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United States Nuclear Regulatory Commission
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H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-261/LICENSE NO. DPR-23

TRANSMITTAL OF EMERGENCY PROCEDURE REVISION

Ladies and Gentlemen:

In accordance with 10 CFR 50.4(b)(5) and Appendix E to 10 CFR 50, Carolina Power & Light (CP&L) Company is transmitting a revision to one of the H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2, Emergency Implementing Procedures. The procedure revision and the effective date are listed in Attachment I.

A description of the procedure change is provided on the "Summary of Changes" page for the emergency procedure. Please replace the superseded procedure with the attached revision.

If you have any questions concerning this matter, please contact Mr. C. T. Baucom.

Sincerely,

B. L. Fletcher III
Manager - Regulatory Affairs

A045

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Attachments:

- I. Procedure Revision and Effective Date
 - II. EPCLA-02, "Emergency Action Level User's Guide," Revision 8
- c: L. A. Reyes, NRC, Region II (2 copies)
NRC Resident Inspector, HBRSEP
R. Subbaratnam, NRC, NRR (w/o Attachments)

Procedure Revision and Effective Date

Procedure	Revision No.	Effective Date
EPCLA-02, "Emergency Action Level User's Guide"	8	05/07/2002

United States Nuclear Regulatory Commission
Attachment II to Serial RNP-RA/02-0084
34 Pages

EPCLA-02
EMERGENCY ACTION LEVEL USER'S GUIDE
Revision 8

CAROLINA POWER & LIGHT COMPANY
H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

PLANT OPERATING MANUAL

VOLUME 2
PART 5

EMERGENCY PROCEDURE

EPCLA-02

EMERGENCY ACTION LEVEL USER'S GUIDE

REVISION 8

SUMMARY OF CHANGES

Step/Section	Description of change
8.2.3.14.b	Revised guidance on EALs due to ATWS. (AR # 43473)

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8.2.1 PURPOSE

1. To provide instructions for the use of the Emergency Action Levels (EALs) and to describe the transition from the EAL flowpaths to this procedure.

8.2.2 RESPONSIBILITIES

N/A

8.2.3 INSTRUCTIONS

1. Declarations
 - a. General Emergency: IF at any time during progression through the EAL flowpath, a General Emergency declaration is warranted, THEN the Site Emergency Coordinator/Superintendent Shift Operations (SEC/SSO) is to immediately declare a General Emergency AND carry out the actions specified by the procedure.
 - b. IF an event (other than a General Emergency) is warranted, THEN the SEC/SSO is to continue through the flowpath, after noting it on the "EAL STATUS Board."
 - c. The highest indicated level will be declared upon completion of the flowpath.
2. Entering the Flowpath
 - a. The flowpath can be entered at the discretion of the SEC/SSO.
 - b. It is appropriate for the Superintendent Shift Operations (SSO) to defer entry into the flowpath early in an event in order to direct his attention and expertise to ensuring proper diagnosis by the operating shift and that proper actions are being taken to combat the casualty. However, because timely event classification is essential to protecting the public, once the SSO is satisfied the response is adequate for the situation, he should immediately enter the flowpath to classify the event and initiate any required augmentation.

8.2.3.2 (Continued)

- c. It is the expectation that the time between exceeding an EAL and declaration of the event will not exceed 15 minutes unless extraordinary conditions prevail. (CR 97-02306) For EAL steps with time requirements, the 15 minute expectation for declaration begins after the stated time. For example, the loss of E-1 and E-2 for greater than 15 minutes. The Site Area Emergency EAL would not be satisfied until the 15 minutes expires. (CR 13050)
3. Entry Point into the Flowpath
- a. The EAL flowpath should be entered at the first step of EAL-1. Re-evaluation of conditions may require entry into EAL-2 at entry point X, but only when directed by steps within EAL-2 or the final step of EAL-1.
 - b. Once entered, the flowpath should be completed unless a General Emergency is identified during the progression through the flowpath.
 - For a General Emergency immediately implement EPCLA-01, Emergency Control.
 - The Unusual Event Matrix should be reviewed if no event above Alert is identified.
4. Progression through the Flowpath
- a. Once the flowpath is entered, progression should continue swiftly until directed to declare an event. This will ensure:
 - Timely classification of the event
 - Timely notification of necessary personnel and agencies
 - Timely completion of any necessary protective actions
 - b. During the progression through the flowpath, the latest available information should be used in answering the questions if current information is not available.

