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10 CFR 50, Appendix E

Serial: RNP-RA/16-0019

MAR 24 2016

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 ANALYSIS**

Ladies and Gentlemen:

In accordance with 10 CFR 50.4(b)(5) and Appendix E to 10 CFR 50, Duke Energy Progress, Inc. is transmitting a revision to the H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2, Emergency 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 Please replace the superseded procedure with the enclosed revision.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 includes a summary of the analysis 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 Scott Connelly, Acting Manager – Nuclear Regulatory Affairs at (843) 857-1569.

Sincerely,

David S. Hoffman
Director – Nuc Org Effectiveness

DSH/cac

Attachments:

- I. Procedure Revision and Effective Date
- II. 50.54(q)(3) Screen
- III. 50.54(q)(3) Evaluation

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

Procedure	Revision No.	Effective Date
AOP-034, "Security Events"	27	03/07/16

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

50.54(q)(3) Screen

10 CFR 50.54(q) Screening Evaluation Form

Screening and Evaluation Number		Applicable Sites	
EREG #: 1998183		BNP	<input type="checkbox"/>
		CNS	<input type="checkbox"/>
		CR3	<input type="checkbox"/>
		HNP	<input type="checkbox"/>
5AD #: 1974717		MNS	<input type="checkbox"/>
		ONS	<input type="checkbox"/>
		RNP	<input checked="" type="checkbox"/>
		GO	<input type="checkbox"/>
Document and Revision AOP-034 Revision 27			
<p>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):</p> <p>The following proposed changes are for procedure AOP-034, Security Events, Revision 27:</p> <ul style="list-style-type: none"> • Main Body: Step 1, Old Step 19(Del), & Attachment 2: Old Step 19(Del): Moved dispatch of EDG Operator to top of page Step 1. Added dispatch of a CCW Pump room operator when in modes 5 & 6. • Attachment 3 Step 1: Added "and exit the attachment" once Security is notified of the threat. • Attachment 6 Old Step 1 (Del): Removed initial step to dispatch the EDG operator. The operator is dispatched as the first step in the procedure and was redundant here. This is editorial. • Attachments 5, 6, 7: Upgraded layout and verbiage to conform to current standards with no change to intent or logic flow. These are editorial enhancements to improve the usability. • Attachment 7 Step 23, 23.a., 23.b, & Caution: Added steps to consolidate RCP Seal isolation requirements and decision and include new Attachment 8. Added Caution regarding reduced allowable RCP Seal Loss times for Safe Shutdown / SBO considerations. • Attachment 7 Step 27: Included starting 'C' Charging Pump and deleted old step 27. The necessary conditions have been established in Step 23, 23.a, & 23.b • Attachment 8: Added new attachment with table to determine maximum time RCP Seal cooling can be lost before the need to isolate. 			

10 CFR 50.54(q) Screening Evaluation Form


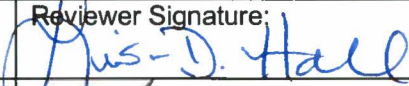

Part II. Activity Previously Reviewed? Is this activity Fully bounded by an NRC approved 10 CFR 50.90 submittal or Alert and Notification System Design Report? If yes, identify bounding source document number or approval reference and ensure the basis for concluding the source document fully bounds the proposed change is documented below: Justification:				Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
				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)							<input type="checkbox"/>
Part III. Editorial Change Is this activity an editorial or typographical change only, such as formatting, paragraph numbering, spelling, or punctuation that does not change intent? The following proposed changes for procedure AOP-034, Security Events, Revision 27, meet the criteria of editorial. Attachments 5, 6, 7: Upgraded layout and verbiage to conform to current standards with no change to intent or logic flow. <u>Justification:</u> These are editorial enhancements to improve the usability. Attachment 6 Old Step 1 (Del): Removed initial step to dispatch the EDG operator. <u>Justification:</u> This is editorial. The operator is dispatched as the first step in the procedure and was redundant here.				Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
				10 CFR 50.54(q) Effectiveness Evaluation is not required. Enter justification and complete Attachment 4, Part V & VI.	Continue to Attachment 4, Part IV and address non editorial changes		
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 checked="" 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 checked="" 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 checked="" type="checkbox"/>
2b	The process for timely augmentation of onshift staff is established and maintained.						<input 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"/>

10 CFR 50.54(q) Screening Evaluation Form

Part IV. Emergency Planning Element and Function Screen (cont.)		
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 initiating notification of the declared emergency within 15 minutes (30 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 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"/>
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 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 type="checkbox"/>

10 CFR 50.54(q) Screening Evaluation Form

Part IV. Emergency Planning Element and Function Screen (cont.)		
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"/>
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. Go to Attachment 4, 10 CFR 50.54(q) Screening Evaluation Form, Part VI for instructions describing the NRC required 30 day submittal.		<input type="checkbox"/>
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. Shaded block requires final approval of Screen and Evaluation by EP CFAM.		<input checked="" type="checkbox"/>

Part V. Signatures:		
Preparer Name (Print): Debbie Dowling	Preparer Signature: 	Date: 3/2/16
Reviewer Name (Print): Lisa Hall	Reviewer Signature: 	Date: 3/2/16
Approver (EP Manager Name (Print): Tony Pilo	Approver Signature: 	Date: 3/3/16
Approver (CFAM, as required) Name (Print): N/A	Approver Signature: N/A	Date: N/A

