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 HAMPTON, J.W.      Duke Power Co.  
 RECIPIENT AFFILIATION  
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*See Proposed Change To Tech Specs.*

SUBJECT: Application for amends to licenses DPR-55, revising TSS to support operation at full rated power during Cycle 16.

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**DUKE POWER**

November 22, 1994

U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555

Subject: Oconee Nuclear Station  
Docket Nos. 50-269, -270, -287  
Unit 3 Cycle 16 Reload Technical Specifications

Pursuant to 10CFR 50, Part 50.90, please find attached (Attachment 1) a proposed amendment to the Oconee Nuclear Station (ONS) Facility Operating Licenses and revisions to the ONS Technical Specifications. The proposed revisions are required to support operation of Unit 3 at full rated power during Cycle 16.

Duke Power Company and B&W Fuel Company have recently completed a detailed engineering study to optimize the neutronic and thermal performance of the fuel assemblies for Oconee Nuclear Station. This study has resulted in two new fuel assembly designs. The first design, referred to as the Mark B10T fuel assembly, is identical to the current Mark B10 assembly with the exception of the fuel rod design. The fuel rod design has been modified to increase the uranium loading of the assembly. Full batch implementation of the Mark B10T design will begin with Oconee Unit 3 Cycle 16. Since this new fuel assembly design cannot be stored in the spent fuel pool under the current Technical Specification, approval of this licensing amendment is needed by May 15, 1995 to support the scheduled fuel shipment dates for Oconee Unit 3 Cycle 16. A 30 day grace period is requested to allow for procedural changes associated with the proposed amendment request.

Full batch implementation of the second design, referred to as the Mark B11 fuel assembly, is scheduled to start with Oconee 3 Cycle 19. The major design changes associated with the Mark B11 fuel assembly are a reduced fuel rod diameter and mixing vane grids. Four Mark B11 lead test assemblies (LTAs) will be inserted in Oconee 1 Cycle 17. These LTAs will be delivered to ONS in September of 1995.

These new fuel assembly designs are not included in the current licensing basis, are more reactive than the designs currently analyzed, and therefore cannot be stored in the spent fuel pool under the current spent fuel pool enrichment limit Technical Specifications.

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Document Control Desk  
November 22, 1994  
Page 2

Attachment 1 provides the proposed Technical Specification changes. This amendment request will establish restricted spent fuel pool loading patterns and associated burnup criteria for placement of new and irradiated fuel into the Oconee spent fuel storage pools. Analyses performed in support of this submittal demonstrate that the use of these configurations for storing fuel with initial enrichments of up to 5.00 w/o U-235 will maintain sufficient criticality safety margins. In addition, the Design Features Technical Specifications associated with the reactor and fuel storage are revised to reflect the new fuel assembly designs. Attachment 2 is a markup of the affected current Technical Specifications highlighting the proposed changes.

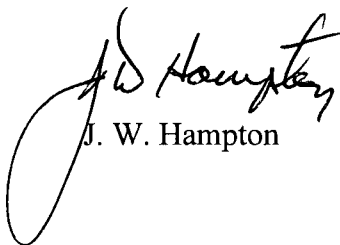
Attachment 3 provides the technical justification for the proposed Technical Specification changes. Attachment 4 is the "Oconee Unit 3 Cycle 16 Reload Report". A summary of cycle operating parameters is included in the report, along with the safety analyses supporting operation of the Unit 3 Cycle 16 core at full rated power. Attachment 5 contains the supporting safety analysis for the fuel enrichment upgrade.

I have determined the attached proposed amendment as having no significant hazards considerations. Attachment 6 provides the No Significant Hazards Consideration Evaluation and Environmental Impact Analysis.

I am forwarding a copy of this application to the South Carolina Department of Health and Environmental Control for review, and, as appropriate, subsequent consultation with the staff.

If any additional information is required please call J. E. Burchfield at (803) 885-3292

Very Truly Yours,



J. W. Hampton

Document Control Desk  
November 22, 1994  
Page 3

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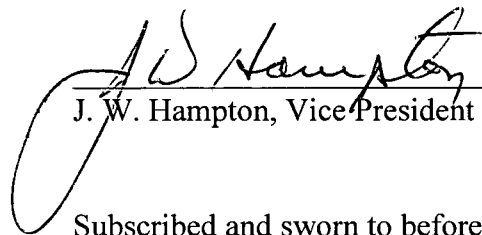
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DHEC

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BWOG Tech Spec Committee (6)

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November 20, 1994  
Page 4

J. W. Hampton, being duly sworn, states that he is Vice President of Duke Power Company, that he is authorized on the part of said Company to sign and file with the Nuclear Regulatory Commission this revision to the Oconee Nuclear Station License Nos. DPR-38, DPR-47, and DPR-55; and that all statements and matters set forth therein are true and correct to the best of his knowledge.

  
\_\_\_\_\_  
J. W. Hampton, Vice President

Subscribed and sworn to before me this 20th day of November, 1994.

  
\_\_\_\_\_  
Notary Public

My Commission Expires:

1-28-2004