergency Power Transfer Switch) is in EMER.
  - c) CLOSE Deepwell Pump D Normal/Emergency Power Transfer Switch Cabinet.

(CONTINUED NEXT PAGE)

Attachment 9Deepwell Cooling

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## 3. (CONTINUED)

## 3) ENSURE proper indications as follows:

- Deepwell Pump D Safety Train Power Transfer Switch Cabinet MCC-16 (Train A) Power Supply light is ILLUMINATED.
  - Deepwell Pump D Normal/Emergency Power Transfer Switch Cabinet Emergency Power Supply light is ILLUMINATED.
- b. INFORM Control Room that Deepwell Pump "D" is aligned to receive power from MCC-16 for cooling of EDG "A."
- c. OBSERVE CAUTIONS prior to Step 4 and GO TO Step 4.

Attachment 9Deepwell Cooling

(Page 6 of 12)

\*\*\*\*\*

CAUTION

- The calculated maximum time an EDG may operate without cooling to preclude adverse effects is 40 minutes.
- DO NOT perform a "pre-emptive" start of DW Pump "D" while the respective E-Buss is powered from an Off-Site source. DW Pump "D" will trip from loss of power when the selected E-Buss Off-Site source is lost.

\*\*\*\*\*

\* 4. **DETERMINE IF The Selected EDG Service Water Cooling is LOST:**

- a. Selected EDG is in operation AND has been running loaded for GREATER THAN one minute. (Ensure all Blackout Sequence loads are finished loading.)
- b. Service Water (SW) Pressure is below the requirements to provide adequate EDG Cooling as indicated by:
  - APP-017-11, RAW WATER LOW PRESS - ILLUMINATED
  - EDG "A" - PI-1626A, SERVICE WATER IN PRESSURE - Reading LESS THAN 8 PSIG
  - EDG "B" - PI-1626B, SERVICE WATER IN PRESSURE - Reading LESS THAN 8 PSIG
- c. IF there are no indications that EDG SW Cooling has been lost, THEN continue monitoring EDG Operation IAW OP-604, DIESEL GENERATORS 'A' AND 'B.'
- d. IF the indications from Step 4.b show that the **SELECTED** EDG has lost SW Cooling, THEN:
  - INFORM the Control Room that the UNSELECTED EDG will be taken to LOCAL AND SHUTDOWN while the SELECTED EDG will be aligned for cooling from Deepwell Pump "D."
  - CONTINUE with Step 5.

Attachment 9Deepwell Cooling

(Page 7 of 12)

**5. GO TO Appropriate Step For EDG To Be Cooled via Deepwell Pump "D":**

EDG To Receive Cooling	GO TO Step	EDG To Be Stopped
EDG "B"	6	EDG "A"
EDG "A"	9	EDG "B"

**6. STOP EDG "A" At The Engine Control Panel:**

- PLACE the LOCAL/REMOTE switch in the LOCAL position.
- DEPRESS the STOP pushbutton.

\*\*\*\*\*

CAUTION

The maximum load allowed on an EDG while receiving cooling from Deepwell Pump "D" is 1500 KW.

\*\*\*\*\*

**7. SECURE Unnecessary Equipment Aligned To Emergency Busses To Minimize Loading On EDG's.**

Attachment 9Deepwell Cooling

(Page 8 of 12)

\*\*\*\*\*

CAUTION

The following step sequence is used to minimize the potential for water hammer when Deepwell Pump "D" is started and to avoid over pressurizing the Service Water components down stream of SW-965. Valves should be opened in a slow and controlled manner to minimize the potential for water hammer or over pressurization of components. (NCR 317360)

\*\*\*\*\*

NOTE

- A locked valve key is required for the following steps.
- A ladder, required for SW-92, is located on the north wall of "B" EDG Room near the Fuel Oil Day Tank.

**8. ALIGN Deepwell Cooling To "B" EDG:****a. START DEEPWELL PUMP "D" as follows:****1) ENSURE proper indications as follows:**

- Deepwell Pump D Safety Train Power Transfer Switch Cabinet MCC-18 (Train B) Power Supply light is ILLUMINATED.
- Deepwell Pump D Normal/Emergency Power Transfer Switch Cabinet Emergency Power Supply light is ILLUMINATED.

**2) At Deepwell Pump D Control Cabinet:**

- a) PLACE DEEPWELL PUMP "D" START/STOP switch in the START position.
- b) CHECK that the RED Pump Running lamp is ILLUMINATED.

(CONTINUED NEXT PAGE)

Attachment 9Deepwell Cooling

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## 8. (CONTINUED)

b. In EDG Room "B," PERFORM the following valve alignments:

- 1) CLOSE SW-90, TCV-1661 OUTLET.
- 2) CLOSE SW-92, DIESEL "B" RETURN.
- 3) UNLOCK and OPEN SW-966, EDG B ALTERNATE COOLING RETURN.
- 4) UNLOCK and OPEN SW-965, EDG B ALTERNATE COOLING SUPPLY.

c. At EDG "B" Engine Control Panel:

- 1) RESET any alarms
- 2) CHECK that EDG "B" Engine cooling via Deepwell Pump "D" flow is adequate as indicated by:
  - APP-017-11 - CLEAR
  - PI-1626B - Indicates GREATER THAN 8 PSIG
  - EDG "B" Oil AND Cooling Water Temperatures - STABLE OR SLOWLY GOING DOWN

d. INFORM Control Room that:

- EDG "B" is being cooled via DW Pump "D"
- EDG "B" load limit is now 1500 KW while on Deepwell Cooling
- AOP-034, Attachment 9, is complete

Attachment 9Deepwell Cooling

(Page 10 of 12)

NOTE

Steps 9, 10 and 11 are used when EDG "A" is selected for DW Pump Cooling. These steps are N/A if Step 6, 7 and 8 were successful.

9. **STOP EDG "B" At The Engine Control Panel:**
- a. PLACE the LOCAL/REMOTE switch in the LOCAL position.
  - b. DEPRESS the STOP pushbutton.

\*\*\*\*\*

CAUTION

The maximum load allowed on an EDG while receiving cooling from Deepwell Pump "D" is 1500 KW.