8.2.3.4 (Continued)

- c. The single exception to this method of classification and notification is the declaration of a General Emergency. If, at any time, including during the development of the notification or the progression through an emergency procedure, the SEC/SSO becomes aware of information which would clearly result in a General Emergency declaration, he should revisit the EAL flowpath to confirm that a declaration of a General Emergency is warranted.
 - d. IF the declaration of a General Emergency is warranted, THEN the SEC/SSO should declare/proceed as directed by the EAL flowpath. Any notifications in progress or in preparation should be amended to the extent practical and the development of protective action recommendations should begin immediately. IF the declaration is NOT warranted, THEN the SEC/SSO should return to the point at which he left the classification/notification process.
 - e. Early in EAL-1, the SEC/SSO is instructed to "Monitor Critical Safety Function Status Trees (CSFSTs) for Information Only." This is done to ensure the SEC/SSO is aware of changing critical parameters which may affect the EALs. In no case should SPDS be reset unless directed by the EOP network. The question "Integrity CSF-4 RED or ORANGE" will be answered yes whenever it is so indicated by SPDS or by manual determination. The Shift Technical Advisor may be consulted if CSFST status is unclear.
5. Verifying Validity of Information
- a. Only valid indications should be used for determination of EALs.
 - b. IF the validity of instrumentation is suspect, THEN attempts should be made to ensure the information used is accurate.

8.2.3 (Continued)

6. Bypassing of Individual Event Groups

- a. Throughout EAL-1 and 2, several questions are asked for the purpose of determining the need to address specific events (Confirmed Fire (YES/NO), ATWS (YES/NO)).
- b. These blocks enable the user to bypass sections of the flowpath which do not pertain to the event which has occurred or is occurring.
- c. IF, for the examples given, an ATWS or Fire has occurred, THEN the block should be answered YES the first time if it is encountered during the progression through the flowpath.
- d. On subsequent re-evaluations, the ATWS decision block should be answered YES until control rods have been fully inserted or the reactor has been shut down. The decision block should also be answered YES if another ATWS occurs.
- e. On subsequent re-evaluations, the Fire Confirmed decision block should be answered YES until the fire has been extinguished and a thorough damage assessment has been completed which concludes that the potential for damage to safety-related equipment has been eliminated.

7. Fission Product Barrier Analysis (Overview)

- a. The first steps of EAL-1 are conducting an analysis of the principal barriers to radiation and radiological releases.
 - fuel cladding
 - reactor coolant system (RCS)
 - containment

8.2.3.7 (Continued)

- b. The criteria for establishing an emergency are the level of challenge (potential or actual damage) to these barriers and the number of barriers concurrently under challenge.
- c. A challenge to one or more barriers generally is identified through instrument readings, periodic sampling, and monitoring of CSFSTs.
- d. Deterioration of a single barrier usually indicates an "Alert" condition, two barriers under challenge a "Site Area Emergency", and three barriers a "General Emergency".
- e. As the SEC/SSO moves through the barrier analysis steps, he is making the following assessments:
 - First, a determination of whether the Fuel Fission Product Barrier (FPB) has been breached, is jeopardized, or is intact. The SEC/SSO then indicates the status of the Fuel FPB on the "FPB Status Board", which is located at the top of the EAL-1 flowpath. He will put an **X** or check mark next to the appropriate term (Intact, Jeopardized or Breached) in the Fuel FPB column.
 - Second, a determination of whether the RCS FPB has been breached, is jeopardized, or is intact. The SEC/SSO then indicates the status of the RCS FPB on the "FPB Status Board". He will put an **X** or check mark next to the appropriate term (Intact, Jeopardized or Breached) in the RCS FPB column.

8.2.3.7.e (Continued)

- Third, a determination of whether the Containment FPB has been breached, is jeopardized, or is intact. The SEC/SSO then indicates the status of the Containment FPB on the "FPB Status Board". He will put an **X** or check mark next to the appropriate term (Intact, Jeopardized or Breached) in the Containment FPB column.

- IF three FPBs were indicated as Breached/Jeopardized, THEN a General Emergency is declared and the SEC/SSO is directed to EPCLA-01, Emergency Control.