Part VI. NRC Emergency Plan and Implementing Procedure Submittal Actions	
Create two EREG General Assignments.	
• One for EP to provide the 10 CFR 50.54(q) summary of the analysis, or the completed 10 CFR 50.54(q), to Licensing.	<input checked="" type="checkbox"/>
• One for Licensing to submit the 10 CFR 50.54(q) information to the NRC within 30 days after the change is put in effect.	<input checked="" type="checkbox"/>

QA RECORD

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

50.54(q)(3) Evaluation

10 CFR 50.54(q) Effectiveness Evaluation Form

Screening and Evaluation Number	Applicable Sites	
EREG #: 1998183	BNP	<input type="checkbox"/>
	CNS	<input type="checkbox"/>
	CR3	<input type="checkbox"/>
	HNP	<input type="checkbox"/>
5AD #: 1974717	MNS	<input type="checkbox"/>
	ONS	<input type="checkbox"/>
	RNP	<input checked="" type="checkbox"/>
	GO	<input type="checkbox"/>
Document and Revision: AOP-034 Revision 27		
Part I. Description of Proposed Change: The following proposed changes are for procedure AOP-034, Security Events, Revision 27: <ul style="list-style-type: none">• Main Body: Step 1, Old Step 19(Del), & Attachment 2: Old Step 19(Del): Moved dispatch of EDG Operator to top of page Step 1. Added dispatch of a CCW Pump Room operator when in modes 5 & 6.• Attachment 3 Step 1: Added "and exit the attachment" once Security is notified of the threat.• Attachment 7 Step 23, 23.a., 23.b, & Caution: Added steps to consolidate RCP Seal isolation requirements and decision and include new Attachment 8. Added Caution regarding reduced allowable RCP Seal Loss times for Safe Shutdown / SBO considerations.• Attachment 7 Step 27: Included starting 'C' Charging Pump and deleted old step 27. The necessary conditions have been established in Step 23, 23.a, & 23.b• Attachment 8: Added new attachment with table to determine maximum time RCP Seal cooling can be lost before the need to isolate.		
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 <input type="checkbox"/> No <input checked="" type="checkbox"/>

10 CFR 50.54(q) Effectiveness Evaluation Form**Part II. Description and Review of Licensing Basis Affected by the Proposed Change:**

The proposed changes in Revision 27, of AOP-034, Security Events, included a review of the following RNP emergency plan licensing basis documents:

- PLP-007, Robinson Emergency Response Plan (Revision 0, dated 1982)
- PLP-007, Robinson Emergency Plan (Revision 85)
- 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 in Revision 27 of AOP-034, Security Events do not affect the licensing basis of PLP-007, Robinson Emergency Plan.

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):

These following proposed changes for Revision 27 of AOP-034, Security Events, are enhancements to ensure timely dispatch of the Auxiliary Building operator to the Emergency Diesel Generator (EDG) "B" Room and Component Cooling Water (CCW) Pump Room operator to the CCW Pump Room. The movement and addition of the dispatch steps to the beginning of the section ensures personnel respond and start emergency equipment in a timely manner to implement AOP-034 and EPP-28, Loss of Ultimate Heat Sink, if required. The addition to dispatch a CCW Pump Room operator in modes 5 & 6 supports checking Motor Driven Auxiliary Feedwater Pump "A" in accordance with EPP-28. This step ensures an operator for CCW Pump Room contingencies is available for dispatch. Incorporating these enhancements address concerns that conditions may change preventing Operations from reaching the required location.

The responsibilities and functions of the organizations remain unchanged and therefore no new positions, responsibilities or functions are created by these proposed changes in regards to maintaining and responding to onsite and offsite Emergency Plans. These changes maintain planning standard functions 10 CFR 50.47(b)(1) and 10 CFR 50.47(b)(2) for assigned responsibility for emergency response and response organization staff to respond and augment on a continuing basis (24/7 staffing) in accordance with the E-plan. Also, these proposed changes continue to comply with planning standards, as described in 10 CFR 50, Appendix E Sections IV.A.2, IV.A.2.a, b; IV.A.9, and IV. C, requirements.

- Main Body: Step 1, Old Step 19(Del), & Attachment 2: Old Step 19(Del):
Moved dispatch of EDG Operator to top of page Step 1.
Added dispatch of a CCW Pump Room operator when in modes 5 & 6.

The following proposed change, for Revision 27 of AOP-034, Security Events, is an enhancement that allows Operations to exit the attachment after notifying Security to initiate Scenario 21 of the Emergency Response Organization Notification System. Exiting the attachment allows Operations to implement the procedure in a timely manner. This change does not impact 10 CFR 50.47 or 10 CFR Appendix E.; therefore, this change continues to support and comply with the Planning Standards, as described in 10 CFR 50.47(b) and the requirements in 10 CFR 50, Appendix E.

- Attachment 3 Step 1: Added "and exit the attachment" once Security is notified.

10 CFR 50.54(q) Effectiveness Evaluation Form

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

The following proposed changes, for Revision 27 of AOP-034, Security Events, are enhancements that consolidate and address the time allowed for restoration of Reactor Coolant Pump seal cooling being reduced to less than 15 minutes when initial seal leakoff flow is greater than 3.2 gpm as described in OP-101, Reactor Coolant System and Reactor Coolant Pump Startup and Operation, Rev. 75, Precaution and Limitation Step 5.2.1.25. This information eliminates the need to branch from one procedure to the other. These proposed changes do not change the intent. These changes do not impact 10 CFR 50.47 or 10 CFR Appendix E.; therefore, these changes continue to support and comply with the Planning Standards, as described in 10 CFR 50.47(b) and the requirements in 10 CFR 50, Appendix E.