\*\*\*\*\*

10. **SECURE Unnecessary Equipment Aligned To Emergency Busses To Minimize Loading On EDG's.**

Attachment 9Deepwell Cooling

(Page 11 of 12)

\*\*\*\*\*

CAUTION

The following step sequence is used to minimize the potential for water hammer when Deepwell Pump "D" is started and to avoid over pressurizing the Service Water components down stream of SW-967. Valves should be opened in a slow and controlled manner to minimize the potential for water hammer or over pressurization of components. (NCR 317360)

\*\*\*\*\*

NOTE

- A locked valve key is required for the following steps.
- A ladder, required for SW-88, is located on the south wall of "A" Emergency Diesel Room opposite the generator end of the diesel.

**11. ALIGN Deepwell Cooling To "A" EDG:****a. START DEEPWELL PUMP "D" as follows:****1) ENSURE proper indications as follows:**

- Deepwell Pump D Safety Train Power Transfer Switch Cabinet MCC-16 (Train A) Power Supply light is ILLUMINATED.
- Deepwell Pump D Normal/Emergency Power Transfer Switch Cabinet Emergency Power Supply light is ILLUMINATED.

**2) At Deepwell Pump D Control Cabinet:**

- a) PLACE DEEPWELL PUMP "D" START/STOP switch in the START position.
- b) CHECK that the RED Pump Running lamp is ILLUMINATED.

(CONTINUED NEXT PAGE)

Attachment 9Deepwell Cooling

(Page 12 of 12)

## 11. (CONTINUED)

b. In EDG Room "A," PERFORM the following valve alignments:

- 1) CLOSE SW-86, TCV-1660 OUTLET.
- 2) CLOSE SW-88, DIESEL "A" RETURN.
- 3) UNLOCK and OPEN SW-968, EDG A ALTERNATE COOLING RETURN.
- 4) UNLOCK and OPEN SW-967, EDG A ALTERNATE COOLING SUPPLY.

c. At EDG "A" Engine Control Panel:

- 1) RESET any alarms
- 2) CHECK that EDG "A" Engine cooling via Deepwell Pump "D" flow is adequate as indicated by:
  - APP-017-11 - CLEAR
  - PI-1626A - Indicates GREATER THAN 8 PSIG
  - EDG "A" Oil AND Cooling Water Temperatures - STABLE OR SLOWLY GOING DOWN

d. INFORM Control Room that:

- EDG "A" is being cooled via DW Pump "D"
- EDG "A" load limit is now 1500 KW while on Deepwell cooling
- AOP-034, Attachment 9, is complete.

- END -

Attachment 10Rapid Start Of Deepwell Pump "D"

(Page 1 of 11)

\*\*\*\*\*

CAUTION

- Attachment 10, Rapid Start Of Deepwell Pump "D", is designed to support Procedure Main Body Step 2 AND Attachment 2, Step 2 when Security reports a HOSTILE ACTION situation.
- The actions in Steps 2 and 10 to align the DeepWell Pump "D" transfer switches and electrical controls should be done in an expeditious manner to minimize the time the Operator is outside of the EDG room.

\*\*\*\*\*

NOTE

- If both EDGs are available (normal alignment), then "B" EDG is the preferred EDG to run with deepwell cooling. MCC-5 may be energized from the DSDG and supply some of the Train "A" loads at the discretion of the operator.
- Deepwell Pump "D" control cabinets are located in the Auxiliary Building First Level near Security Door 25; across from Instrument Air Compressor "B. "
- The transfer switches operated in the Steps 2 and 10 are cycled through the desired positions by pulling down on the ratcheted handle located inside the door to the cabinet. Approximately 3 pulls per position rotation are required.

1. **Determine EDG That Will Be Aligned For Cooling from Deepwell Pump "D"**
  - a. IF EDG "B" will be aligned for DeepWell Cooling THEN OBSERVE the CAUTION PRIOR to Step 2 AND CONTINUE with Step 2.
  - b. IF EDG "A" will be aligned for DeepWell Cooling THEN OBSERVE the CAUTION PRIOR to Step 10 AND CONTINUE with Step 10.

Attachment 10Rapid Start Of Deepwell Pump "D"

(Page 2 of 11)

\*\*\*\*\*

CAUTION

Deepwell Pump "D" should not be started while the selected E-Buss is aligned to an Off-Site Power feed. DW Pump "D" will trip from loss of power IF the selected E-Buss loses power. DW Pump "D" may be started from the EDG once the EDG is providing power to the E-Buss.

\*\*\*\*\*

**2. ALIGN DEEPWELL PUMP "D" to E-2 (MCC-18) Power As Follows:**

- a. At the Deepwell Pump "D" Safety Train Power Transfer switch cabinet:
  - 1) OPEN Deepwell Pump D Safety Train Power Transfer Switch Cabinet.
  - 2) ENSURE SAF-TRN-TRFR-SW (Deepwell Pump D Safety Train Power Transfer Switch) is in EMER for MCC-18.
  - 3) CLOSE Deepwell Pump D Safety Train Power Transfer Switch Cabinet.
- b. At the Deepwell Pump "D" Normal / Emergency Transfer switch cabinet:
  - 1) OPEN Deepwell Pump D Normal/Emergency Power Transfer Switch Cabinet.
  - 2) ENSURE N/E-TRFR-SW (Deepwell Pump D Normal/Emergency Power Transfer Switch) is in EMER.
  - 3) CLOSE Deepwell Pump D Normal/Emergency Power Transfer Switch Cabinet.
- c. ENSURE proper indications as follows:
  - Deepwell Pump D Safety Train Power Transfer Switch Cabinet MCC-18 (Train B) Power Supply light is ILLUMINATED.
  - Deepwell Pump D Normal/Emergency Power Transfer Switch Cabinet Emergency Power Supply light is ILLUMINATED.

(CONTINUED NEXT PAGE)

Attachment 10Rapid Start Of Deepwell Pump "D"

(Page 3 of 11)

## 2. (CONTINUED)

d. At Deepwell Pump D Control Cabinet:

- 1) PLACE DEEPWELL PUMP "D" START/STOP switch in the START position.
- 2) CHECK that the RED Pump Running lamp is ILLUMINATED.
- 3) GO TO EDG "B" Room.

\* 3. **DETERMINE if EDG "B" Service Water cooling is lost:**

- a. EDG "B" is in operation AND has been running loaded for greater than one minute. (Ensure all Blackout Sequence loads are finished loading.)
- b. Service Water (SW) pressure is below the requirements to provide adequate EDG cooling as indicated by:
  - APP-017-11, RAW WATER LOW PRESSURE - ILLUMINATED
  - PI-1626B, SERVICE WATER IN PRESSURE - Reading LESS THAN 8 PSIG.
- c. IF there are no indications that EDG SW Cooling has been lost, THEN continue monitoring EDG Operation IAW OP-604, DIESEL GENERATORS 'A' AND 'B.'
- d. IF there are indications that EDG SW Cooling has been lost, THEN OBSERVE the CAUTION AND NOTES PRIOR to Step 4 AND CONTINUE with Steps 4 through 9.