- IF two FPBs were indicated as Breached/Jeopardized, THEN the SEC/SSO will put an **X** or check mark to "Site Area Emergency" on the EAL Status Board located in the upper right corner of the EAL-2 AND then continue on in EAL-1.

- IF one FPB is indicated as Breached/Jeopardized, THEN the SEC/SSO will put an **X** or check mark next to "Alert" on the EAL Status Board located in the upper right corner of EAL-2 AND then continue on in EAL-1.

8.2.3 (Continued)

8. EAL-1 Grid A-4: R-9 Rad Monitor
 - a. It may be prudent to isolate letdown prior to either of the listed criteria being exceeded as a precautionary measure to reduce exposure to personnel working in the Auxiliary Building.
 - b. IF letdown is isolated, THEN R-9 will not be monitoring actual RCS conditions.
 - c. Because R-9 is the only real time indicator of mechanical fuel damage, the SEC should consider trending R-9 response to determine if R-9 is projected to exceed either of the listed criteria prior to discretionary isolation.
9. EAL-1 Grid A-9: RCS leakage Greater Than Charging Capability
 - a. RCS leakage is defined in EPCLA-00, Attachment 10.1, Definitions. The charging capability of 3 charging pumps for evaluation purposes is 225 gpm.
 - b. IF only 2 charging pumps are available, THEN this decision block should be answered YES for leakage > 150 gpm.
 - c. IF only 1 charging pump is available, THEN this decision block should be answered YES for leakage > 75 gpm.
 - d. A charging pump may be technically inoperable AND still considered as a part of charging capability if it is available to provide flow.
10. EAL-1 Grid A-10: CV Pressure Less Than 2 psig
 - a. CV Pressure is considered normal when less than 2 psig.

8.2.3 (Continued)

11. EAL-1 Grid D-4: Phase A or CV Ventilation Isolation Initiated or Required.
 - a. The purpose of this decision block is to determine if events are in progress, or have occurred, of such significance that a Phase A or CV Ventilation Isolation signal is appropriate to mitigate the consequences of the event(s).
 - b. IF an automatic or manual CV Ventilation Isolation signal has been initiated, THEN this decision block should be answered YES.
 - c. IF an automatic or manual Phase A Isolation signal has been initiated, THEN this decision block should be answered YES.
 - d. IF conditions are known to exist which should have resulted in the initiation of an automatic CV Ventilation or Phase A isolation actuation, but did not, THEN the decision block should also be answered YES.
 - e. IF a spurious signal is initiated, THEN the block should be answered YES.

12. EAL-1 Grid E-5: Pathway Exists from CV Atmosphere to Environment
 - a. This decision block can only be reached if an event requiring a Phase A OR CV Ventilation Isolation signal has occurred OR if one of the other fission product barriers (fuel or RCS) has been breached or jeopardized.
 - b. This decision block determines whether or not there is an open, uncontrollable pathway for fission products within the air space or that may be contained within the liquid in the CV sump to find their way to the outside atmosphere, to the lake, or to an open system outside the CV.

8.2.3.12 (Continued)

- c. For a ruptured steam generator, the decision block should be answered NO. During tube rupture events the EOP Network provides direction for isolation of the steam generator and will ultimately facilitate closure of the steam and feed lines. Unless attempts to close valves in these lines as directed by the EOP Network are unsuccessful, the CV should be considered intact and controllable even though a release may be occurring.
- d. For a faulted steam generator, the decision block should be answered NO. Although the rapid depressurization from a faulted steam generator may result in a safety injection signal, there is no pathway for communication of the CV atmosphere with the outside atmosphere.
- e. For a ruptured, faulted steam generator, OR a situation in which one steam generator is faulted AND another is ruptured, this decision block should be answered NO. The combination of grid locations D-5 and E-6 will provide a decision path for determining the status of CV in this situation.
- f. For failure of a CV Ventilation Isolation valve to close:
 - The decision block should be answered NO if the redundant CV Ventilation Isolation valve in the flow path does close and isolate the flow path;
 - The decision block should be answered YES if both redundant valves in a flow path fail to close OR if the one which closes is not capable of isolating the flow path.

