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Director
Office of Federal Register
Washington, DC 20403

Dear Director:

We request that the Individual Notice for Proposed Amendments relating to Oconee Unit 3 Cycle 10 reload and boron concentration for the Oconee Nuclear Station, Dockets Nos. 50-269, 50-270 and 50-287 be published in the Federal Register immediately, but no later than Friday, March 6, 1987.

This request is based on the impact to the licensee if the notice and proposed amendments are delayed. Any delay will have an impact on the upcoming refueling outage that will delay the affected unit's current scheduled restart.

Because of the urgency, we are using an emergency notice allowing a shorter public comment period rather than the usual 30-day. If this notice is not published as requested, it would result in unnecessary delays that would not be in the best interest of the public.

We appreciate your assistance in this effort. If there are any problems or if I can be of assistance, please call me on (301) 492-7288.

Sincerely,

John F. Stolz, Director
PWR Project Directorate No. 6
Division of PWR Licensing-B

Enclosure:
As stated

<i>[Signature]</i> PWR#6 RIngram 3/14/87	<i>[Signature]</i> PWR#6 HPastis 3/14/87	<i>[Signature]</i> PWR#6 GEEdison 3/14/87	<i>[Signature]</i> PWR#6 JStolz 3/14/87
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DOCKET NO(S). 50-269, 270 and 287

Mr. Hal B. Tucker
 Vice President - Nuclear Production
 Duke Power Company
 P. O. Box 33189
 422 South Church Street
 Charlotte, NC 28242
 SUBJECT:

OCONEE NUCLEAR STATION, UNITS 1, 2 AND 3

The following documents concerning our review of the subject facility are transmitted for your information.

- Notice of Receipt of Application, dated _____.
- Draft/Final Environmental Statment, dated _____.
- Notice of Availability of Draft/Final Environmental Statement, dated _____.
- Safety Evaluation Report, or Supplement No. _____, dated _____.
- Notice of Hearing on Application for Construction Permit, dated _____.
- Notice of Consideration of Issuance of Facility Operating License, dated _____.
- Monthly Notice; Applications and Amendments to Operating Licenses Involving no Significant Hazards Considerations, dated _____.
- Application and Safety Analysis Report, Volume _____.
- Amendment No. _____ to Application/SAR dated _____.
- Construction Permit No. CPPR- _____, Amendment No. _____ dated _____.
- Facility Operating License No. _____, Amendment No. _____, dated _____.
- Order Extending Construction Completion Date, dated _____.

Other (Specify) **Notice of Consideration of Issuance of Amendments and Facility Operating Licenses and Proposed No Significant Hazards Consideration Determination concerning application dated December 12, 1986, as supplemented January 29, 1987, and application dated February 11, 1987, related to the Unit 3, Cycle 10 reload and the minimum boron concentration in the borated water storage tank.**

Helen N. Pastis, Project Manager
 Office of Nuclear Reactor Regulation

PWR Project Directorate #6
 Division of PWR Licensing-B

Enclosures:
 As stated

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CC: w/enclosures:
 See next page

OFFICE	PWR#6	PWR#6	PWR#6	PWR#6		
SURNAME	Ringram	HPastis;eh	GEdison	JStolz	FMiraglia	@Woodhead
DATE	2/18/87	2/18/87	2/19/87	2/19/87	2/19	2/19/87

Mr. F. B. Tucker
Duke Power Company

Oconee Nuclear Station
Units Nos. 1, 2 and 3

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Honorable James M. Phinney
County Supervisor of Oconee County
Walhalla, South Carolina 29621

UNITED STATES NUCLEAR REGULATORY COMMISSIONDUKE POWER COMPANYDOCKETS NOS. 50-269, 50-270 AND 50-287NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENTS TO
FACILITY OPERATING LICENSES AND PROPOSED NO SIGNIFICANT HAZARDS
CONSIDERATION DETERMINATION

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of amendments to Facility Operating Licenses Nos. DPR-38, DPR-47 and DPR-55, issued to Duke Power Company (the licensee), for operation of the Oconee Nuclear Station, Units Nos. 1, 2 and 3, located in Oconee County, South Carolina.

The amendments would revise the Station's common Technical Specifications (TSs) to: (1) support the operation of Oconee Unit 3 at full rated power during the upcoming Cycle 10, and (2) raise the minimum boron concentration in the borated water storage tank (BWST) from 1835 parts per million (ppm) to 2010 ppm to ensure that the core shutdown margin is one percent delta k over k, 1% Wk/k, at 70°F without any control rods in the core.