Attachment 10Rapid Start Of Deepwell Pump "D"

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\*\*\*\*\*

CAUTION

The step sequence in Step 4 is used to minimize the potential for water hammer when Deepwell Pump "D" is started and to avoid over pressurizing the Service Water components down stream of SW-965. Valves should be opened in a slow and controlled manner to minimize the potential for water hammer or over pressurization of components. (NCR 317360)

\*\*\*\*\*

NOTE

- A locked valve key is required for the following steps.
- A ladder, required for SW-92, is located on the north wall of "B" EDG Room near the Fuel Oil Day Tank.

4. **IF There Are Indications That EDG "B" Has LOST SW Cooling, THEN PERFORM the following valve alignments:**
- a. CLOSE SW-90, TCV-1661 OUTLET.
  - b. CLOSE SW-92, DIESEL "B" RETURN.
  - c. UNLOCK and OPEN SW-966, EDG B ALTERNATE COOLING RETURN.
  - d. UNLOCK and OPEN SW-965, EDG B ALTERNATE COOLING SUPPLY.

Attachment 10Rapid Start Of Deepwell Pump "D"

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**5. At EDG "B" Engine Control Panel:**

- a. RESET any alarms
- b. CHECK that EDG "B" Engine cooling via Deepwell Pump "D" flow is adequate as indicated by:
  - APP-017-11 - CLEAR
  - PI-1626B - Indicates GREATER THAN 8 PSIG
  - EDG "B" Oil AND Cooling Water Temperatures - STABLE OR SLOWLY GOING DOWN

\*\*\*\*\*

CAUTION

The maximum load allowed on an EDG while receiving cooling from Deepwell Pump "D" is 1500 KW.

\*\*\*\*\*

**6. INFORM Control Room that:**

- EDG "B" is being cooled via DW Pump "D"
- EDG "B" load limit is now 1500 KW while on Deepwell Cooling

**7. CONTACT the Control Room to DETERMINE IF EDG "A" is running without adequate Service Water Cooling as indicated by:**

- EDG "A" is running

AND

- LESS THAN 2 (One OR None) SW Pumps are running

Attachment 10Rapid Start Of Deepwell Pump "D"

(Page 6 of 11)

8. **IF BOTH items in Step 7 are a YES, THEN SECURE EDG "A" as follows:**
  - a. CHECK with Security to determine if it is safe to exit EDG ROOM "B" and go into EDG Room "A".
  - b. WHEN Security states that it is safe to move, THEN EXIT EDG "B" Room and ENTER EDG "A" room.
  - c. At the EDG "A" Engine Control Panel:
    - 1) PLACE the LOCAL/REMOTE switch in the LOCAL position.
    - 2) DEPRESS the STOP pushbutton.
  - d. Return to EDG "B" Room to monitor EDG "B" operation.
9. **INFORM the Control Room that AOP-034, Attachment 10 is complete.**

Attachment 10Rapid Start Of Deepwell Pump "D"

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\*\*\*\*\*

CAUTION

Deepwell Pump "D" should not be started while the selected E-Buss is aligned to an Off-Site Power feed. DW Pump "D" will trip from loss of power IF the selected E-Buss loses power. DW Pump "D" may be started from the EDG once the EDG is providing power to the E-Buss.

\*\*\*\*\*

**10. ALIGN DW PUMP "D" Controls to E-1 (MCC-16) Power As Follows:**

- a. At the Deepwell Pump "D" Safety Train Power Transfer switch cabinet:
  - 1) OPEN Deepwell Pump D Safety Train Power Transfer Switch Cabinet.
  - 2) ENSURE SAF-TRN-TRFR-SW (Deepwell Pump D Safety Train Power Transfer Switch) is in NORM for MCC-16.
  - 3) CLOSE Deepwell Pump D Safety Train Power Transfer Switch Cabinet.
- b. At the Deepwell Pump "D" Normal / Emergency Transfer switch cabinet:
  - 1) OPEN Deepwell Pump D Normal/Emergency Power Transfer Switch Cabinet.
  - 2) ENSURE N/E-TRFR-SW (Deepwell Pump D Normal/Emergency Power Transfer Switch) is in EMER.
  - 3) CLOSE Deepwell Pump D Normal/Emergency Power Transfer Switch Cabinet.
- c. ENSURE proper indications as follows:
  - Deepwell Pump D Safety Train Power Transfer Switch Cabinet MCC-16 (Train A) Power Supply light is ILLUMINATED.
  - Deepwell Pump D Normal/Emergency Power Transfer Switch Cabinet Emergency Power Supply light is ILLUMINATED.

(CONTINUED NEXT PAGE)

Attachment 10Rapid Start Of Deepwell Pump "D"

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## 10. (CONTINUED)

## d. ALIGN DEEPWELL PUMP "D" controls as follows:

## 1) At Deepwell Pump D Control Cabinet:

- a) PLACE DEEPWELL PUMP "D" START/STOP switch in the START position.
- b) CHECK that the RED Pump Running lamp is ILLUMINATED.
- c) GO TO EDG "A" Room.

**\*11. DETERMINE if EDG "A" Service Water cooling is lost:**

- a. EDG "A" is in operation AND has been running loaded for greater than one minute. (Ensure all Blackout Sequence loads are finished loading.)
- b. Service Water (SW) pressure is below the requirements to provide adequate EDG cooling as indicated by:
  - APP-017-11, RAW WATER LOW PRESSURE - ILLUMINATED
  - PI-1626A, SERVICE WATER IN PRESSURE - Reading LESS THAN 8 PSIG.
- c. IF there are no indications that EDG SW Cooling has been lost, THEN continue monitoring EDG Operation IAW OP-604, DIESEL GENERATORS 'A' AND 'B.'
- d. IF there are indications that EDG SW Cooling has been lost, THEN OBSERVE the CAUTION AND NOTES PRIOR to Step 12 AND CONTINUE with Steps 12 through 17.