8.2.3.12 (Continued)

- g. For failure of a Phase A isolation valve to close:
 - The decision block should be answered NO if the redundant valve closes and isolates the pathway OR if the pathway goes into a closed system outside CV which is intact.
 - Examples of closed pathways includes RMS-1,2,3, and 4 and the CVCS hold-up tanks, unless they are known to be faulted.
 - The decision block should be answered YES in the event that both Phase A isolation valves fail to close on a system that is open outside the CV.
 - Examples of open systems include WD-1723 and 1728, the CV sump valves to the Waste Hold-up Tank which is vented to the Auxiliary Building ventilation system
 - The decision block should be answered YES in the event that both valves fail to close and a normally closed system is known to be faulted both inside and outside CV.
- h. For an unisolable service water leak inside CV, the decision block should be answered YES.
- i. In determining if a pathway exists the SSO/SEC should consider plant conditions and indications. Normally closed systems inside or outside CV should not be assumed to be faulted unless there are indications that they are faulted or they are known to be faulted.
- j. In determining the status of isolation valves, ERFIS indication and local panel indication are often available.

8.2.3.12 (Continued)

- k. Area and process radiation monitors, such as R-4, R-14, C, D, or E, provide indication when fission products from the CV atmosphere find their way to the outside environment. IF these monitors are unavailable, THEN dose rate surveys taken locally can provide the basis for a determination that fission products have found a pathway from the CV atmosphere.

- l. In general, a YES determination at this decision block requires:
 - Knowledge OR evidence of an open system inside the CV.
 - CV isolation valves which fail to close.
 - Knowledge OR evidence of an open system outside CV such that the pathway for the gases or sump water inside the CV to reach the outside environment exists.
 - Knowledge or evidence can be provided by plant conditions, local or remote indications, and process or area radiation monitors.

- 13. EAL-1 Grid D-5: Nonisolable Steamline or Feedline Leak Outside CV
 - a. Any leakage outside CV should prompt a YES answer at this decision block no matter how small the leak may be.
 - pinhole, weep, valve leakage

8.2.3.13 (Continued)

- b. The leak should NOT be considered unisolable until local manual efforts to isolate the leak have been initiated AND have proven unsuccessful OR been deemed impractical due to the hazardous environment, a lack of needed tools or equipment, or inaccessibility of the leak for repair.
 - c. Attempts at manual isolation should be initiated promptly and expedited consistent with radiological considerations and should be given a high priority when a release is in progress through the leak.
14. EAL-1 Grid D-10: ATWS
- a. The first time the EAL flowchart is reviewed, any previous ATWS should be considered in this decision block.
 - b. For subsequent progressions through the EAL flowchart, this decision block should be answered YES until the reactor is in Mode 3 or lower. (AR # 43473)
15. EAL-1 Grid D-12: Fire Confirmed
- a. Indication of the existence of a fire may be received in the Control Room by fire alarm or by telephone, PA, or radio notification from any individual on the plant site.
 - b. The SEC/SSO must confirm the existence of an actual fire prior to answering decision block D-12. This may involve questioning an individual in the case of a verbal notification or dispatching a qualified individual to the scene in the case of a fire alarm.

8.2.3.15 (Continued)

- c. FP-001, Fire Emergency, prescribes actions to be taken upon notification of a fire by any means and provides for the timely response to ensure proper confirmation of the fire. IF no flame is present OR reported but smoke is reported from cable trays or conduits, THEN this should be considered adequate confirmation.
 - d. WHEN adequate information has been received from the scene, THEN decision block D-12 may be answered.
16. EAL-1 Grid D-13: Fire Has Potential to Affect Safety Related Equipment
- a. This decision block should be answered based on information received from the scene of the fire. The Emergency Diesel Generators are included for this decision.
 - b. WHEN a fire is confirmed to exist in a fire zone which contains safety related equipment, THEN the SEC/SSO must ascertain whether the magnitude and location of the fire is such that it could potentially render the safety related equipment inoperable.
 - c. A small fire on an Emergency Diesel Generator (EDG) exhaust manifold that does not have the potential to affect EDG operability AND that could be easily put out using a fire extinguisher would NOT be considered a fire that has potential to affect safety related equipment.

8.2.3.16 (Continued)

- d. IF the fire has potential to render safety related equipment inoperable, THEN this decision block should be answered "yes" unless all of the following conditions are met:
- The nature and location of the fire are known, including what component(s) are involved in the fire and what is burning;
 - The component(s) involved in the fire are not safety-related;
 - The fire is confined to those components or that location by the existence of ample space or a barrier; and
 - No safety-related power, control, or communications cables OR their power sources are involved in the fire.
- e. The fire can be quickly extinguished by the individual at the scene using fire extinguishers available at the scene OR has already been extinguished;
- f. No indications of spurious or abnormal equipment operation are observed at the scene or in the Control Room;
- g. The SEC/SSO is expected to utilize the collective knowledge and judgment of watch-standers in assessing the safety-related status of equipment involved in the fire.