- Attachment 7 Step 23, 23.a, 23.b, & Caution: Added steps to consolidate RCP Seal isolation requirements and decision and include new Attachment 8. Added Caution regarding reduced allowable RCP Seal Loss times for Safe Shutdown / SBO considerations.
- Attachment 7 Step 27:
Included conditional for starting of 'C' Charging Pump and deleted old step 27. The necessary conditions have been established in Step 23, 23.a, & 23.b
- Attachment 8: Added new attachment with table to determine maximum time RCP Seal cooling can be lost before the need to isolate.

10 CFR 50.54(q) Effectiveness Evaluation Form

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):

10 CFR 50.47(b)(1), Emergency Response Responsibility

PLANNING STANDARD: Primary responsibilities for emergency response by the nuclear facility licensee and by State and local organizations within the Emergency Planning Zones have been assigned, the emergency responsibilities of the various supporting organizations have been specifically established, and each principal response organization has staff to respond and to augment its initial response on a continuous basis.

PS FUNCTIONS:

1. Process ensures that on-shift emergency response responsibilities are staffed and assigned.
2. The response organization has the staff to respond and augment on a continuing basis (24/7 staffing) in accordance with the E-plan.

Supporting Requirements (in part): 10 CFR Part 50, Appendix E, Sections IV.A.2

A. Organization

The organization for coping with radiological emergencies shall be described, including definition of authorities, responsibilities, and duties of individuals assigned to the licensee's emergency organization and the means for notification of such individuals in the event of an emergency. Specifically, the following shall be included:

2. A description of the onsite emergency response organization with a detailed discussion of:
 - a. Authorities, responsibilities, and duties of the individual(s) who will take charge during an emergency;
 - b. Plant staff emergency assignments

Program Elements

- Primary responsibilities for emergency response by the nuclear facility licensee, and by State and local organizations within the Emergency Planning Zones have been assigned.
- The emergency responsibilities of the various supporting organizations have been specifically established.
- Each organization and sub-organization having an operational role shall specify its concept of operations, and its relationship to the total effort.
- Each organization shall identify a specific individual by title who shall be in charge of the emergency response.

10 CFR 50.54(q) Effectiveness Evaluation Form

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):

10 CFR 50.47(b)(2) Onsite Emergency Organization states:

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.

The emergency planning functions associated with 10 CFR 50.47(b)(2) state:

- Process ensures that on-shift emergency response responsibilities are staffed and assigned.

The applicable supporting requirement which is described in 10 CFR 50, Appendix E Sections IV.A.2.a, b; IV.A.9; and IV. C states (in part):

A. Organization

The organization for coping with radiological emergencies shall be described, including definition of authorities, responsibilities, and duties of individuals assigned to the licensee's emergency organization and the means for notification of such individuals in the event of an emergency. Specifically, the following shall be included:

2. A description of the onsite emergency response organization with a detailed discussion of:

- a. Authorities, responsibilities, and duties of the individual(s) who will take charge during an emergency;
- b. Plant staff emergency assignments;

9. By December 24, 2012, for nuclear power reactor licensees, a detailed analysis demonstrating that on-shift personnel assigned emergency plan implementation functions are not assigned responsibilities that would prevent the timely performance of their assigned functions as specified in the emergency plan.

C. Activation of Emergency Organization

- 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.**

10 CFR 50.54(q) Effectiveness Evaluation Form**Program Elements**

- Responsibilities for emergency response are defined and have adequate staffing to provide initial facility accident response in key functional areas. Provide timely augmentation of response capabilities and interface among various onsite response activities and offsite support and response activities are specified.
- Specify the onsite emergency organization of plant staff personnel for all shifts and its relation to the responsibilities and duties of the normal shift complement.
- Designate an individual as emergency coordinator who shall be on shift at all times and who shall have the authority and responsibility to immediately and unilaterally initiate any emergency actions, including providing protective action recommendations to authorities responsible for implementing offsite emergency measures.
- Specify the positions or title and major tasks to be performed by the persons to be assigned to the functional areas of emergency activity. For emergency situation, specific assignments shall be made for all shifts and for plant staff members, both onsite and away from the site. These assignments shall cover the emergency functions in Table B-1 entitled "Minimum Staffing Requirements for Nuclear Power Plant Emergencies." The minimum on-shift staffing levels shall be as indicated in Table B-1. The site will be able to augment on-shift capabilities within a short period after declaration of an emergency. This capability is indicated in Table B-1.

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

AOP-034, Security Events, is a supporting procedure that describes how to respond to a threat to the facility from external security events. The following proposed changes in Revision 27 of AOP-034 do not result in a reduction in effectiveness to onsite emergency organization of plant staff personnel. The proposed changes do not reduce the effectiveness of the Robinson Emergency Plan (PLP-007). PLP-007, Section 5.3, Emergency Response Organization, provides assigned responsibility for emergency response and response organization staff to respond and augment on a continuing basis (24/7 staffing). These proposed changes continue to support the guidance provided in PLP-007 with no reduction in effectiveness.

The responsibilities and functions of the organizations remain unchanged and therefore no new positions, responsibilities or functions are created by these proposed changes in regards to maintaining and responding to onsite and offsite Emergency Plans. These changes have no impact to the NEI 10-05 On-Shift Staffing Analysis for H. B. Robinson Nuclear Plant – 2015, May 2015 Revision 1. The Design Basis Threat and Aircraft Probable Threat scenario was reviewed and determined to have no impact to On-Shift Staffing Analysis.