Attachment 10Rapid Start Of Deepwell Pump "D"

(Page 9 of 11)

\*\*\*\*\*

CAUTION

The step sequence in Step 12 is used to minimize the potential for water hammer when Deepwell Pump "D" is started and to avoid over pressurizing the Service Water components down stream of SW-967. Valves should be opened in a slow and controlled manner to minimize the potential for water hammer or over pressurization of components. (NCR 317360)

\*\*\*\*\*

NOTE

- A locked valve key is required for the following steps.
- A ladder, required for SW-88, is located on the south wall of "A" Emergency Diesel Room opposite the generator end of the diesel.

12. **IF There Are Indications That EDG "A" Has LOST SW Cooling, THEN PERFORM the following valve alignments:**
- a. CLOSE SW-86, TCV-1660 OUTLET.
  - b. CLOSE SW-88, DIESEL "A" RETURN.
  - c. UNLOCK and OPEN SW-968, EDG A ALTERNATE COOLING RETURN.
  - d. UNLOCK and OPEN SW-967, EDG A ALTERNATE COOLING SUPPLY.

Attachment 10Rapid Start Of Deepwell Pump "D"

(Page 10 of 11)

**13. At EDG "A" Engine Control Panel:**

- a. RESET any alarms
- b. CHECK that EDG "A" Engine cooling via Deepwell Pump "D" flow is adequate as indicated by:
  - APP-017-11 - CLEAR
  - PI-1626A - Indicates GREATER THAN 8 PSIG
  - EDG "A" Oil AND Cooling Water Temperatures - STABLE OR SLOWLY GOING DOWN.

\*\*\*\*\*

CAUTION

The maximum load allowed on an EDG while receiving cooling from Deepwell Pump "D" is 1500 KW.

\*\*\*\*\*

**14. INFORM Control Room that:**

- EDG "A" is being cooled via DW Pump "D"
- EDG "A" load limit is now 1500 KW while on Deepwell cooling

**15. CONTACT the Control Room to DETERMINE IF EDG "B" is running without adequate Service Water Cooling as indicated by:**

- EDG "B" is running

AND

- LESS THAN 2 (One OR None) SW Pumps are running

Attachment 10Rapid Start Of Deepwell Pump "D"

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16. **IF BOTH items in Step 15 are a YES, THEN SECURE EDG "B" as follows:**
- a. CHECK with Security to determine if it is safe to exit EDG ROOM "A" and go into EDG Room "B".
  - b. WHEN Security states that it is safe to move, THEN EXIT EDG "A" Room and ENTER EDG "B" room.
  - c. At the EDG "B" Engine Control Panel:
    - 1) PLACE the LOCAL/REMOTE switch in the LOCAL position.
    - 2) DEPRESS the STOP pushbutton.
  - d. Return to EDG "A" Room to monitor EDG "A" operation.
17. **INFORM the Control Room that AOP-034, Attachment 10 is complete.**

- END -

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 11Restoration From Deepwell Pump "D" Operations

(Page 1 of 10)

NOTE

- The intent of Attachment 11, Restoration From Deepwell Pump "D" Operations, is to restore the EDG Service Water cooling flow path, the pump flow path and the pump controls to the normal standby condition. AOP-034 Main Body Step 1.a.2 directed the performance of Attachment 9, Deepwell Cooling, electrical alignments for the preferred EDG. As a minimum, these alignments must be restored to the normal configuration.
- Attachment 11 directly supports Main Body Step 7 RNO when the security threat is not verified as credible OR Main Body Step 10 when the threat was neutralized prior to starting Deepwell Pump "D."
- At the direction of the Shift Manager, Attachment 11 may be used as part of the post-event restoration activities when the Emergency Busses are powered from Off-Site power with BOTH EDGs shutdown.

1. **CHECK that BOTH Emergency Diesel Generators are SHUTDOWN with Deepwell Pump Cooling No Longer Required:**

- EDG "A"
- EDG "B"

IF either EDG is running with Deepwell Pump "D" providing Engine cooling,  
THEN CONSULT with Plant Staff for desired restoration actions PRIOR TO continuing.

2. **At Deepwell Pump D Control Cabinet:**

- a. PLACE DEEPWELL PUMP "D" START/STOP switch in the STOP position
- b. CHECK that the RED pump running lamp is extinguished AND the GREEN pump off lamp is illuminated

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 11Restoration From Deepwell Pump "D" Operations

(Page 2 of 10)

NOTE

The transfer switches operated in the following steps are cycled through the desired positions by pulling down on the ratcheted handle located inside the door to the cabinet. Approximately 3 pulls per position rotation are required.

3. **At the Deepwell Pump D Safety Train Power Cabinet:**
  - a. OPEN the Cabinet
  - b. ENSURE SAF-TRN-TRFR-SW (Deepwell Pump D Safety Train Power Transfer Switch is in the NEUT (Neutral) position
  - c. CLOSE the Cabinet
4. **At the Deepwell Pump D Normal/Emergency Power Transfer Switch Cabinet:**
  - a. OPEN the Cabinet
  - b. ENSURE N/E-TRFR-SW (Deepwell Pump D Normal/Emergency Power Transfer Switch) is in NORM (Normal)
  - c. Close the Cabinet

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 11Restoration From Deepwell Pump "D" Operations

(Page 3 of 10)

NOTE

The following items in Step 5 are functional verification that Deepwell Pump "D" is properly aligned to NORMAL (MCC-11) power with all 3 phases energized. A lack of proper (expected) indication may indicate either a transfer switch failure OR a blown fuse. (Reference: CWD-1787)

5. **CHECK that the following indications exist:**

- a. On the SAF-TRN-TRFR-SW Cabinet, BOTH Cabinet lamps are OFF
- MCC-16 (Train A)
  - MCC-18 (Train B)
- b. On the N/E-TRFR-SW Cabinet:
- 1) NORMAL POWER SUPPLY red lamp is ILLUMINATED
  - 2) EMERGENCY POWER SUPPLY red lamp is OFF
- c. On the Deepwell Pump D Control Cabinet - GREEN Pump Stopped lamp is ILLUMINATED

IF any of the expected indications are NOT observed, THEN INFORM The Control Room of the problem.

GO TO Step 7.