8.2.3 (Continued)

17. EAL-1 Grid D-13: Complete Loss of Any ESF Function in Table 2 Due to Fire
- a. Complete loss means loss of manual and automatic capability to provide the function.
 - b. IF control power is lost but pumps can be manually started and flow delivered despite the fire, THEN the function is NOT completely lost.
 - c. When evaluating the effects of a fire on the Plant, the intent is for the SEC/SSO to consider equipment which is rendered inoperable by the fire and determine if all capability for any particular ESF function is lost. The following examples are provided:
 - A fire which damaged all three Safety Injection (SI) pumps would result in declaration of a Site Area Emergency. Also, if only one pump was damaged by fire, but neither of the other two pumps were available for some other reason, the same condition would exist (all SI capability lost).
 - A fire which removed the ability supply fuel oil to the EDG Day tanks should be viewed as an alert due to the fire affecting safety related equipment without a total loss of capability.
18. EAL-1 Grid D-14: Unplanned Loss of **Greater Than or Equal to 7** Annunciator Panels for >15 Minutes
- a. RTGB annunciator panels include those on the RTGB and does not include the panels whose response is dictated by APP-036, or APP-044.
 - b. IF only the audible annunciation function is lost, THEN the decision block should be answered NO.

8.2.3 (Continued)

19. EAL-1 Grid D-14: Plant Transient in Progress
 - a. Trips, runbacks, SI actuations and losses of electric power are all considered plant transients.
 - b. IF these events have occurred either manually or automatically, THEN the transient is considered in progress until the RCS AND secondary have been stabilized.
 - c. Normal power changes of >10% are considered to be transients and are considered in progress until the power change can be curtailed AND primary and secondary status has been stabilized.

20. EAL-1 Grid E-14, D-15: ERFIS Data Available
 - a. The trending AND alarm function of ERFIS should be considered when determining the impact on plant operations of a loss of annunciators.
 - b. If the ERFIS system is out of service, the block should be answered "NO".

8.2.3 (Continued)

21. EAL-1 Grid G-4: E-1 and E-2 De-Energized for Greater than 15 Minutes
 - a. IF E-1 AND E-2 have been de-energized for greater than 15 minutes, THEN this block should be answered YES.
 - b. IF E-1 AND E-2 are both de-energized, but have NOT yet been de-energized for greater than 15 minutes, THEN the decision block should be answered "NO".
 - c. IF E-1 AND E-2 have remained de-energized for greater than 15 minutes, but are currently energized, THEN the decision block should be answered "YES" unless a Site Area Emergency has already been declared due to the loss of E-1 and E-2. However, in the case where the buses are currently energized, it is appropriate to declare and downgrade in the same notification.

22. EAL-1 Grid G-5: MCC-A and MCC-B De-Energized for Greater Than 15 Minutes
 - a. MCC-A and MCC-B are considered to be de-energized when the voltage has decreased to the level that the instrument bus inverter on each MCC has tripped off due to low input voltage.
 - b. This decision block should be answered in a similar manner to E-1 and E-2 in step 8.2.3.21.

23. EAL-1 Grid G-7: Complete Loss of Any Function Listed in Table 3
 - a. A "Complete Loss" of any of these functions is defined as a total loss of the function needed in an effort to stabilize the plant in hot shutdown, cold shutdown, OR both.

8.2.3.23 (Continued)

- b. Example:
A complete loss of Service Water (SW) capability might result from a failure of all four SW pumps, a catastrophic piping failure which depressurized both the North and South SW headers, or a sabotage event which isolated all four SW pumps and could not be immediately reversed. The key issue here is whether or not the loss of capability being considered will cause an inability to achieve Hot or Cold S/D and maintain that condition safely.
- c. In the case of a complete loss of Emergency Buses E-1 and E-2, several of the functions in Table 3 will be lost until power is restored. Therefore, this step is redundant to prior steps in the flowpath which address a loss of power. As such, the criteria established for a loss of these busses greater than 15 minutes should be applied here also and the function should not be considered completely lost (due to loss of power) until power has been lost for greater than 15 minutes.
- d. The short-term loss of these functions during the time the emergency diesels are sequencing loads following a blackout should NOT be considered a complete loss of the function.