These proposed changes are enhancements to ensure timely response to a threat to the facility from external security events. These enhancements ensure timely dispatch of the Auxiliary Building operator to the EDG "B" Room and Component Cooling Water (CCW) Pump Room operator to the CCW Pump Room. The addition to dispatch a CCW Pump Room operator in modes 5 & 6 supports checking Motor Driven AFW Pump "A" in accordance with EPP-28. This step ensures an operator for CCW Pump Room contingencies is available for dispatch. Incorporating these enhancements address concerns that conditions may change preventing Operations from reaching the required location.

- Main Body: Step 1, Old Step 19(Del), & Attachment 2: Old Step 19(Del):
Moved dispatch of EDG Operator to top of page Step 1.
Added dispatch of a CCW Pump Room operator when in modes 5 & 6.

10 CFR 50.54(q) Effectiveness Evaluation Form**Part V. Description of Impact of the Proposed Change on the Effectiveness of Emergency Plan Functions:**

The following proposed change does not reduce the effectiveness of the PLP-007, Robinson Emergency Plan. This change is an enhancement that allows Operations to exit the attachment after notifying Security to initiate Scenario 21 of the Emergency Response Organization Notification System.. Exiting the attachment allows Operations to implement the procedure in a timely manner.

- Attachment 3 Step 1: Added "and exit the attachment" once Security is notified.

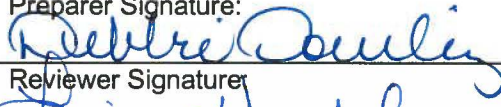

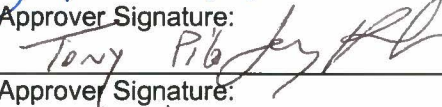
The following proposed changes do not reduce the effectiveness of the Robinson Emergency Plan (PLP-007). These changes are enhancements that consolidate and address the time allowed for restoration of RCP seal cooling being reduced to less than 15 minutes when initial seal leakoff flow is greater than 3.2 gpm as described in OP-101, Reactor Coolant System and Reactor Coolant Pump Startup and Operation, Rev. 75, Precaution and Limitation Step 5.2.1.25. Including these changes in AOP-034 eliminates the need to branch from one procedure to the other.

- Attachment 7 Step 23, 23.a, 23.b, & Caution: Added steps to consolidate RCP Seal isolation requirements and decision and include new Attachment 8. Added Caution regarding reduced allowable RCP Seal Loss times for Safe Shutdown / SBO considerations.
- Attachment 7 Step 27:
Included conditional for starting of 'C' Charging Pump and deleted old step 27. The necessary conditions have been established in Step 23, 23.a, & 23.b
- Attachment 8: Added new attachment with table to determine maximum time RCP Seal cooling can be lost before the need to isolate.

Overall, the proposed changes to AOP-034, Security Events, Revision 27 are improvements to the RNP Emergency Preparedness Program. The proposed changes described in this revision continue to provide additional 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.

10 CFR 50.54(q) Effectiveness Evaluation Form

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 X	No <input type="checkbox"/>
2	Does the proposed change maintain the effectiveness of the emergency plan (i.e., no reduction in effectiveness)?	Yes X	No <input type="checkbox"/>
3	Does the proposed change maintain the current Emergency Action Level (EAL) scheme?	Yes X	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.	X	
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: _____.			
Part VIII. Signatures: EP CFAM Final Approval is required for changes affecting risk significant planning standard 10 CFR 50.47(b)(4).			
Preparer Name (Print): Debbie Dowling	Preparer Signature: 	Date: 3/2/16	
Reviewer Name (Print): Lisa Hall	Reviewer Signature: 	Date: 3/2/16	
Approver (EP Manager) Name (Print): Tony Pilo	Approver Signature: 	Date: 3/3/16	
Approver (CFAM, as required) Name (Print):	Approver Signature: N/A	Date: N/A	
If the proposed activity is a change to the E-Plan or implementing procedures, then create two EREG General Assignments.			
• One for EP to provide the 10 CFR 50.54(q) summary of the analysis, or the completed 10 CFR 50.54(q), to Licensing.			X
• One for Licensing to submit the 10 CFR 50.54(q) information to the NRC within 30 days after the change is put in effect.			X



Continuous Use

AOP-034

SECURITY EVENTS

REVISION 27

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. SEC-NGGC-2170, Security Event Procedures, 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.

- END -

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

1. DISPATCH Assigned Operators:

- a. DISPATCH the Auxiliary Building Operator to EDG "B" Room with a Copy of AOP-034 and EPP-28
- b. CHECK plant status - MODE 5
OR 6
- c. DISPATCH CCW Pump Room Operator to the CCW Pump Room with a copy of EPP-28
- b. GO TO Step 2.

NOTE

The accelerated call made to the NRC in Step 24 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.

*** 2. 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.

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

THREAT	ACTION
Attack In Progress	GO TO Step 6.
Threat Message Received from Plant Security	GO TO Step 5.
Threat Message Received from NRC AND Authentication Code Confirmed	GO To Step 5.
All Other Threat Messages received	Perform Attachment 1, Credibility Evaluation, prior to continuing.

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

RETURN TO procedure and Step in effect.

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

5. **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

6. **CHECK Threat - AIRCRAFT ATTACK**

Go to step 7.

