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DOCKET # 05000270

SUBJECT: Forwards revised pages to BAW-1565, Revision 1, "Cycle 5 Reload Rept." Contains corrections to Boc physics parameters for Cycle 5. Conclusions & safety results of reload rept are unaffected by revision.

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NOTES: M. CUNNINGHAM - ALL AMENDS TO FSAR & CHANGES TO TECH SPECS

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WILLIAM O. PARKER, JR.  
VICE PRESIDENT  
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April 30, 1980

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Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Attention: Mr. R. W. Reid, Chief  
Operating Reactors Branch No. 4

Subject: Oconee Nuclear Station, Unit 2  
Docket No. 50-270

Dear Sir:

Please find attached revised pages to Babcock and Wilcox Topical Report BAW 1565, Revision 1, "Oconee Unit 2, Cycle 5 Reload Report." These pages contain correction to the BOC physics parameters for Cycle 5. The values that have been corrected are identified by short vertical liner on Tables 5-1, 5-2, and 7-1.

The conclusions and safety results of the reload report are not affected by this revision.

This submittal is considered to supplement my letters of November 16, 1979, and March 12, 1980 and as such, no additional license fees are provided.

Very truly yours,

*William O. Parker, Jr.*  
William O. Parker, Jr. *by [signature]*

RLG:scs  
Attachment

*4001  
5/11*

## 7. ACCIDENT AND TRANSIENT ANALYSIS

### 7.1. General Safety Analysis

Each FSAR<sup>1</sup> accident analysis has been examined with respect to changes in cycle 5 parameters to determine the effect of the cycle 5 reload and to ensure that thermal performance during hypothetical transients is not degraded. The effects of fuel densification on the FSAR accident results have been evaluated and are reported in reference 10. Since batch 7 reload fuel assemblies contain fuel rods with a theoretical density higher than those considered in reference 10, the conclusions in that reference are still valid.

### 7.2. Accident Evaluation

The key parameters that have the greatest effect on the outcome of a transient can typically be classified in three major areas: core thermal parameters, thermal-hydraulic parameters, and kinetics parameters including the reactivity feedback coefficients and control rod worths.

Fuel thermal analysis parameters for each batch in cycle 5 are compared in Table 4-2. A comparison of the cycle 5 thermal-hydraulic maximum design conditions to the previous cycle 4 values is presented in Table 6-1. The key kinetics parameters from the FSAR and cycle 5 are compared in Table 7-1.

A generic LOCA analysis has been performed for the B&W 177-FA lowered-loop NSS using the Final Acceptance Criteria ECCS evaluation model reported in reference 13. This analysis is generic in nature since the limiting values of the key parameters for all plants in this category were used. Furthermore, the combination of the average fuel temperature as a function of linear heat rate and the lifetime pin pressure data used in the LOCA limits analysis<sup>13</sup> is conservative compared to those calculated for this reload. Thus, the analysis and the LOCA limits reported in reference 13 provided conservative results for the operation of Oconee 2, cycle 5 fuel. Table 7-2 shows the bounding values for allowable LOCA peak linear heat rates for Oconee 2, cycle 5 fuel.