8.2.3.23 (Continued)

- e. Specifically, the following list describes the components, the loss of which, constitutes complete loss of selected functions:
- Charging Capability - Complete loss requires all three (3) charging pumps or all flow paths for make-up to the RCS.
 - Boration Capability - Complete loss requires all automatic flow paths AND the manual boration path.
 - RCS Pressure Control Capability - Loss of all pressurizer heaters or loss of all pressurizer spray flow paths and PORV's constitutes a complete loss of RCS pressure control capability:
- f. Loss of all heaters due to a low pressurizer level or a level instrument failure does not constitute a complete loss unless the heaters remain unavailable after level is re-established or the level instrument failure repair efforts have been completed.
- g. Loss of all heaters due to a loss of offsite power does not constitute a complete loss unless EPP-21, Energizing Pressurizer Heaters from Emergency Busses, is not effective in re-energizing the heaters or heaters cannot be re-energized when normal power is restored.
- h. Because the plant was not designed with enough pressurizer heaters to maintain RCS pressure in a LOCA event, the inability to maintain RCS pressure in a LOCA event does not constitute a complete loss of RCS pressure control.
- i. IF a Pressurizer PORV has been isolated due to leakage but can be made available by opening its associated block valve, THEN a complete loss of RCS pressure control does not exist.

8.2.3.23 (Continued)

- j. Table 3 has been provided so the SEC/SSO can quickly determine which functions are required for a shutdown. The table provides a list of the required functions and indicates whether they are required for hot shutdown or cold shutdown. The SEC/SSO should mark the function(s) that have been completely lost and continue on in the flowpath.
 - k. IF the function has an "X" marked in both columns, THEN it is required for hot shutdown AND cold shutdown.
 - l. IF a function has an "X" in only the hot shutdown column, THEN it is required only for hot shutdown.
 - m. IF a function has an "X" in only the cold shutdown column, THEN it is required only for cold shutdown.
 - n. IF the function(s) is required for hot shutdown, and RHR is not providing shutdown cooling THEN the SEC/SSO indicates a "Site Area Emergency" on the EAL Status Board and continues on the flowpath.
 - o. With RCS temperature being controlled by the Residual Heat Removal System, the functions required for hot shutdown column do not apply. IF the function(s) is required for cold shutdown only, THEN the SEC/SSO indicates an "Alert" on the EAL Status Board and continues on in the flowpath.
24. EAL-1 Grid G-8: Security Event
- a. WHEN the Control Room is made aware of any security threat, THEN the Security force will be mobilized to investigate and validate the situation. This process will result in an event declaration, if appropriate, and this event declaration will establish the level of emergency class.

8.2.3.24 (Continued)

- b. The Superintendent Shift Operations (SSO) or his designee must determine if physical control of the plant is lost OR its loss is imminent.
 - c. Imminent loss of physical control would NOT merit declaration of a General Emergency.
25. EAL-1 Grid G-11: Release in Progress
- a. This decision block refers to a release of radioactive material from the New or Spent Fuel Building.
 - b. It does not include normal liquid and gaseous releases, CV purges, OR CV pressure reliefs. These are addressed elsewhere.

NOTE: The following guidance is for EAL-2.

26. EAL-2 Grid B-3: Any Rad Monitor in Table 4 in Alarm
- a. This decision block asks if any of the RAD monitors in Table 4 are in alarm. Table 4 consists of the radiation monitors used for dose projections. They are listed by their radiation monitor numbers so the SEC/SSO can easily determine which monitors to assess at this point in the flowpath.
 - b. IF any of the Rad Monitors are in alarm, THEN the SEC/SSO should mark that Rad Monitor on the Table AND continue on in the flowpath.
 - IF the current reading for any of the Rad Monitors listed in Table 5 is greater than value listed in Column 6 of Table 5, THEN an "Alert" is indicated on the EAL Status Board and the SEC/SSO continues on in the flowpath.