The Cycle 10 reload amendment was initially noticed on January 28, 1987 (52 FR 2880). However, because the licensee revised the reload report by letter dated January 29, 1987, and changed the boron concentration by letter dated February 11, 1987, the request is being renoticed.

The licensee revised the reload report because Oconee Unit 3 was shut down on December 17, 1986 - earlier than scheduled because of possible wear indications in the 3B2 reactor coolant pump. The Oconee Unit 3 Cycle 10 core was then redesigned based on the shortened Cycle 9 length of 349 effective

full power days (EFPDs). Results of this redesign indicated that to ensure the core will be shut down in conformance with applicable criteria, the beginning-of-cycle (BOC), all rods out, 70°F and one percent delta k over k shutdown, the boron concentration should be increased from the present 1835 ppm to 2010 ppm. The minimum boron concentration would be increased for Oconee Unit 3 only. In a letter dated February 11, 1987, as supplemented on February 27, 1987, the licensee proposed revisions to the TSs to raise the minimum boron concentration in the BWST.

In its February 11, 1987 letter, the licensee requested that noticing of these amendments be treated as an emergency notice because insufficient time exists for the Commission's usual 30-day notice without extending the current outage. Because of the early shutdown of Oconee Unit 3, the licensee determined that emergency circumstances exist for approval of these proposed revisions to support startup of Oconee Unit 3, Cycle 10, on March 17, 1987.

Before issuance of the proposed license amendments, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations.

The Commission has made a proposed determination that the amendment requests involve no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendments would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

The Commission has provided guidance for the application of these criteria by providing examples of amendments that are considered not likely to involve significant hazards considerations (51 FR 7751).

Example (iii) of the types of amendments not likely to involve significant hazards considerations is an amendment to reflect a core reload where:

(1) No fuel assemblies significantly different from those found previously acceptable to the Commission for a previous core at the facility in question are involved;

(2) No significant changes are made to the acceptance criteria for the TSs;

(3) The analytical methods used to demonstrate conformance with the TSs and regulations are not significantly changed; and

(4) The Commission has previously found such methods acceptable.

This particular reload involves the reinsertion of 117 fuel assemblies of a type previously approved and used and the insertion of 60 fuel assemblies of the Mark BZ type. The Mark BZ fuel assemblies are the same as previously approved and used assemblies in terms of fuel rods, end grid, end fittings, and guide tubes and differ only slightly from previously approved assemblies in the use of Zircaloy spacer grids rather than Inconel Intermediate Spacer grids. Thus, this core reload involves the use of fuel assemblies that are not significantly different from those found previously acceptable to the Commission for a previous core at this facility. The request for amendment changes the TSs to reflect new operating limits based on the fuel and control rods to be inserted into the core. These parameters are based on the new physics of the core and fall within the acceptance criteria.

In the analyses supporting this reload, there have been no significant changes in the acceptance criteria for the TSs, the analytical methods used to demonstrate conformance with the TSs and the regulations were not significantly changed, and those analytical methods have been previously found acceptable. Thus, this reload and the proposed license amendments reflecting it appear to be encompassed by example (iii) of amendments not likely to involve a significant hazards consideration.

The Commission has made a proposed determination that the amendments on the boron concentration issue involve no significant hazards consideration. The requested amendments will not involve a significant increase in the probability or consequences of an accident previously evaluated. The licensee states that it has examined each accident addressed in the Oconee Final Safety Analysis Report (FSAR) with respect to the increase in the Oconee Unit 3, Cycle 10, minimum BWST boron concentration. BWST boron concentration is required to be maintained such that the core will remain one percent subcritical at 70°F with all control rods removed. This concentration applies to loss-of-coolant accidents (LOCA) and refueling conditions. As such, a boron concentration of 2010 ppm will meet the criteria. Therefore, the probability of any Design Basis Accident (DBA) is not affected by this change, nor are the consequences of a DBA affected by this change.

