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JAN 11 1992

Docket Nos. 50-321, 50-366
License Nos. DPR-57, NPF-5

Georgia Power Company
ATTN: Mr. W. G. Hairston, III
Senior Vice President -
Nuclear Operations
P. O. Box 1295
Birmingham, AL 35201

Gentlemen:

SUBJECT: PLANT HATCH EMERGENCY PLAN REVIEW, REVISION 11

We have completed our review of changes incorporated as Revision 11 and the justification documentation to support the requested changes.

Our review indicated that two changes were not consistent with the provisions of 10 CFR 50.47(b), and Appendix 1 of NUREG-0654. The inconsistencies are specified in the Enclosure. The inconsistencies were discussed by a member of the emergency preparedness staff with members of your staff on December 6 and 19, 1991. Based on the discussions and a review of draft emergency action level (EAL) changes proposed under Revision 12, both items will be resolved provided the commitments are reflected in Revision 12 Plan Changes. Those commitments are: (1) reinstatement of turbine building ARM setpoint as an indicator for an unisolable steam line break outside containment, and (2) reinstatement of the availability of respiratory protection to field monitoring personnel.

If your understanding of the commitments is different, please advise this office immediately. Please modify your Plan to correct those pages necessary to maintain plan continuity. We request that the corrections be provided to us within 60 days of this letter.

Should there be further questions or discussions regarding this matter, please contact Mr. William H. Rankin of our staff at (404) 331-5618.

Sincerely,

Decker/Cline

William E. Cline, Chief
Radiological Protection and
Emergency Preparedness Branch
Division of Radiation Safety
and Safeguards

Enclosure:
Plan Inconsistencies

cc: (see page 2)

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ENCLOSURE

Plan Inconsistencies

1. Section D. Table D-3 (Sheet 2 of 10), Item 3.0 states a Site Area Emergency exists when:

An unisolable main steam, HPCI, or RCIC steam line break outside containment, as indicated by entry conditions into secondary containment control EOP, and affected system fails to isolate.

or

SOS/ED judgement

This change is inconsistent with the previous Hatch EAL (addressing item 4 of NUREG-0654, Appendix I, Page 1-13) which stated a Site Area Emergency exists when:

An unisolable MSL break outside containment is indicated by the following:

MSL hi flow alarm > 138% of rated flow
and

Any one of the following indicators:

Any reactor building ARM above alarm setpoint and rapidly increasing

or

Any turbine building ARM above alarm setpoint and rapidly increasing

or

MSL low pressure alarm < 825 psig (and decreasing)

or

Any tunnel temperature > 194°F (TS)

The inconsistency resulted from the absence of the turbine building indications of a steam line break.

2. Section I. Accident Assessment, Field Monitoring, Page I-4, First Paragraph: Respirators were deleted from field monitoring kits. This deletion is inconsistent with 10 CFR 50.47(b)(10) which requires a range of protective actions (consistent with Federal guidance) be developed for

the plume exposure pathway EPZ for emergency workers and the public. The Environmental Protection Agency's, "Manual of Protective Action Guides and Protective Actions for Nuclear Incidents" states that radiation exposure from inhalation of gaseous or particulate radionuclides may be reduced by the use of respirators. Consequently, this change is inconsistent with 10 CFR 50.47(b)(10).



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
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JAN 11 1992

MEMORANDUM FOR: William H. Rankin, Chief
Emergency Preparedness Section

FROM: Alphonsa Gooden, Radiation Specialist
Emergency Preparedness Section

SUBJECT: PLANT HATCH EMERGENCY PLAN REVIEW, REVISION 11, DOCKET
NOS. 50-321 AND 50-366

I. BACKGROUND

By letter dated October 9, 1991, the licensee submitted Revision 11 to the Hatch Emergency Plan dated December 1990, with an implementation date of September 9, 1991. Many of the changes were administrative in nature resulting from general editorial and typographical corrections, title changes, updated population figures and evacuation time estimates, and updated agreement letters. Those changes that were considered administrative in nature and neither diminish nor improve the effectiveness of the Plan will not be discussed further. Those changes deemed substantive are discussed below.

II. DISCUSSION

A. Section D. Emergency Classification System

1. Table D-1 (Sheet 2 of 10), Section 2.0 Radiological Effluents

Under Notification of Unusual Event, a footnote defining average meteorological conditions was added.

Comment: Based on discussions with members of the licensee's staff and no changes to the EAL, the additional wording appears to be merely clarification of the term "average meteorological conditions." The trigger point for this EAL continues to be offsite dose rates as indicated by field measurements or effluent monitor readings. This change is considered a Plan improvement with no affect on Plan effectiveness.