8.2.3.26 (Continued)

- c. The multipliers used in the calculation are based on the normal setpoints for these monitors. IF the setpoints have been reduced below the normal values, as described in OMM-014, Radiation Monitor Setpoints, THEN the basis for the Alert call is no longer valid. In this event, an Alert call should NOT be made.
 - d. Table 5 is referred to again when evaluating the Unusual Event Matrix. In this case, if any monitor is greater than the value specified in Column 4, an Unusual Event is declared.
27. EAL-2 Grid F-6: Lake Level Normal
- a. Normal lake level is from 220.7 ft. to 221.5 ft. above mean seal level (MSL).
28. Grid F-10 (F-11): Sustained Lower Wind Speeds Greater than 90 (100) MPH.
- a. Sustained winds are those which are reported as sustained from the National Weather Service or meteorological center OR are observed on plant meteorological tower data for greater than 5 minutes continuously.
 - The plant meteorological tower reports wind speed as a 15 minute average. By virtue of this, if the speed is reported in excess of the limit on ERFIS/EDS the condition is satisfied.
 - b. In the event that information specifically for the Robinson Plant is not available, information reported for the nearest reliable location in the Hartsville - Florence vicinity from any of the sources listed in EPRAD-00, Radiological Assessments and Consequences should be used in answering this decision block.

8.2.3.28 (Continued)

- c. In the absence of any data from these sources the block should be answered NO.
29. EAL-2 Grid F-12: Any Explosion Affecting Plant Operation
- a. An explosion is a rapid and violent chemical reaction releasing large quantities of energy.
 - b. This decision block should be answered YES if an explosion has occurred AND any of the following have occurred as a result of the explosion:
 - Access is lost to equipment which must be operated to maintain stable plant conditions.
 - Damage to safety-related equipment which impairs its performance.
 - Personnel injury has resulted in the shift complement not being maintained.
 - c. An explosion does NOT include catastrophic failures of electrical breakers or compressed gas bottles.
30. EAL-2 Grid F-14: Safety-Related Equipment or Structure Affected
- a. This decision block should be answered YES if any function listed in Table 2 OR Table 3 of EAL-1 is completely lost as a consequence of the explosion/aircraft crash/missile impact.

8.2.3 (Continued)

31. EAL-2 Grid H-2: Uncontrolled or Unplanned Release of Toxic or Flammable Gas into Vital Area

- a. The following is a list of toxic and flammable gases and asphyxiants that are normally stored in bulk quantities within the Protected and Vital areas. While this list is not all-inclusive, it is provided to aid in classification; the MSDS identifier is provided for information.

<u>MSDS</u>	<u>Name of Toxic or Flammable Gas</u>
1004	ACETYLENE (1, 2)
*1245	OXYGEN (1)
1271	PROPANE (1, 2)
1359	HYDROGEN (1)
3000	AMMONIA (1, 2)
4210	P-10 GAS, used in portal monitors (1)

* Oxygen itself is not flammable, but is treated as a flammable gas because its presence increases the flammability of materials.

1 - Flammable

2 - Toxic

- b. When evaluating the effects of a release of toxic or flammable gas, this decision block should be answered YES if the gases listed are released in an uncontrolled or unplanned manner.
- c. For evolutions such as surveillance testing, freeze-sealing and leak-checking, it is expected that small quantities may be released; these small anticipated releases should NOT result in a YES answer.

8.2.3.31 (Continued)

- d. Asphyxiants such as those listed below displace oxygen and, as such, can become toxic in large enough quantities.

<u>MSDS</u>	<u>Asphyxiant Gas</u>
1000	NITROGEN
1002	ARGON
1361	CARBON DIOXIDE
2223	HELIUM
2947	FREON - GENETRON DICHLORODIFLUOROMETHANE
4703	FREON - R-22, CHLORODIFLUOROMETHANE

- e. When evaluating the "loss of access" decision block, the SEC/SSO must consider the type and quantity of gas released, the volume into which it is released, AND the flow path of the ventilation system in service.
- For flammable gases, where any spark could conceivably trigger a fire or explosion which could damage vital equipment, a YES answer is warranted for potentially flammable concentrations.
 - For toxic gases and asphyxiants, the concern is a loss of access for personnel to manipulate vital equipment in support of normal or EOP procedures. Positive indications, by sample, or Superintendent Shift Operations (SSO) judgment should be used to verify atmosphere is oxygen deficient prior to answering Yes. IF access to any vital area is lost, THEN the decision block should be answered YES. Vital areas are listed in Attachment 8.2.5.1, Vital Areas.

