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Rev 1/27/80

SUBJECT: Forwards Rev 16 to Emergency Plan PLP-201.

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JAN - 5 1990

Letter Number: HO-890177 (O)

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Washington, D.C. 20555

NRC-697

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Gentlemen:

In accordance with 10CFR50, Appendix E, Carolina Power & Light Company hereby transmits one copy of the affected pages for Revision 16 to the Emergency Plan (PLP-201). Changes to the plan have been summarized in Attachment 1 to this letter. Attachment 2 provides the revised NUREG-0654 Comparison with the SHNPP Emergency Action Level Flow Path for your review.

Very truly yours,

R. B. Richey, Manager
Harris Nuclear Project

MGW:dgr

Attachments

cc: Mr. R. A. Becker (NRC)
Mr. S. D. Ebneter (NRC-RII) (w/two copies of procedures)
Mr. J. E. Tedrow (NRC)

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ATTACHMENT 1
CHANGES TO THE EMERGENCY PLAN

Text from Advance Change 15/1 that was incorporated into Revision 16 intact have not been highlighted by a side bar. Only changes that are new with this revision are highlighted with a side bar. This revision incorporates new demographic data into chapter 1. A new evacuation time study has been performed and will be reflected in Annex H as soon as a new map is available from the State. The evacuation times are within 41 minutes of the old values as shown below:

	Summer Weekday (Good Weather)		Summer Weekend (Good Weather)		Late Fall Weekday (Adverse Weather)		Summer Evening (Good Weather)	
	Old	New	Old	New	Old	New	Old	New
All Zones	193	205	174	215	236	260	172	185

Changes were made on pages 2-13, 2-14, and 2-15 to assign the responsibility for direction and control of the environmental monitoring teams to the Dose Projection Team Leader during Alerts only. When the Emergency Operations Facility is activated, the Environmental Supervisor will assume control of the teams from the Dose Projection Team Leader.

CHANGES TO THE EMERGENCY ACTION LEVELS

The purpose of the changes to the Emergency Action Levels was to incorporate changes in Revision 15 to the Emergency Plan approved by the NRC, to incorporate miscellaneous comments from users and experience, and to reflect comments received during the most recent operator licensing examinations. With respect to the license examinations, it was perceived that the flowpath took too long to evaluate. With the latter concern in mind, the emergency action levels were reviewed to identify and remove any duplicative indications of the same initiating condition. Consequently, the time to evaluate the fission product barrier portion of the Emergency Action Levels has been substantially reduced.

The first change was to delete the Emergency Action Level "CNMT LEAK DET RAD MON NOBLE GAS CHNL INC > 85 TIMES IN 2 HOURS." This value corresponds to the monitor's response to a 300 uCi/cc I-131 equivalent activity in the RCS. This emergency action level is very difficult and time consuming to evaluate, since the operator must call up the time history of that radiation monitor channel on the Radiation Monitoring System console. There are three other Emergency Action Levels that utilize the 300 uCi/cc assumption (plant vent stack monitor, CNMT high range monitors, and RCS activity). Further, it is likely that all of the remaining fuel fission product barriers will show indication of fuel breach or jeopardy in the two hours necessary to evaluate this particular Emergency Action Level.

The next Emergency Action Level eliminated was "CNMT VENT ISOL RAD MON > 1.22E4 mR/HR." This action level is entirely redundant to the Containment high range monitor Emergency Action Level. There are two redundant Containment high range monitors, so, this action level is not necessary.

Another deletion was all Emergency Action Levels utilizing the Reactor Auxiliary Building normal or emergency radiation monitors. These Emergency Action Levels were entirely redundant, using the same assumptions as the Emergency Action Levels for the Plant Vent Stack monitor. The Reactor Auxiliary Building normal and emergency ventilation exhausts to the Plant Vent Stack.

Another deletion was CSF-1 (subcriticality) Red as a fuel jeopardy. This particular critical safety function tree with a red output is the same as an Anticipated Transient Without Scram (ATWS) and is covered elsewhere in the flowpath (Side 1 at D-11).

Another Emergency Action Level eliminated was secondary activity > 100 uCi/cc. This is not a NUREG-0654 required Emergency Action Level. It will be amply covered by the "EOP PATH-2 ENTERED" and main steam line monitor Emergency Action Levels. Further, a secondary sample with this much activity would be time consuming to take and evaluate against an Emergency Action Level since there is no shielding or dilution capability similar to PASS.

Another was to ask a particular question that applies to more than one fission product barrier only once rather than repeat the question under each applicable fission product barrier. In such cases, the flowpath will direct the user to indicate more than one fission product barrier breached and then will exit to an entry point "A" or "B" that skips over additional questions about the same barriers. This change was made for the plant vent stack monitors, the main steam line monitors, the Containment high range monitors and the Steam Generator Level and Pressure Emergency Action Levels.

With respect to the Containment fission product barrier, two questions were added to ensure that the particular containment boundary or secondary system relief or safety valve failure involves a release pathway. With respect to the main steam safeties or Steam Generator PORV's, primary to secondary leakage must exceed Technical Specifications before an Alert would be declared. With respect to containment integrity, a release pathway must result from the failure of containment integrity before an Alert would be declared. This is in keeping with the NUREG-0654 Unusual Events No. 6 and No. 8. With respect to the unisolable steam and/or feed break outside containment, an Alert is declared if the primary to secondary leakage exceeds 10 gpm to the affected Steam Generators. This is identical to the NUREG-0654 Alert Event No. 4.

In the loss of power portion of the flowpath, Side 1, "continuing actions" blocks have been added to aid the operator in keeping time on the 15 minute limit before the power loss is upgraded to a Site Emergency. Also an entry point "C" is added to avoid evaluating all the fission product barriers again simply because a 15 minute clock on loss of power has expired.

In the shutdown functions (EAL Table 1), loss of power and lighting were eliminated. Loss of power is covered already in the flowpath in accordance with NUREG-0654 and inclusion of power in Table 1 was confusing and conflicting with the loss of power Emergency Action Levels. Lighting was also eliminated as redundant to loss of power. A question was also inserted to ensure that any declaration based on a loss of shutdown function was not due to loss of all power.

On side 2, Emergency Action Levels relating to explosions, crashes, missiles, and toxic gas releases were redefined in applicability from inside the Protected Area to inside the Power Block, with the Power Block carefully stated to include all structures remotely related to safety. Buildings of no safety significance, such as the Administration Building, Service Building, or Warehouse were not included. Events of these types in the excluded buildings would be covered under Unusual Events.

Other minor wording changes were made for clarity, such as specific EAL Table references, naming the critical safety function rather than using its number, clarifying the seismic event alarm indicator on EAL Table 4, using the ">" sign rather than "greater than," etc.

The changes approved by the NRC from Revision 15 of the Emergency Plan were also included.

The Unusual Event for reservoir levels were made more clear and easier to read. Also, an Emergency Action Level for the Auxiliary Reservoir less than 250 feet was added since this is the Technical Specifications value.

A revised cross reference between the Emergency Action Level Flowpath and NUREG-0654 is provided as Attachment 1.