2. Table D-1 (Sheet 4 of 10), Section 8.0 Security Event

Under Notification of Unusual Event, the emergency condition was revised. The previous wording stated that "a Notification of Unusual Event exists when: A security threat or attempted entry or attempted sabotage occurs as indicated by the following." The revised statement indicates that "a Notification of Unusual Event exists when: A security alert occurs as indicated by the following."

Comment: On November 27, 1991, the reviewer examined the Hatch Safeguards Contingency Plan with a Region II based security inspector, and noted that a security alert as defined in the aforementioned document was consistent with the previous security conditions for the Notification of Unusual Event classification. Therefore, this change is considered a Plan update to ensure initiating events in the Plan and security procedures are consistent.

3. Table D-1 (Sheet 6 of 10), Section 10.2 Explosions

Under Notification of Unusual Event, the EAL for an explosion was revised. The previous wording stated that "any explosion observed near or onsite and OSOS/ED judgment." The revised EAL reads "any explosion observed (within the protected area) including 230-KV and 500-KV switchyards and SOS/ED judgement."

Comment: According to the licensee's justification, this change provides clarification and meaning to the wording "near or onsite." As presented, the revised EAL appears to encompass all equipment essential to plant operations. This change is therefore considered a Plan improvement with no impact on Plan effectiveness.

4. Table D-1 (Sheet 7 of 10), Section 10.3 Toxic Gas

Under Notification of Unusual Event, the EAL for a toxic gas release was revised. The previous wording stated that "a toxic gas release is indicated by the following: observation of significant near or onsite toxic gas release and OSOS/ED judgement." The revised EAL reads "observation of significant toxic gas release (within the protected area) including 230-KV and 500-KV switchyards."

Comment: As stated above in item 3, the licensee's justification was to provide clarification and meaning to the wording "near or onsite." The EAL as revised appears to encompass all equipment essential to safe plant operations. This change is therefore considered a Plan improvement item with no affect on Plan effectiveness.

5. Table D-1 (Sheet 7 of 10), Section 10.4 Flammable Gas

Under Notification of Unusual Event, the EAL was revised to replace "observation of significant onsite flammable gas release" with "observation of significant flammable gas release (within the protected area) including 230-KV and 500-KV switchyards."

Comment: As previously stated in the above items (3 and 4), the licensee's justification for the referenced change was to clarify and define what is meant by near or onsite. This change is therefore considered a Plan improvement item with no affect on Plan effectiveness.

6. Table D-1 (Sheet 8 of 10), Section 11.0 Contaminated Injured Victim

Under Notification of Unusual Event, the EAL was revised to replace "contamination of injured victim: $>10,000$ dpm/100cm² with contamination of injured victim >100 cpm/probe area (1000 dpm/probe area) above background."

Comment: This change according to the licensee was to ensure that contamination detection procedures and action levels in the Emergency Plan and Radiation Protection Procedure (E2RP-RAD-017-05, Section 7.1.2) were consistent. The revised EAL appears to provide a very expedient answer to the presence or absence of contamination without requiring personnel to perform any calculations (dpm/100 cm²). Previous EAL was based on converting direct survey results into dpm/100cm²; the revised EAL is based on a direct survey using a thin-window pancake probe with an increase of 100 cpm above background cpm. This change is considered a Plan improvement item that increases the effectiveness of the Plan.

7. Table D-1 (Sheet 10 of 10), Section 16.0 Multiple Symptoms and Other Conditions

Under Notification of Unusual Event, various Technical Specifications safety limits (used as trigger points for event classification) were deleted from the EAL.

Comment: The reviewer examined the Hatch Unit 1 and Unit 2 Technical Specifications document (Sections 1.1, 1.2, and 2.1) and the Emergency Plan Implementing Procedure (Section 22.0 of 73 EP-EIP-001-05) governing emergency classification. The referenced deletions were available in each of the aforementioned documents to aid in the event declaration. Consequently, the change is considered a Plan update with no affect on Plan effectiveness.

8. Table D-2 (Sheet 1 of 10), Section 1.0 Radiological Effluents

Under Alert, a footnote defining average meteorological conditions was added.

Comment: This additional information does not appear to change the intent of the EAL. In fact, this change is merely a Plan improvement item with no affect on Plan effectiveness.

9. Table D-2 (Sheet 1 of 10), Section 3.0 Steam Line Break (MSL)

Under an Alert, several changes were made:

- a. A steam line break occurs outside containment with significant MSIV leakage was changed to "A steam line break occurs outside containment with significant main steam, HPCI, or RCIC isolation valve leakage."
- b. Any valid turbine building leak detection indication, was changed to "any valid reactor building or turbine building leak detection indication."
- c. Any reactor building area radiation monitor (ARM) above alarm setpoint and increasing was changed to "any reactor building ARM above maximum normal operating values and increasing."