- **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

* 7. **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 17
Less than 30 minutes prior to expected Attack (T-30)	GO TO Step 15
Greater than 30 minutes prior to expected Attack (T-30)	GO TO Step 8
Threat has been Nullified	NOTIFY NRC within five minutes AFTER expected Attack time (T+5) and Attack has <u>NOT</u> occurred Return to Procedure and Step in effect

8. **CONTACT Plant General Manager To Discuss The Event And Determine The Need For Plant Shutdown / Site Evacuation**

CONTACT Station Duty Manager.

- CHECK Plant Shutdown - DIRECTED
- TRIP the Reactor AND GO TO EOP-E-0, Reactor Trip Or Safety Injection while CONTINUING WITH this procedure

- GO TO Step 9.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
9.	NOTIFY The Fire Brigade Incident Commander Of The Nature Of The Threat	
10.	INITIATE Call Out For Selected Support Personnel Using Attachment 3, ERO Notification for Security Events	
11.	IMPLEMENT EALs	
12.	CHECK Availability And Expedite Return To Service Of Any Of The Following Equipment: <ul style="list-style-type: none">• Emergency Diesel Generators• Safeguards Systems• DSDG	
13.	FILL The Following Tanks To Maximum Capacity Allowed By Procedure <ul style="list-style-type: none">• CST• PWST	
14.	CHECK Preemptive Evacuation - DESIRED	GO TO Step 30.

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.

15. **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

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

GO TO Step 30.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
17.	CHECK Trip Breakers - CLOSED	GO TO step 18.
	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.
18.	ACTUATE CONTROL ROOM DOOR DISABLE Pushbutton	
19.	CHECK Control Room Ventilation System - ALIGNED FOR EMERGENCY RECIRCULATION	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:
		<ul style="list-style-type: none"> • CR-D1A-SA, CR EXH DMPR • CR-D1B-SB, CR EXH DMPR
		d. CLOSE the following dampers:
		<ul style="list-style-type: none"> • OUTSIDE AIR DAMPER "A" • OUTSIDE AIR DAMPER "B"
20.	INITIATE Call Out For Selected Support Personnel Using Attachment 3, ERO Notification for Security Events	
21.	IMPLEMENT EALs	
22.	CHECK Attack Status - IN PROGRESS Or IMMINENT (Less Than 5 minutes)	GO TO Step 29.

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

23. **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.

24. **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)

25. **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
*26.	CHECK Emergency Busses - REMAINED ENERGIZED BY EDGs	<u>IF</u> Power is lost to the Emergency Busses after alignment to the EDGs, <u>THEN</u> ATTEMPT to restore power to Emergency Busses using Attachment 7, Energizing the Emergency Busses from an Offsite Source.
*27.	DETERMINE EPP-28 Applicability: a. CHECK either event - IN PROGRESS <ul style="list-style-type: none"> Total loss of SW <p style="text-align: center;"><u>OR</u></p> <ul style="list-style-type: none"> Loss of Lake Robinson Dam Integrity b. PERFORM EPP-28, Loss Of Ultimate Heat Sink, while continuing with this procedure	a. <u>IF</u> either a Loss of all SW or Dam Integrity occurs, <u>THEN</u> PERFORM EPP-28, Loss Of Ultimate Heat Sink, while continuing with this procedure. Go To Step 28.
28.	CONTACT Security To Check Status Of Law Enforcement Personnel Called In	
29.	CHECK RCS Temperature - GREATER THAN 350°F a. INITIATE Cooldown using Attachment 5, RCS Cooldown while continuing.	GO TO Step 30.
30.	CHECK Original Threat Notification Source - WAS NRC	ESTABLISH continuous communication with the NRC HQ Operations Center at the earliest practical time.
31.	CHECK Fuel Movement - STOPPED	STOP Fuel Movement.
32.	CHECK CV Closure - ESTABLISHED	<u>WHEN</u> conditions allow, <u>THEN</u> IMPLEMENT CV Closure.
33.	MAINTAIN Contact With Security For Updates On The Threat	

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

NOTE

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

34. **CONTACT Shift Personnel For Accountability And Sharing Of Pertinent Information Regarding The Threat**
35. **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
36. **CONSIDER The Need To Pre-Stage Off-Site Assistance At A Location Nearby**
- Ambulance
 - Fire Trucks
37. **CHECK TS For Applicable Action Statements**
38. **RETURN TO Step 7**

- END -

Attachment 1Credibility Evaluation

(Page 1 of 1)

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.**
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, Step in effect.**

- END -

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 2Aircraft Attack

(Page 1 of 13)

NOTE

EDMG-000, Extreme Damage Initial Actions, provide 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.

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 2Aircraft Attack

(Page 2 of 13)

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.

* 2. **PERFORM ACTION for conditions indicated:**

Condition / Time relative to expected Impact	ACTION
Less than Five minutes prior to expected Attack (T-5)	GO TO Step 18
Less than 30 minutes prior to expected Impact (T-30)	GO TO Step 17
Greater than 30 minutes prior to expected Impact (T-30)	GO TO Step 3
Impact has Occurred	GO To Step 18
Threat has been Nullified	Notify NRC within five minutes AFTER expected Attack time (T+5) and Attack has <u>NOT</u> occurred Return to Procedure and Step in effect
Updated Estimated Time of Impact Obtained	Make PA Announcement using VLC to Notify Plant Personnel of Updated Impact Time GO TO Step 1

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 2Aircraft Attack

(Page 3 of 13)

3. **PERFORM Site Evacuation AND
DIRECT ERO Personnel to
Remote ERFs**

- a. PLACE VLC Switch in EMERG Position
- b. PLACE And HOLD Evacuation Alarm Switch to SITE Position for 5 Seconds
- c. 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"

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

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

NOTIFY Security of the status of the threat.