8.2.3 (Continued)

32. EAL-2 Grid H-3: Lack of Access Causes Complete Loss of any Function in Table 2 or 3
 - a. IF access to a vital area(s) is lost such that manual actions required to support any function cannot be performed, THEN this decision block should be answered YES.
33. UE Matrix Item E3:
 - a. Loss of both EDGs means that the diesels are not capable of providing AC power to the Emergency Busses. Events caused by fires should be evaluated for its potential to affect safety related equipment.
34. UE Matrix Item A1:
 - a. IF the setpoints have been reduced below the normal values, as described in OMM-014, Radiation Monitor Setpoints, THEN the basis for the Unusual Event call is no longer valid. In this event, a UE call should NOT be made.
35. UE Matrix Item B4
 - a. While R-9 can detect changes in RCS activity, it can not always determine the origin of the radioactive material in the RCS. If conditions exist that could give false indication of fuel failure, a sample should be used for verification. The instruction in UE matrix B1, B2, or B3 should be used once sample results are obtained. If previous plant conditions exist such as confirmed fuel clad leakage, declaration should occur without delaying for sample.
36. UE Matrix Item G3
 - a. Credibility must be established when notification of a threat is received.
 - b. If time permits, Security should be contacted to verify the credibility of the threat by contacting the appropriate local, state, or federal agency.

8.2.3.36 (Continued)

- c. If time does not permit, the Superintendent-Shift Operations or Site Emergency Coordinator must determine credibility using the best available information.
- d. Credible threats include the following:
 - Events that are in progress are considered to be credible.
 - Validated notifications reported by State or Federal agencies. These notifications are considered valid following verification that the notification was made by the agency specified.
- e. For potentially credible threats from calls that do not originate from State or Federal agencies, the determination is not as straightforward. In these cases, judgment must be used. The caller should be questioned using the technique similar to that used for a bomb threat. The following information should be obtained for evaluating credibility:
 - Ask the caller's name.
 - Ask the caller the reason for the call.
 - Is the caller rational/sober?
 - Does the caller know when the event will occur?
 - Does the caller know specific information concerning the plant?

8.2.3 (Continued)

37. Downgrading an Emergency

- a. Downgrading of an emergency can be accomplished by declaring the lower emergency class whenever the plant conditions improve to satisfy the affected emergency action levels.
- b. The following guidelines apply when downgrading an Emergency:
 - IF the Position of Emergency Response Manager is activated, THEN he should be consulted before downgrading occurs, although the final decision rests with the Site Emergency Coordinator.
 - IF the NRC Director of Site Operations position is activated, THEN he should be consulted before downgrading occurs, although the final decision rests with the Site Emergency Coordinator.
 - IF offsite protective action recommendations have been made, THEN the Site Emergency Coordinator shall consult with the Emergency Response Manager, if the position is activated, AND consult with state and county authorities, prior to downgrading. It is recommended that any offsite protective action recommendations be completed prior to downgrading of a General Emergency.
 - For Alert or higher classifications, unless the conditions causing emergency action levels are very quickly resolved (less than approximately 30 minutes), downgrading should not occur until after the Technical Support Center is activated.
 - IF the process of activating the TSC is in progress, THEN downgrading should NOT occur until after TSC activation.

38. Recovery actions should follow guidance provided within PLP-007, Robinson Emergency Plan, Section on Recovery.

8.2.4 RECORDS

N/A

8.2.5 ATTACHMENTS

8.2.5.1 Vital Areas

ATTACHMENT 8.2.5.1

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VITAL AREAS

PAP WEST

CAS - Central Alarm Station
Access Control
Mechanical/Electrical Room
PAP (TSC/EOF) Diesel

PAP EAST

SAS - Secondary Alarm Station

RADIATION CONTROL AREAS

RHR Pump Room
BIT Room
Auxiliary Building
Containment Building
Fuel Handling Building - Gas Decay Tank Room
Spent Fuel Pit
New Fuel Building
SFP Heat Exchanger and Pump Area

OTHER AREAS

AFW Pump Room
E1/E2, Battery Room, Safeguards and Relay Rack Rooms
HVAC Equipment Room for the Unit 2 Control Room
Old Unit #1 Cable Spread Room
Unit #2 Control Room
CCW Surge Tank Room
Service Water Intake Building