Comment: The above changes involving additional wording and/or editorial changes are considered Plan improvements with no affect on Plan effectiveness. The above change in item c) was discussed with members of the licensee's staff on December 6, 1991. According to the licensee, the change in wording from alarm setpoint to maximum normal operating values was to achieve editorial consistency between the Emergency Plan, Emergency Operating Procedures, and the Annunciator Procedures.

10. Table D-2 (Sheet 4 of 10), Section 8.2 High Winds

Under the Alert condition, additional wording was added to the EAL for high winds. The previous EAL stated that "any tornado observed striking the operating facility." The revised EAL stated that "any tornado observed striking the operating facility (including 230-KV and 500-KV switchyards)."

Comment: The additional information regarding the operating facility identified structures integral to plant operations and is considered a Plan improvement item.

11. Table D-2 (Sheet 5 of 10), Section 9.1 Aircraft Activity

Under Alert, the EAL for aircraft activity was revised to clarify what area of the plant is considered onsite. The previous EAL stated "aircraft crash onsite." The revised EAL reads "aircraft crash within the protected area including the 230-KV and 500-KV switchyards."

Comment: This change clearly defines the area of the plant in which a plane crash may pose a hazard to plant operation. This change appears to be a Plan improvement with no affect on Plan effectiveness.

12. Table D-2 (Sheet 5 of 10), Section 9.3 Toxic Gas

Under Alert, the specific area of the plant for hazard assessment consideration was included. The previous EAL indicated that "uncontrolled toxic gas entry into facility environs." The revised EAL states that "uncontrolled toxic gas entry into protected area facility environs. . .

Comment: This change is considered a Plan improvement with no affect on Plan effectiveness.

13. Table D-3 (Sheet 1 of 10), Section 1.0 Radiological Effluents

Under Site Area Emergency, a footnote defining average meteorological conditions was added.

Comment: Identical to comments contained in item II.A.1. above.

14. Table D-3 (Sheet 2 of 10), Section 2.0 Core Damage

Under Site Area Emergency, the EAL was changed to include main steam, HPCI, or RCIC steam line. In addition, the criteria or conditions which must be satisfied were deleted and replaced with an Emergency Operating Procedure (EOP) reference to review for entry conditions. The previous EAL was as follows:

An unisolable MSL break outside containment is indicated by the following:

MSL HI flow alarm > 138% of rated flow

and

Any one of the following indicators:

Any reactor building ARM above alarm setpoint and rapidly increasing

or

Any turbine building ARM above alarm setpoint and rapidly increasing

or

MSL low pressure alarm < 325 psi (and decreasing)

or

Any tunnel temperature > 194°F (TS)

The revised EAL is as follows:

An unisolable main steam, HPCI, or RCIC steam line break outside containment, as indicated by entry conditions into secondary containment control EOP, and affected system fails to isolate,

or

SOS/ED judgement.

Comment: The reviewer contacted a member of the licensee's Emergency Preparedness staff on December 18, 1991 to review and discuss the entry conditions listed in the referenced EOP. With one exception, the previous EAL conditions are included in Tables to the EOP. The one exception involved the absence of an entry condition based on turbine building radiation levels. When questioned regarding the absence of an EAL addressing increased radiation levels inside the turbine building, the licensee contact acknowledged this error resulted from an oversight during the process and the EAL was omitted inadvertently. The licensee contact committed to the following EAL (addressing the turbine building) in Revision 12 to the Hatch Plan:

Any indications of significant leakage into the turbine building from the main steam system with turbine building ARMs above the alarm setpoint and increasing. The reviewer was informed by a member of the Corporate Office staff that although the condition was not included in the Plan, the procedure used by licensee personnel in event classification (73EP-EIP-001-05) did address each of the previous conditions. The reviewer examined procedure 73EP-EIP-001-05 and noted that the procedure was adequate in addressing the previous conditions.

15. Table D-3 (Sheet 3 of 10), Section 6.0 Fire In Plant

Under Site Area Emergency, editorial changes were made to provide guidance to classification personnel regarding what capabilities if affected by a fire should result in the event declaration.

Comment: This change is considered a Plan improvement item that enhances the effectiveness of the Plan.

16. Table D-3 (Sheet 7 of 10), Section 9.3 Toxic Gas

Under Site Area Emergency, editorial changes were made to include vital areas where the presence of uncontrolled toxic gas would satisfy the Site Area Emergency declaration.

Comment: The additional wording provides guidance to personnel making event classification determinations. Therefore, this change is a Plan improvement that enhances the effectiveness of the Plan.

17. Table D-4 (Sheet 7 of 10), Section 9.4 Flammable Gas

Under Site Area Emergency, editorial changes were made to include vital areas where the presence of uncontrolled flammable gas entry would satisfy the Site Area Emergency declaration.