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 2Aircraft Attack

(Page 4 of 13)

NOTE

When activating facilities during normal working hours and outages with large number of personnel on-site, the local facility should be activated when less than 30 minutes is available prior to the arrival of the aircraft, and the remote emergency response facility if 30 minutes or greater is available. During off normal hours when few personnel are on-site, the remote emergency response facility should be activated.

5. **NOTIFY Security To Open PA Gates For Evacuation While Continuing To Defend Site.**
6. **INITIATE Call Out For Selected Support Personnel Using Attachment 3, ERO Notification for Security Events**
7. **IMPLEMENT EALs**

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 2Aircraft Attack

(Page 5 of 13)

8. **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"

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

GO TO Step 10.

- 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 6 of 13)

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

- | | |
|------------------------------------------------------------------|---------------------|
| a. CHECK Outage - IN PROGRESS | a. GO TO Step 11. |
| 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 10.f. |
| e. IMPLEMENT CV Closure | |
| f. FILL RCS to maximum allowable value for current configuration | |

11. **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. |

12. **FILL Makeup Tanks:**

- | | |
|------------------------------------------------------------------|---------------------|
| a. CHECK Plant Status - MODE 5, Loops Filled, <u>OR</u> MODE 1-4 | a. GO TO Step 12.c. |
| b. FILL the CST to the maximum capacity allowed by procedure | |
| c. FILL the PWST to the maximum capacity allowed by procedure | |

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 2Aircraft Attack

(Page 7 of 13)

13. CHECK Status Of SFP Systems:

- | | |
|------------------------------------------------------------------------------------------------------|---------------------|
| a. CHECK SFP Purification - IN SERVICE | a. GO TO Step 13.c. |
| 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 | |

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

- Ambulance
- Fire Trucks

15. MONITOR Activities Associated With The Incoming Aircraft And Continue Preparation Activities**16. RETURN TO Step 1****17. DETERMINE Need For Outage Actions:**

- | | |
|------------------------------------------------------------|-------------------|
| a. CHECK Outage - IN PROGRESS | a. GO TO Step 18. |
| b. STOP refueling activities | |
| c. CHECK personnel in CV and SFP - EVACUATING | |
| d. FILL RCS to maximum allowable for current configuration | |

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 2Aircraft Attack

(Page 8 of 13)

18. **CHECK Trip Breakers - CLOSED**

GO TO step 19.

- 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

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

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 2Aircraft Attack

(Page 9 of 13)

NOTE

- 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

19. **NOTIFY PLANT PERSONNEL:**

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> a. CHECK conditions that would impede relocation / evacuation - NONE b. PLACE VLC Switch in EMERG position c. PERFORM PA announcement: | <ul style="list-style-type: none"> a. PERFORM applicable announcements based on current conditions. |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|

"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 seconds
- g. PLACE VLC switch in NORM position

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 2

Aircraft Attack

(Page 10 of 13)

20. **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"

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

NOTIFY Security of the status of the threat.

22. **INITIATE Call Out For Selected Support Personnel Using Attachment 3, ERO Notification for Security Events**

23. **IMPLEMENT EALs**

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 2

Aircraft Attack

(Page 11 of 13)

- | | | |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 24. | CHECK Time Of Threat - DURING DAYLIGHT HOURS | <p>At Unit 2 Lighting Control Panel
TURN the following lights OFF:</p> <ul style="list-style-type: none"> • Turbine Deck and Transformer Yard • Unit 2 Switchyard <p>CONTACT Security to
EXTINGUISH High Mast Lighting
using Attachment 4, Exterior
Lighting Reduction.</p> <p><u>IF</u> Security is unable to extinguish
the High Mast Lighting, <u>THEN</u>
CONTACT WCC to BRIEF available
operations personnel regarding the
purpose and life safety
considerations and DISPATCH to
perform Attachment 4, Exterior
Lighting Reduction.</p> |
| 25. | CHECK Status Of Aircraft Impact - EXPECTED IN LESS THAN 5 MINUTES | RETURN TO Step 1. |
| 26. | 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. |
| 27. | STOP Auxiliary Building Ventilation: <ol style="list-style-type: none"> a. PLACE the selector switch for
the in service REACTOR AUX
BLDG EXH FAN in STOP: <ul style="list-style-type: none"> • HVE-2A • HVE-2B | |
| 28. | ACTUATE CONTROL ROOM DOOR DISABLE Pushbutton | |

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 2

Aircraft Attack

(Page 12 of 13)

29. **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 30.

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

RETURN TO Step 1.

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

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

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

*33. **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.

34. **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 13 of 13)

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

a. CHECK either of the below events - IN PROGRESS

- Total loss of SW

OR

- Loss of Lake Robinson Dam Integrity

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

a. RETURN to procedure and step in effect.