(CONTINUED NEXT PAGE)

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 11Restoration From Deepwell Pump "D" Operations

(Page 4 of 10)

## 5. (CONTINUED)

d. TEST the Deepwell Pump D Freeze Protection Circuit as follows:

- 1) DEPRESS AND HOLD the TEST pushbutton
- 2) CHECK that:
  - The ammeter indicates UP SCALE
  - The Freeze Protection WHITE LAMP is ILLUMINATED
- 3) RELEASE the TEST button

6. **INFORM the Control Room that Deepwell Pump "D" is Electrically Aligned to the NORMAL, MCC-11, Power Supply.**

7. **Determine IF EDG SW Valves Need To Be Restored to the NORMAL Configuration:**

- Valves in EITHER EDG Room were manipulated IAW Attachment 9, Deepwell Cooling

OR

- Valves in EITHER EDG Room were manipulated IAW Attachment 10, Rapid Start Of Deepwell Pump "D"

IF NONE of the EDG SW Valves in EITHER EDG Room were aligned for EDG Cooling via Deepwell Pump "D,"  
THEN GO TO Step 16.

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 11Restoration From Deepwell Pump "D" Operations

(Page 5 of 10)

NOTE

The actions in Step 8 through 15 may be bypassed (treated as NOT APPLICABLE) IF SW cooling to the EDGs was never lost; none of the valve alignments in either Attachment 9 OR Attachment 10 were performed.

8. **Determine EDG That Will Require Service Water Valve Alignment restoration:**

- IF EDG B was cooled via Deepwell Pump D cooling, THEN OBSERVE the CAUTION and NOTES prior to Step 9 AND CONTINUE with Step 9
- IF EDG A was cooled via Deepwell Pump D cooling, THEN OBSERVE the CAUTION and NOTES prior to Step 10 AND CONTINUE with Step 10.

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 11Restoration From Deepwell Pump "D" Operations

(Page 6 of 10)

\*\*\*\*\*

CAUTION

Service Water valves SW-90, TCV-1661 OUTLET, and SW-92, DIESEL "B" RETURN, are slowly throttled open to the FULL OPEN position to help minimize the potential for water hammer.

\*\*\*\*\*

NOTE

- A locked valve key is required for the following step.
- A ladder, required for SW-92, is located on the north wall of "B" EDG Room near the Fuel Oil Day Tank.

9. **In EDG "B" Room, ENSURE that the following valves are aligned as listed:**
- a. LOCK SHUT SW-965, EDG B  
ALTERNATE COOLING  
SUPPLY
  - b. LOCK SHUT SW-966, EDG B  
ALTERNATE COOLING WATER  
RETURN
  - c. SLOWLY THROTTLE SW-90,  
TCV-1661 OUTLET, to the FULL  
OPEN position
  - d. SLOWLY THROTTLE SW-92,  
DIESEL "B" RETURN, to the  
FULL OPEN position
  - e. GO TO Step 11.

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 11Restoration From Deepwell Pump "D" Operations

(Page 7 of 10)

\*\*\*\*\*

CAUTION

Service Water valves SW-86, TCV-1660 OUTLET, and SW-88, DIESEL "A" RETURN, are slowly throttled open to the FULL OPEN position to help minimize the potential for water hammer.

\*\*\*\*\*

NOTE

- A locked valve key is required for the following step.
- A ladder, required for SW-88, is located on the south wall of "A" Emergency Diesel Room opposite the generator end of the diesel.

10. **In EDG "A" Room, ENSURE that the following valves are aligned as listed:**
- a. LOCK SHUT SW-967, EDG A  
ALTERNATE COOLING  
SUPPLY
  - b. LOCK SHUT SW-968, EDG A  
ALTERNATE COOLING WATER  
RETURN
  - c. SLOWLY THROTTLE SW-86,  
TCV-1660 OUTLET, to the FULL  
OPEN position
  - d. SLOWLY THROTTLE SW-88,  
DIESEL "A" RETURN, to the  
FULL OPEN position

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 11Restoration From Deepwell Pump "D" Operations

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NOTE

The intent of Steps 11 through 14 is to minimize the potential for a water hammer of the Service Water System during a subsequent EDG start.

11. **Determine the status of the SW System as follows:**

- At least two (2) SW Pumps are running

AND

- The SW System is filled and pressurized enough to allow re-fill of the SW pipes in the EDG Rooms

12. **INFORM the Control Room that SW piping in BOTH EDG Rooms will be refilled**

WHEN the SW System is restored enough to support re-filling the pipes in the EDG Rooms,  
THEN CONTINUE with Step 12.

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 11Restoration From Deepwell Pump "D" Operations

(Page 9 of 10)

13. **In EDG Room "A," PERFORM the following:**
- a. SLOWLY THROTTLE OPEN SW-87, TCV-1660 BYPASS, to the FULL OPEN POSITION
  - b. AFTER SW-87 has been full open for a minimum of one minute (60 seconds), THEN SLOWLY THROTTLE SHUT SW-87 to the FULL SHUT POSITION
  - c. On EDG "A" Engine Control Panel:
    - 1) RESET any alarms
    - 2) INFORM the Control Room of any locked in alarms along with the applicable temperature indications

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 11Restoration From Deepwell Pump "D" Operations

(Page 10 of 10)

14. **In EDG Room "B," PERFORM the following:**
- a. SLOWLY THROTTLE OPEN SW-91, TCV-1661 BYPASS, to the FULL OPEN POSITION
  - b. AFTER SW-91 has been full open for a minimum of one minute (60 seconds), THEN SLOWLY THROTTLE SHUT SW-91 to the FULL SHUT POSITION
  - c. On EDG "B" Engine Control Panel:
    - 1) RESET any alarms
    - 2) INFORM the Control Room of any locked in alarms along with the applicable temperature indications
15. **INFORM the Control Room that SW Pipes in the EDG Rooms have been re-filled.**
16. **INFORM the Control Room that all required actions of AOP-034, Attachment 11, are complete.**

- END -

**AOP-034, Revision 29**  
**PRR 2132505 for NCR 1947438**  
**This revision also answers PRR 2020161 and PRR 2028520.**  
**Summary of Changes**