Comment: Same as above in item 16.

B. Section I. Accident Assessment

1. Dose Projection System, Pages I-2 thru I-3

Editorial changes were made to reflect improvements in the dose projection methodology. Improvements included:

- ° capability for inputting new meteorological and radiological data at 15 mins. intervals rather than 30 mins. intervals.
- ° Changed the dispersion calculation model from a "Straight-line Gaussian" to a "Lagrangian Puff and a segmented Gaussian model."

Comment: Both of the above changes are considered Plan Improvements which increase the effectiveness of the Plan and dose projection methodology.

2. Field Monitoring, Page I-3

This Section was revised to reflect the deletion of "respirators" from the field monitoring kits. Previous statement read "the kits included respirators, a two-way radio, meters for measuring gamma and beta/gamma dose rates, and air samplers." The revised statement read "the kits include a two-way radio, meters for measuring gamma and beta/gamma dose rates, and air samplers."

Comment: The licensee was contacted regarding this change on December 6, 1991. The reviewer informed members of the licensee's staff that the referenced deletion would be inconsistent with 10 CFR 50.47(b)(10) which requires a range of protective actions have been developed for the plume exposure pathway EPZ for emergency workers and the public. Guidelines consistent with federal guidance, are developed and in place. Included in the EPA Manual of PAGs and protective actions is respiratory

protection. According to the EPA manual, radiation exposure from inhalation of gaseous or particulate radionuclides may be reduced by the use of respirators.

On December 18, 1991, the reviewer was informed by members of the licensee's staff that adequate iodine canisters and respirators will be available for deployment with field monitoring kits. Although canisters and respirators will not be stored in kits, respirators will be stored at the same location as the kits and available for field teams. The licensee further stated that Revision 12 to the Plan will reflect the availability of respiratory protection to field monitoring personnel.

C. Section J. Protective Response

1. Table J-2, Protective Action Recommendations Based on Plant Conditions

Two typos were noted and discussed with the licensee.

- ° An incorrect reference to Attachment 2. Correct reference should be Table J-1.
- ° Editorial change resulted in a drywell wide range monitor (DWRM) setpoint of $>4.8E5$ R/hr rather than a correct value of $\geq 4.8E5$ R/hr.

Comment: The licensee acknowledged the above typos and indicated that the corrections would be reflected in Revision 12. Plan effectiveness is unaffected by the referenced errors.

D. Section N. Exercises and Drills

1. Exercises, Page N-1

The hours for conducting off hours exercises was changed. Previously, after hours was defined as after 6:00 p.m. and prior to 6:00 a.m. The revised time is after 6:00 p.m. and prior to 4:00 a.m.

Comment: This change has no impact on emergency preparedness. The hours of 6:00 p.m. to 4:00 a.m. continue to meet the intent of NUREG-0654 regarding off hours exercise.

E. Section 0. Radiological Emergency Response Training

1. Tables 0-1 (Description of Typical Training Subject Areas) and 0-2 (Emergency Preparedness Training Topics)

The referenced tables were revised to reflect the task oriented approach to training. The licensee's justification indicated that the INPO developed program provides training on the specific tasks each emergency responder will be required to perform.

Comment: This change is a Plan update with no affect on Plan effectiveness.

F. Appendix 2. Letters of Agreement

An agreement with Fort Stewart (ARMY) for providing air transportation during a medical emergency was deleted.

Comment: The reviewer contacted the licensee on December 6, 1991 to discuss the referenced deletion. According to members of the licensee's staff, an agreement for air transportation is available via a Radiation Management Consultants contract. Further, the licensee's justification indicated the new Lifestar Helicopter Service was available via Savannah.

III. SUMMARY AND CONCLUSION

Based on the review of the licensee's change justification details and discussions with members of the licensee's staff, changes incorporated as Revision 11 are considered acceptable provided the commitments made during the teleconference calls on December 6 and 19, 1991, are implemented. The commitments were as follows:

- o Include in Revision 12 changes an EAL addressing any indications of significant leakage into the turbine building from the main steam system with turbine building ARMs above the alarm setpoint and increasing.
- o Re-instate the availability of respirators to the offsite monitoring team in Revision 12 of the Plan.

The reviewer also discussed with members of the licensee's staff a complete review of the EALs to consider the appropriateness of the statement "and SOS/ED judgement" in comparison with "or SOS/ED judgement"

in those EALs where positive instrument indication or physical observation and confirmation is made. If you concur on this matter, attached is a letter to the licensee expressing NRC approval pending licensee commitments in Revision 12 of the Plan.

Alphonsa Gooden

Alphonsa Gooden

cc: C. Banks