- END -

Attachment 3ERO Notification for Security Events

(Page 1 of 3)

1. **IF The Threat Is An Aircraft Attack AND Greater Than Or Equal To 5 Minutes From Impact, THEN NOTIFY Security To Initiate Scenario 21 AND EXIT This Attachment.**
 2. **IF a LAN Computer Will Be Used To Notify The ERO, THEN GO TO Step 4.**
 3. **IF EverBridge Interactive Voice Response Will Be Used To Notify The ERO, THEN GO TO Step 16.**
 4. **LOG Onto The Emergency Response Organization Notification System On An NGG computer:**
 - For Windows 7 Desktop: SELECT Start > All Programs > DAE > Shortcuts Tab > Search EverBridge > Select EverBridge and Run Application
- OR
- OPEN an internet browser and type www.everbridge.net.
5. **TYPE RNPactivation (not case sensitive) In The Member ID field Of The Initial Login Screen.**

NOTE

Passwords are provided in pre-designated locations.

6. **ENTER The Password From The Password Card.**
7. **SELECT GO or PRESS Enter On The Keyboard.**
8. **SELECT "Scenario Manager" From Left Side Of The Screen.**
9. **SELECT "Send Scenario" Under "Scenario Manager".**

Attachment 3ERO Notification for Security Events

(Page 2 of 3)

NOTE

Scenario NO. 21, FIRE BRIGADE - REPORT TO STATION 8 will assemble Fire Brigade and Operations personnel at Fire Station #8 (Pine Ridge).

10. **USE The Previous And Next Cursors To Scroll Through The Scenario List To LOCATE AND CONFIRM Scenario NO. 21 And FIRE BRIGADE - REPORT TO STATION 8 On The Send Scenarios Screen.**
11. **CLICK FIRE BRIGADE - REPORT TO STATION 8 in EverBridge once you have located and confirmed that the Scenario Number and Scenario Title are correct.**

NOTE

A satellite dish animation will appear on the screen to indicate transmission of the message.

12. **SELECT Send Message At Bottom Of The List Unscheduled Messages Screen.**
13. **CLICK On Broadcast ID To CHECK Broadcast Results. Responses Will Be Displayed. Screen Will Refresh Approximately Every 60 Seconds.**
14. **NOTIFY The CR-SEC/SM that Call Out For Selected Support Personnel In Accordance With Attachment 3, ERO Notification For Security Events, Is Complete.**
15. **RETURN TO Procedure And Step In Effect**
16. **DIAL EverBridge At 888-440-4911**

Attachment 3ERO Notification for Security Events

(Page 3 of 3)

17. LISTEN To The IVR Command AND FOLLOW The Instructions:

- a. ENTER the Member ID followed by the # sign.
 - ENTER 132508341 #
- b. ENTER site specific password. See Password Card for site password.

NOTE

Upon completion of the following steps, activation of the ERO will occur.

18. To Launch A Broadcast Scenario, PRESS The Number 3.**19. To Select A Scenario By Number, PRESS The Number 1.**NOTE

Scenario NO. 21, FIRE BRIGADE - REPORT TO STATION 8 will assemble Fire Brigade and Operations personnel at Fire Station #8 (Pine Ridge).

- 20. ENTER Scenario Number 21, Followed By The # Sign.**
- 21. Voice Will State Title Of The Scenario. CHECK That This Is The Correct Entry.**
- 22. To Select This Scenario, PRESS the # Key A Second Time.**
- 23. To Launch This Scenario Now, PRESS The Number 1.**
- 24. END The Call.**
- 25. NOTIFY The CR-SEC/SM That Call Out For Selected Support Personnel In Accordance With Attachment 3, ERO 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 11)

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.

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

- Normal boration using
OP-301, Chemical And
Volume Control System
(CVCS)

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 11)

CAUTION

Excessive steam dump using the steam line PORVs may initiate a high steam line ΔP 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:

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| a. CHECK RCPs - ALL STOPPED | a. MAINTAIN cooldown rate in RCS cold legs less than 100°F/hr.

GO TO Step 3.d. |
| b. CHECK Status of CRDM Cooling Fans, HVH-5A AND HVH-5B - BOTH RUNNING | b. MAINTAIN cooldown rate in RCS cold legs less than 10°F/hr AND subcooling greater than 100°F.

GO TO Step 3.d. |
| c. MAINTAIN cooldown rate in RCS cold legs less than 25°F/hr | |
| d. MAINTAIN RCS temperature and pressure - WITHIN LIMITS OF CURVE 3.4, REACTOR COOLANT SYSTEM PRESSURE - TEMPERATURE LIMITATIONS FOR COOLDOWN | |
| 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% | |

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 5

RCS Cooldown

(Page 3 of 11)

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

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 4 of 11)

NOTE

Supplement K is available for optimizing Auxiliary Spray below.

**7. DEPRESSURIZE RCS To
1950 PSIG:**a. USE normal PZR Spray to
depressurize RCSa. 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 PSIGb. WHEN RCS pressure less than
1950 psig, THEN GO TO
Step 7.c.

c. STOP RCS depressurization

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 5RCS Cooldown

(Page 5 of 11)

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 6 of 11)

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
- b. REPRESSURIZE RCS within limits of Curve 3.4, Reactor Coolant System Pressure - Temperature Limitations For Cooldown

a. GO TO Step 13.