<u><b>Section/Step</b></u>	<u><b>Comment - Change Basis</b></u>
Purpose & Entry Conditions	<p>Added two new sections, major action categories and Time Critical/Time Sensitive Actions (TCAs/TSAs) in AOP-034.</p> <p>The TCAs in AOP-034 are considered part of the RNP Security Plan and, thus, are Safeguards Information (SGI).</p>
CAUTION before Main Body, Step 1.	This CAUTION is similar to a caution in new Attachment 9. It is placed at the front of all the procedure steps to help prevent a "pre-emptive" DW Pump "D" start prior to the selected E-Buss transferring to EDG power.
NOTES before Main Body, Step 1	<p>1. Reminds the users that Steps 1 through 9 should be performed in a concurrent or parallel manner. Part of the answer to NCR 1947438.</p> <p>2. Reminds the users that Steps 26 &amp; 27 may need to be performed early or out of sequence during some Security Events.</p>
Step 1	Step 1.a.2 now directs the users to perform the Attachment 9. Deepwell Cooling, ELECTRICAL ALIGNMENTS without starting DW Pump "D." This is part of the answer to NCR 1947438.
Steps 2, 3 & 4 with NOTE before Step 2	New Continuous Action Steps (CAS) to address NCR 1947438 for fast breaking events.
Step 6 Table	Combined line items #2 and #3 since they both direct going to old Step 5. (Old Step 5 is now Step 8.) No change in meaning or intent.
Step 7 RNO	Performance of the Attachment 11 electrical alignments is necessary to restore DW Pump "D" to the normal, standby, status. This action is done ONLY IF the threat was not verified as CREDIBLE.
New NOTE before Step *10	New NOTE concerns the use of the Security Radios kept in the Control Room. These radios may be used to monitor the Security related radio transmissions to assist with threat assessment. Radio monitoring is not required when a Security Officer is posted in the Control Room.

**AOP-034, Revision 29**  
**PRR 2132505 for NCR 1947438**  
**This revision also answers PRR 2020161 and PRR 2028520.**  
**Summary of Changes**

<u><b>Section/Step</b></u>	<u><b>Comment - Change Basis</b></u>
Step *10	<p>Revised the "Threat Nullified" actions. Old actions were to "Return to Procedure &amp; Step in effect." That would not be possible after an attack, the damage to the plant must be assessed. Even if the threat were nullified prior to tripping the reactor, the applicable action in Attachment 11 must be addressed.</p> <p>The new action directs the use of procedures EPEOF-10, AD-EP-ALL-0110, AD-WC-ALL-0380, AD-OP-ALL-0102 and new Attachment 11 for the development of recovery plans.</p>
Step 20	Step 20.b RNO. Added an additional contingency action that states: "IF the SDAFW Pump is NOT available, THEN PERFORM the applicable actions found in OP-402, Auxiliary Feedwater System, while NOT placing people in harms way."
Step 28 NOTE 1 & 2	<p>1<sup>st</sup> NOTE explains the intent of Step 28. Copied from the Basis Document.</p> <p>2<sup>nd</sup> NOTE reminds users to use EOP Supplement "F" when changing loads on an EDG.</p>
Step *29 NOTES	<p>Step *29 directs the use of Attachment 7 to restore off-site power to the E-Busses. Attachment 7 contains these same NOTES at the entry to the Attachment.</p> <p>Intent is to help with Control Room decision making when determining IF Attachment 7 should be performed. Information copied from the Basis Document.</p>
Step *30	<p>Added a new Step *30.a to check that the Reactor is SHUTDOWN.</p> <p>The RNO for *30.a states: "WHEN The Reactor is EITHER SHUTDOWN OR TRIPPED while in this procedure, THEN PERFORM an APPLICABILITY DETERMINATION for EPP-28, Loss Of Ultimate Heat Sink." Intent is to ensure EPP-28 is addressed AFTER the applicable actions in the EOP Network are accomplished. This is part of the answer to EPP-28 PRR 2098167.</p>
NOTE before Step 36	Repeat of the new NOTE before Step *10 concerning Security Radios.

**AOP-034, Revision 29**  
**PRR 2132505 for NCR 1947438**  
**This revision also answers PRR 2020161 and PRR 2028520.**  
**Summary of Changes**

<u><b>Section/Step</b></u>	<u><b>Comment - Change Basis</b></u>
CAUTION Before Step 38	New CAUTION to remind the users that 10CFR50.54x declaring may be necessary IF EOP and/or AOP actions must be bypassed or delayed due to the Security Situation. AD-OP-ALL-1000 contains an attachment that must be completed for a 10CFR50.54x situation.
Attachment 2, Steps 2, 3 & 4 with NOTE before Step 2	Same as Main Body Steps 2, 3 & 4. Part of the answer to NCR 1947438.
Attachment 2, Table in Step 5	Combined the two line items for "Less than Five Minutes" and "Impacted Has Occurred." Both conditions require the same response, GO TO Step 19.  Revised the "Threat Nullified" actions. Old actions were to "Return to Procedure & Step in effect." That would not be possible after an attack, the damage to the plant must be assessed. The new action directs the use of procedures EPEOF-10, AD-EP-ALL-0110, AD-WC-ALL-0380, AD-OP-ALL-0102 and new Attachment 11 for the development of recovery plans.
Attachment 2, NOTE before Step 6	New NOTE drawn from the AOP-034 Basis Document. Gives a BRIEF explanation of the decision logic used in Step 6. A form of this NOTE was used before old Step 5. This type of information needs to be given PRIOR to the PA announcements for ERO activation and Site Evacuation.
Attachment 2, Step 6	Complete re-structure of step to allow for a possible Aircraft Attack during an outage <b>OR IF</b> the Time-To-Attack is rapidly changing.  Steps 6.a checks for the plant configuration (non-outage or off-normal hours) with the 6.a RNO actions for an outage or if the time to attack is changing while working this step.  Steps 6.b through 6.h AER are the directions to evacuate the site with the ERO reporting to the Remote Emergency Response Facility.  Step 6.i through 6.n are entered from the Step 6.a RNO.
Attachment 2, NOTE at Step 7	New NOTE concerns the use of the Security Radios kept in the Control Room. Same as the NOTE before Main Body Steps *10 and 36.

**AOP-034, Revision 29**  
**PRR 2132505 for NCR 1947438**  
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**Summary of Changes**