The licensee states that it has examined each transient analysis addressed in the Oconee FSAR with respect to the revised Oconee Unit 3 Cycle 10 physics parameters calculated based upon the shortened Cycle 9 length of 349 EFPDs. The results of this review are documented in Revision 1 of the

Oconee Unit 3 Cycle 10 reload report submitted by letter dated January 29, 1987. The key physics parameter affected by the Oconee Unit 3 Cycle 10 redesign is the BOC boron concentration. The limiting FSAR transient with respect to changes in the boron concentration is the moderator dilution transient at power. Only the non-LOCA boron dilution transient was found to have a more potentially severe result due to increased boron concentration. However, based on the analysis the licensee has determined that this event is bounded by the values assumed in the FSAR. The combined effects of the boron concentration and the differential boron worth are the key physics parameters which establish the positive reactivity addition rate associated with a moderator dilution transient. A comparison of the boron concentration and differential boron worth calculated for Oconee Unit 3 Cycle 10 to the values assumed in the FSAR indicates that the Oconee Unit 3 Cycle 10 values would result in an insertion rate 8 percent less than the value assumed in the FSAR. Therefore, the moderator dilution transient presented in the FSAR remains conservative for Oconee Unit 3 Cycle 10. The Commission concurs with the licensee's assessment.

The proposed amendments will not create the possibility of a new or different kind of accident from any accident previously evaluated. Analysis of the increase in the Oconee Unit 3, Cycle 10, minimum BWST boron concentration has indicated that the 2010 ppm concentration is well within all acceptance criteria. For refueling and LOCA conditions, the proposed concentration is sufficient to maintain the core one percent subcritical at 70°F with all control rods removed. Therefore, this change will not create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed amendments will not involve a significant reduction in a margin of safety. The licensee has examined the FSAR transient and accident analyses to ensure that the physics parameters predicted for Oconee Unit 3 Cycle 10 do not result in a significant reduction to any margin of safety. The proposed value of 2010 ppm will maintain the core one percent subcritical at 70°F with all rods removed. The predicted boron concentration required to maintain the core one percent subcritical at 70° F with all control rods out of the core during refueling or a LOCA has been compared to the current TS value for the BWST. The predicted BOC, all rods out, 70°F, one percent subcritical boron concentration of 1873 ppm has necessitated a change in the required boron concentration for the BWST from 1835 ppm. To provide additional shutdown margin during refueling or a LOCA, a more conservative BWST boron concentration of 2010 ppm has been proposed. For the non-LOCA events, the moderator dilution transient has been shown to be bounded by the FSAR analysis and therefore involves no significant reduction in a margin of safety. The results of this evaluation are documented in Revision 1 of the Oconee Unit 3 Cycle 10 reload report. The margin of safety is maintained. Therefore, there is no significant reduction in a margin of safety.

Based on the above, the Commission has made a proposed determination that these proposed amendments involve no significant hazards consideration.

The Commission has determined that failure to act in a timely way would result in extending the present outage. Therefore, the Commission has insufficient time to issue its usual 30-day notice of the proposed actions for public comment.

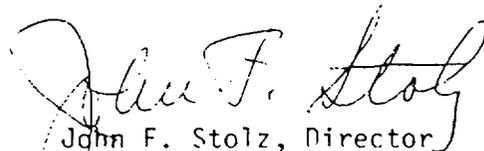
If the proposed determination becomes final, an opportunity for a hearing will be published in the FEDERAL REGISTER at a later date and any hearing request will not delay the effective date of the amendments.

If the Commission decides in its final determination that the amendments do involve a significant hazards consideration, a notice of opportunity for a prior hearing will be published in the FEDERAL REGISTER, and if a hearing is granted, it will be held before any amendments are issued.

The Commission is seeking public comments on this proposed determination of no significant hazards consideration. Comments on the proposed determination may be telephoned to Mr. John F. Stolz, Director, PWR Project Directorate No. 6, by collect call to (301) 492-7288 or submitted in writing to the Rules and Procedures Branch, Division of Rules and Records, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, and should cite the publication date and page number of this FEDERAL REGISTER notice. All comments received by March 18, 1987, will be considered in reaching a final determination. A copy of the applications may be examined at the NRC's Public Document Room, 1717 H Street, N.W., Washington D.C., and at the Oconee County Library, 501 West Southbroad Street, Walhalla, South Carolina 29691.

Dated at Bethesda, Maryland, this 4th day of March, 1987.

FOR THE NUCLEAR REGULATORY COMMISSION



John F. Stolz, Director
PWR Project Directorate No. 6
Division of PWR Licensing-P