

Official

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Docket Nos. 50-269, 50-270, 50-287
License Nos. DPR-38, DPR-47, DPR-55

Duke Power Company
ATTN: Mr. H. B. Tucker, Vice President
Nuclear Production Department
P. O. Box 1007
Charlotte, NC 28201-1007

Gentlemen:

SUBJECT: OCONEE NUCLEAR STATION EMERGENCY PLAN REVIEW, REVISION 90-1

We have completed our review of Revision 90-01 to your Oconee Nuclear Station Emergency Plan dated March 1, 1990. Revision 90-01 incorporated the Emergency Action Level changes resulting from your response to NRC concerns regarding Revisions 89-01 and 89-02 to Emergency Plan, dated February 23, 1990, and the commitments made during the February 26, 1990 meeting held in the Region II Office on the same subject.

Our review indicates that the aforementioned Plan corrections were incorporated as appropriate; however, certain revised Emergency Action Levels (EALs) continue to be inconsistent with NUREG-0654, Appendix 1 and appear to decrease the effectiveness of the Plan. Two areas of concern relate to the original changes made in Revision 89-1 while the third relates to a newly initiated change in Revision 90-01.

Enclosure 1 to this letter includes the specific areas where it appears that the Plan effectiveness has been decreased. These items were identified during discussion with C. Jennings of your staff on August 21, 1990. To preclude a violation of regulatory requirements, you should not continue to implement the changes noted in Enclosure 1. Please modify the appropriate pages of your Plan. We request that the corrective changes be provided to us within 45 days of the date of this letter.

Our review of the remainder of the changes incorporated as Revision 90-1 to the Oconee Nuclear Station Emergency Plan indicated that they are consistent with the planning standards of 10 CFR 50.47(b) and the requirements of Appendix E to 10 CFR Part 50.

As a result of Revision 89-01 to the Oconee Emergency Plan, the February 26, 1990 meeting, and subsequent teleconferences, several issues remained for NRC resolution, specifically: (1) the "credit" which could be given for the Stand-by Shutdown Facility related to the EAL classification scheme; and (2) proposed EALs for natural disasters and security events which strictly related classification to plant shutdown capability. Enclosure 2 provides the NRC disposition of these items.

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Please be reminded that 10 CFR 50.54(q) requires that proposed changes that decrease the effectiveness of your Emergency Plan shall not be implemented without application to and approval by the Commission. However, changes may be made without Commission approval if such changes do not decrease the effectiveness of the Plan, and the Plan, as changed, continues to meet the standards of 10 CFR 50.47(b) and the requirements of Appendix E to 10 CFR 50. If a change is made without approval, you should furnish copies in accordance with 10 CFR 50.54(q). Also, any changes to the Emergency Plan Implementing Procedures should be made in accordance with the requirements of 10 CFR 50, Appendix E, Section V.

Should you have any questions regarding this letter, please contact Mr. William H. Rankin of our staff at 404-331-5586.

Sincerely,

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J. Philip Stohr, Director
Division of Radiation Safety
and Safeguards

Enclosures:

1. Items Requiring Corrective Actions
2. Resolution of Outstanding Issues

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WShymlock
9/6/90

Concurrences
from
AFB, NRR
by telephone
on 9/7/90

ENCLOSURE 1

AREAS REQUIRING CORRECTIVE ACTION

All items are referenced to Section D, Emergency Classification System, of the Oconee Nuclear Station Emergency Plan.

1. Alert Initiating Condition No. 7: Loss of All Offsite Power and Loss of All Onsite AC Power

The Oconee EAL was modified in response to a previously identified Plan deficiency; however, the revised EAL is inconsistent with the current NRC criteria provided in NUREG-0654 and continues to be viewed as a decrease in the effectiveness of the Plan. The EALs are mode specific requiring declaration of an Alert for momentary losses of AC power (1-15 minutes) in Modes 1-4 and for losses of AC power greater than 15 minutes in Modes 5 and 6. Under NUREG-0654 criteria momentary onsite and offsite power loss should be classified as an Alert and losses for greater than 15 minutes should be classified as a Site Area Emergency regardless of plant operating mode. The appropriate sections of your Plan should be revised accordingly until such time as future Agency approved guidance is instituted.