<u><b>Section/Step</b></u>	<u><b>Comment - Change Basis</b></u>
Attachment 2, Step 7	Combined old Steps 4, 5 & 6 into current Step 7. This gives a small improvement in the step progression time line.
Attachment 2, Step 17	This is old Step 16. Old step just said to "RETURN TO Step 1. New Step 17 now states: "Observe The NOTE Prior To Step 1 And RETURN TO Steps 1 through 5 To Re-assess The Threat Situation." Re-worded step based on Basis Document information and new steps.
Attachment 2, Step 19	New contingency action in Step 19.b (old 18.b) RNO. The new contingency states: "IF the SDAFW Pump is NOT available, THEN PERFORM the applicable actions found in OP-402, Auxiliary Feedwater System while NOT placing people in harms way."
Attachment 2, NOTE before Step 20	New first NOTE is similar to the new NOTE before Step 3. Gives a quick explanation of the basis for sending the ERO to the ON-SITE facilities.
Attachment 2, Step 26 RNO	This is old step 25. RNO is now the same as Attachment 2, Step 17.
Attachment 2, NOTE at Step 27	NOTE reminds users to use EOP Supplement "F" when changing loads on an EDG.
Attachment 2, Step 31 RNO	This is old step 30. Same as Attachment 2, Steps 17 & 26.
Attachment 2, Step 33	This is old step 32. New NOTE before Step 33. Reminds users of possible need for procedures EDMG-000 and EPSPA-05 use in parallel with AOP-041.
Attachment 2, Step 36	<p>This is old step 35. Replaced the Step 36.a RNO statement with the revised directions found in Main Body, Step 10 table and the table in Step 5 of this attachment.</p> <p>Added a new bullet to step 36.a RNO that states: "IF EPP-28 is not applicable, THEN GO TO Main Body, Step 5, to re-assess plant conditions."</p> <p>This RNO assumes that the Aircraft Attack is done BUT that the overall threat is not nullified.</p>

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**Summary of Changes**

<u><b>Section/Step</b></u>	<u><b>Comment - Change Basis</b></u>
Attachment 5, 2 <sup>nd</sup> NOTE before Step 1	New NOTE. Reminds users that Attachment 5 is intended to be performed in PARALLEL with the other actions in AOP-034. This answers a Human Performance question, "Is there any time where Attachment 5 is performed instead of the actions in the AOP?"
Attachment 5, Step 7.c	Old Step 7.c just stated to "STOP RCS Depressurization." New Step 7.c states: "CONTROL RCS Pressure to MAINTAIN BETWEEN 1950 psig to 1900 psig while performing Step 8."  Intent: Ensure proper RCS/PZR Pressure Control while blocking the Low Pressure Safety Injection Signal in Step 8. Answers a Human Factors Question: "When I stop the depressurization, what is my next action with respect to RCS Pressure Control?"
Attachment 5, Step 21 NOTE	New NOTE that defines the RCS Temperature and Pressure Control Bands that will be checked/established in Steps 21 through 24.  Intent: To help the Control Room crew control and coordinate their actions while approaching and entering the Step 24 Control Bands.
Attachment 6, Step 1	New CAUTION prior to step. Addresses potential for EDGs pre-lube to be in progress as directed in the new Continuous Actions Steps.  New Step 1.a with RNO, addresses potential that EDG "B" may, or may not, be running with the output breaker open. This contingency is necessary IF the EDG has started after a pre-lube but has not loaded.
Attachment 7, Step 1	Revised step to read: "CHECK Emergency Bus - DEENERGIZED FROM STOPPING AN EDG IN EPP-28 OR from Attachment 9, Deepwell Cooling OR Attachment 10, Rapid Start of Deepwell Pump "D"."
Attachment 7, NOTE before Step 8	Added information that Breaker 52/11A will be manipulated in Step 20.c. Intent is to help the users with prioritization and timing of when the Security Officer will be needed.

**AOP-034, Revision 29**  
**PRR 2132505 for NCR 1947438**  
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**Summary of Changes**

<u><b>Section/Step</b></u>	<u><b>Comment - Change Basis</b></u>
Attachment 7, Step *20	New NOTE prior to Step along with new Step 20.a. Depending on what the Security Event was and depending on what caused the loss of power to the E-Busses, it is possible that MCC-3 may now be energized. IF the various MCC-3 powered loads indicate power is restored to MCC-3, THEN it is not necessary to dispatch an Operator with armed escort to operate Breaker 52/11A.
Attachment 7, Step 22	New Step 22. Check for need to energize Emergency Buss E-1 from Off-Site source. IF E-1 it is already energized, THEN the actions in Step 23 (old Step 22) are not needed.
Attachment 8	Converted from an MS Word table to a VE-PROMS table. No changes in text.
Attachment 9	<p>New attachment is part of the answer to NCR 1947438. The intent of this attachment is for the non-rapid alignment and possible start of DW Pump "D."</p> <p>Steps, information and equipment nomenclature drawn from EPP-28, Attachment 6, and OST-414.</p> <p>The design intent of Attachment 9 is that the threat is external to the Auxiliary Building AND will stay external to the Auxiliary Building.</p>
Attachment 10	<p>New attachment is part of the answer to NCR 1947438. The intent of this attachment is for the RAPID alignment and start of DW Pump "D." A rapid alignment and start would be required <b>ONLY IF</b> Security declares a HOSTILE ACTION on the Site.</p> <p>Attachment 10 is invoked from either the Procedure Main Body, Step *2, <b>OR</b> Attachment 2, Step *2. Performance of this attachment works under the assumption that the selected EDG was given a forced start via the Blackout Sequence either just prior to or in parallel to the Auxiliary Building Operator receiving direction to perform the attachment.</p> <p>Steps, information and equipment nomenclature drawn from EPP-28, Attachment 6, and OST-414.</p> <p>Attachment 10 assumes that the threat may enter the Auxiliary Building, thus the 1<sup>st</sup> Level Hallway (Fire Detection Zones 11, 12 and 13) may become an active shooter area with the EDG Rooms still safe and protected.</p>

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**PRR 2132505 for NCR 1947438**  
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**Summary of Changes**

<b><u>Section/Step</u></b>	<b><u>Comment - Change Basis</u></b>
Attachment 11	<p>New attachment concerning restoration after Deepwell Pump "D" Operations. Part of the answer to NCR 1947438.</p> <p>The intent of Attachment 11, Restoration From Deepwell Pump "D" Operations, is to restore the EDG Service Water cooling flow path, the pump flow path and the pump controls to the normal standby condition.</p> <p>Attachment 11 directly supports Main Body Step 7 RNO when the security threat is not verified as credible or has been nullified PRIOR to operation of Deepwell Pump "D." At the direction of the Shift Manager, this attachment may be used as part of the post-event restoration activities when the Emergency Busses are powered from Off-Site power with BOTH EDGs shutdown.</p> <p>As a minimum, it is expected that the ELECTRICAL PORTIONS of DW Pump "D" will need to be restored to the NORMAL, MCC-11 supply, alignment.</p> <p>IF DW Pump "D" is used for EDG cooling, THEN the applicable valves will be need to be restored and the SW piping down stream of <b>BOTH</b> EDGs will need to be refilled to minimize the potential for a water hammer during a subsequent EDG start.</p>
Continuous Action Summary (CAS) Pages	Revised as applicable to reflect the previously listed changes including new Continuous Actions in Attachments 9 & 10.