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 5RCS Cooldown

(Page 7 of 11)

- *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 8 of 11)

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 9 of 11)

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 10 of 11)

21. STABILIZE RCS Temperature:

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

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 11 of 11)

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)

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. At EDG "B" Engine Control Panel, Quickly PLACE the Local/Remote Switch in LOCAL
- b. CHECK White Local Light is ILLUMINATED
- c. 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
Lever to Indicate Generator
Frequency of 60 Hertz | |
| c. ADJUST EDG "B" voltage using
Automatic Voltage Control Knob
to 480V on GENERATOR
voltmeter | |
| d. NOTIFY Control Room to
perform the following:

1) OPEN 480V BUS E2 MAIN
BKR, 52/28B

2) CHECK CLOSED EMERG
DG B TO BUS E2 BKR
52/27B | |
| e. ADJUST EDG "B" Speed Control
Lever to indicate generator
frequency of 60 Hertz | |
| f. ADJUST EDG "B" voltage using
Automatic Voltage Control Knob
to 480V on GENERATOR
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 EPP-28 - IN PROGRESS | b. GO TO Step 3.f. |
| 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 10)

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** 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 23 And GO TO Step 23**
 7. **CHECK Offsite Power - AVAILABLE** RETURN TO Main Body / **Attachment 2** Step In Effect.
 - Startup Transformer - CAPABLE OF BEING ENERGIZED
- AND
- 115KV Span Bus - ENEGIZED OR CAPABLE OF BEING ENERGIZED

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 7Energizing the Emergency Busses from an Offsite Source

(Page 2 of 10)

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.

8. **NOTIFY Security Of Need For Armed Escort**

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 10)

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 10)

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 10)

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

(Page 6 of 10)

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

(Page 7 of 10)

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

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>a. CHECK Armed Officer Available to escort an Operator to 4KV Switchgear Room</p> <p>b. Locally CLOSE breaker 52/11A, FEED TO MCC-3</p> <p>c. CHECK Startup Transformer Access- AVAILABLE</p> | <p>a. <u>WHEN</u> an Armed Officer escort is available, <u>THEN ACCESS</u> the 4KV Switchgear Room.</p> <p>c. <u>WHEN</u> access to the Startup Transformer is available, <u>THEN PERFORM</u> Step 20.d.</p> <p>GO TO Step 21.</p> |
| <p>d. PERFORM the following at the Startup Transformer:</p> <ul style="list-style-type: none"> • CHECK the cooling fans and oil pumps operating • RESET local alarms | |

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. 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

(Page 8 of 10)

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.

23. **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"> • 15 minutes <p style="text-align: center;"><u>OR</u></p> <ul style="list-style-type: none"> • Time Determined Above | <p>b. ISOLATE Seal Cooling:</p> <ol style="list-style-type: none"> 1) CLOSE FCV-626, THERM BAR FLOW CONT. 2) Locally CLOSE RCP SEAL WATER FLOW CONTROL VALVES: <ul style="list-style-type: none"> • CVC-297A • CVC-297B • CVC-297C 3) CLOSE CVC-381, SEAL WTR RETURN ISO. |

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 7Energizing the Emergency Busses from an Offsite Source

(Page 9 of 10)

24. **ESTABLISH E1 Loads:**

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

25. **ESTABLISH RCS Makeup:**

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

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

- | | |
|-----------------------------------------|-------------------|
| a. CHECK 480V Bus E2 -
DEENERGIZED | a. GO TO Step 27. |
| b. CLOSE 480V BUS E2 MAIN
BKR 52/28B | |
| c. CHECK 480V Bus E2 is
ENERGIZED | |

STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

Attachment 7Energizing the Emergency Busses from an Offsite Source

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

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

- END -

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

(Page 1 of 1)

No. 1 Seal Leak-Off (GPM)	TIME (Minutes)
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

AOP-034, Revision 27
Summary of Changes
(PRR 01965855)

Main Body

Step 1, 19(Del),
Att. 2 Step 19(Del): Moved dispatch of EDG Operator to top of the procedure and added dispatch of a CCW Pp room operator when in modes 5&6.
PRR 01965855

Attachment 3

Step 1: Appended Step to exit the attachment if Security will make the notification. (Training Feedback)

Attachments

5, 6, 7: Upgraded layout and verbiage to conform to current standards with no change to intent or logic flow.

Attachment 6

Step 1 (Del): Removed initial step to dispatch the EDG operator. The operator is dispatched as the first step in the procedure and was redundant here.

Attachment 7

Step 23: New step to consolidate RCP Seal isolation requirements and decision. Added Caution regarding reduced allowable RCP Seal Loss times for Safe Shutdown / SBO considerations.
PRR 486552

Step 27: Included conditional starting of 'C' Charging Pump and deleted old step 27. The necessary conditions have already been established

Attachment 8: New attachment with table to determine maximum time RCP Seal cooling can be lost before the need to isolate. PRR 486552

CONTINUOUS ACTION SUMMARY FOR AOP-034MAIN BODY

- 2 Document relevant times. (updates)
7. Perform action specified in table. Re-perform if times change
26. 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
27. IF either a Loss of all SW or Dam integrity occurs, THEN PERFORM EPP-28, Loss Of Ultimate Heat Sink, while continuing in this procedure.

ATTACHMENT 2

2. Perform action specified in table. Re-perform if times change
9. IF it is determined that attack on RNP is intended, THEN TRIP the Reactor.
- 33 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

ATTACHMENT 5

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

ATTACHMENT 7

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

CONTINUOUS ACTION SUMMARY FOR AOP-034MAIN BODY

- 2 Document relevant times. (updates)
7. Perform action specified in table. Re-perform if times change
26. 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
27. IF either a Loss of all SW or Dam integrity occurs, THEN PERFORM EPP-28, Loss Of Ultimate Heat Sink, while continuing in this procedure.

ATTACHMENT 2

2. Perform action specified in table. Re-perform if times change
9. IF it is determined that attack on RNP is intended, THEN TRIP the Reactor.
- 33 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

ATTACHMENT 5

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

ATTACHMENT 7

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