2. Alert Initiating Condition No. 8: Loss of All Vital Onsite DC Power

This Oconee EAL was added in response to a previously identified deficiency. The new EAL is viewed as a Plan enhancement; however, it remains inconsistent with NUREG-0654 criteria. The Oconee EAL scheme would require declaration of an Alert for momentary losses of DC power in Modes 1-4 and a Site Area Emergency declaration for losses greater than 15 minutes in Modes 1-4. The Oconee Emergency Classification System does not require any classification for a loss of DC power incident in Modes 5 and 6. As discussed previously for AC power, NUREG-0654 requires momentary losses of DC power to be classified as an Alert and losses greater than 15 minutes to be classified as a Site Area Emergency regardless of plant operating mode. The appropriate sections of your Plan should be revised accordingly until such time as future Agency approved guidance is instituted.

3. Alert Initiating Condition No. 18, Hazardous Substance or Flammable Gas Release

This EAL was modified to read "Uncontrolled entry of a toxic substance of flammable gas into an area of the plant which prevents the operation of safety equipment necessary to establish and maintain cold shutdown." Previously, the EAL indicated "jeopardizes" the operation of equipment which is consistent with the anticipatory criteria of NUREG-0654. Therefore, the change appears to decrease the effectiveness of the Plan, and the previous EAL should be reinstated to bring the Oconee Plan into compliance.

ENCLOSURE 2

RESOLUTION OF OUTSTANDING ISSUES

During the February 23, 1990 meeting between Duke Power Company and the NRC Region II, several issues were raised which required NRC clarification. The following summarizes those outstanding issues and their disposition.

1. Considerable discussion was held regarding the EALs for fires classified as Alerts and Site Area Emergencies. The licensee's justification for the original EAL submittal (Alert Initiating Condition No. 13 and Site Area Emergency Initiating Condition No. 11) was that the Stand-by Shutdown Facility (SSF) provided an additional level of plant safety by ensuring the availability of the functions required to establish and maintain hot shutdown. In reviewing this area further, NRC has determined that the licensee cannot take credit for the SSF for fire related EALs. Specifically, the NUREG-0654 Alert EAL (fire potentially affecting safety systems) and Site Area Emergency EAL (fire compromising the function of safety systems) represent loss or potential loss of safety systems which the SSF does not include. These systems include but are not limited to: Reactor Protection System logic and instrumentation; Emergency System function, logic and instrumentation; Emergency Core Cooling Systems (High Pressure Injection, Low Pressure Injection, Containment Sump, Water Storage Tanks, etc.); Class IE Electrical System (Diesels, Battery Chargers, Inverters, Vital AC Busses, Vital DC Busses); Essential Service Water; Component Cooling Water; Shutdown Cooling Water, Emergency Feedwater; Spent Fuel Pool and Auxiliaries; and Containment Structure (Containment Isolation System, Spray System, Air Coolers, Air Clean-up System, Hydrogen Removal System).

This determination further emphasizes NRC position in the February 23, 1990, meeting that each EAL is independent and not all EALs should be tied to a single basis (i.e. ability to maintain shutdown).

For other EALs, such as those related to shutdown capability, the licensee has taken credit for the SSF and this is acceptable. These areas have already been approved by NRC.

2. During the February 23, 1990 meeting, the licensee proposed several new EALs related to natural phenomena and security events. Specifically, the proposal involved replacing the earthquake/natural disasters and security EALs with EALs relating to maintaining the plant at hot shutdown. As discussed in Item 1 above, NRC considers the EALs for plant shutdown as separate and distinct from other EALs. In particular, the security and earthquake occurrence EALs are anticipatory in nature which is one of the fundamental basis of NUREG-0654 criteria.

Subsequent conference calls on the General Emergency and Site Area Emergency EALs for security resulted in the NRC decision to continue to support the NUREG-0654 criteria even though the licensee has in place the SSF capability.

NRC is currently reviewing a new EAL methodology; however, until this scheme has been recognized and formally approved by the Agency, NUREG-0654 criteria continues to be the basis for EAL review and approval. Therefore, the Coconee EAL scheme must continue to include specific action levels for earthquake occurrence and security event occurrence as presently approved by NRC.