**CONTINUOUS ACTION SUMMARY FOR AOP-034****MAIN BODY**

2. **IF** at any time Security calls via the Dedicated Line to report a HOSTILE ACTION, **THEN** PERFORM listed actions in Step 2.
3. **IF** at any time there is a VERIFIED CREDIBLE THREAT with GREATER THAN 5 minutes but LESS THAN 10 minutes until threat arrival, **THEN** PERFORM the listed actions in Step 3.
4. **IF** at any time there are indications that Off-Site power to EITHER Emergency Buss has been COMPROMISED OR LOST due to the Security Threat, **THEN** PERFORM the listed actions in Step 4.
5. Document relevant times. (updates)
10. Perform action specified in table. Re-perform if times change.
29. **IF** Power is lost to the Emergency Busses **AFTER** alignment to the EDGs, **THEN** ATTEMPT to restore power to Emergency Busses using Attachment 7, Energizing The Emergency Busses From An Offsite Source.
30. **WHEN** The Reactor is EITHER SHUTDOWN OR TRIPPED while in this procedure, **THEN** PERFORM an APPLICABILITY DETERMINATION for EPP-28, Loss Of Ultimate Heat Sink.

**ATTACHMENT 2**

2. **IF** at any time Security calls via the Dedicated Line to report a HOSTILE ACTION, **THEN** PERFORM listed actions in Step 2.
3. **IF** at any time there is a VERIFIED CREDIBLE THREAT with GREATER THAN 5 minutes but LESS THAN 10 minutes until threat arrival, **THEN** PERFORM the listed actions in Step 3.
4. **IF** at any time there are indications that Off-Site power to EITHER Emergency Buss has been COMPROMISED OR LOST due to the Security Threat, **THEN** PERFORM the listed actions in Step 4.
5. Perform action specified in table. Re-perform if times change
10. **IF** it is determined that attack on RNP is intended, **THEN** TRIP the Reactor.
34. **IF** Power is lost to the Emergency Busses **AFTER** alignment to the EDGs, **THEN** ATTEMPT to restore power to Emergency Busses using Attachment 7, Energizing The Emergency Busses From An Offsite Source.

**CONTINUOUS ACTION SUMMARY FOR AOP-034 (Continued)****ATTACHMENT 5**

13. **WHEN** RCS pressure is less than 1000 psig,  
**THEN** PERFORM Steps 14 through 19.

**ATTACHMENT 7**

20. **WHEN** access to the 4KV Switchgear Room is available,  
**THEN** PERFORM Step 20 actions to ENERGIZE MCC-3.

**ATTACHMENT 9**

4. **IF** EDG Service Water Cooling is LOST,  
**THEN** ALIGN Deepwell Pump "D" Cooling IAW Attachment 9.

**ATTACHMENT 10**

3. **IF** there are indications that EDG "B" has lost SW Cooling,  
**THEN** OBSERVE the CAUTION AND NOTES PRIOR to Step 4  
**AND** CONTINUE with Steps 4 through 9.
11. **IF** there are indications that EDG "A" has lost SW Cooling,  
**THEN** OBSERVE the CAUTION AND NOTES PRIOR to Step 12  
**AND** CONTINUE with Steps 12 through 17.

**CONTINUOUS ACTION SUMMARY FOR AOP-034****MAIN BODY**

2. **IF** at any time Security calls via the Dedicated Line to report a HOSTILE ACTION, **THEN** PERFORM listed actions in Step 2.
3. **IF** at any time there is a VERIFIED CREDIBLE THREAT with GREATER THAN 5 minutes but LESS THAN 10 minutes until threat arrival, **THEN** PERFORM the listed actions in Step 3.
4. **IF** at any time there are indications that Off-Site power to EITHER Emergency Buss has been COMPROMISED OR LOST due to the Security Threat, **THEN** PERFORM the listed actions in Step 4.
5. Document relevant times. (updates)
10. Perform action specified in table. Re-perform if times change.
29. **IF** Power is lost to the Emergency Busses **AFTER** alignment to the EDGs, **THEN** ATTEMPT to restore power to Emergency Busses using Attachment 7, Energizing The Emergency Busses From An Offsite Source.
30. **WHEN** The Reactor is EITHER SHUTDOWN OR TRIPPED while in this procedure, **THEN** PERFORM an APPLICABILITY DETERMINATION for EPP-28, Loss Of Ultimate Heat Sink.

**ATTACHMENT 2**

2. **IF** at any time Security calls via the Dedicated Line to report a HOSTILE ACTION, **THEN** PERFORM listed actions in Step 2.
3. **IF** at any time there is a VERIFIED CREDIBLE THREAT with GREATER THAN 5 minutes but LESS THAN 10 minutes until threat arrival, **THEN** PERFORM the listed actions in Step 3.
4. **IF** at any time there are indications that Off-Site power to EITHER Emergency Buss has been COMPROMISED OR LOST due to the Security Threat, **THEN** PERFORM the listed actions in Step 4.
5. Perform action specified in table. Re-perform if times change
10. **IF** it is determined that attack on RNP is intended, **THEN** TRIP the Reactor.
34. **IF** Power is lost to the Emergency Busses **AFTER** alignment to the EDGs, **THEN** ATTEMPT to restore power to Emergency Busses using Attachment 7, Energizing The Emergency Busses From An Offsite Source.

**CONTINUOUS ACTION SUMMARY FOR AOP-034 (Continued)****ATTACHMENT 5**

13. **WHEN** RCS pressure is less than 1000 psig,  
**THEN** PERFORM Steps 14 through 19.

**ATTACHMENT 7**

20. **WHEN** access to the 4KV Switchgear Room is available,  
**THEN** PERFORM Step 20 actions to ENERGIZE MCC-3.

**ATTACHMENT 9**

4. **IF** EDG Service Water Cooling is LOST,  
**THEN** ALIGN Deepwell Pump "D" Cooling IAW Attachment 9.

**ATTACHMENT 10**

3. **IF** there are indications that EDG "B" has lost SW Cooling,  
**THEN** OBSERVE the CAUTION AND NOTES PRIOR to Step 4  
**AND** CONTINUE with Steps 4 through 9.
11. **IF** there are indications that EDG "A" has lost SW Cooling,  
**THEN** OBSERVE the CAUTION AND NOTES PRIOR to Step 12  
**AND** CONTINUE with Steps 12 through 17.