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February 21, 1990

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

Subject: Oconee Nuclear Station  
Docket Nos. 50-269, -270, -287  
Unit 3 Cycle 12 Reload Report

Gentlemen:

By letter dated September 25, 1989 I submitted the Oconee Unit 3 Cycle 12 Reload Report in support of proposed revisions to Technical Specifications. Via amendments 180/180/177, the NRC approved the revisions. Please find attached for your information Revision 1 to the Oconee 3, Cycle 12 Reload Report. Revision 1 changes the assumed RCS flow and corrects a typographical error. These changes do not impact Technical Specifications.

Very truly yours,

*H. B. Tucker ms*

H. B. Tucker

PJN102/td

Attachment

cc: Mr. S. D. Ebnetter  
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Oconee 3 Cycle 12

Reload Report

DPC - RD - 2014

REVISION LOG

<u>Revision</u>	<u>Effective Date</u>
Original Issue	July 1989
Revision 1	February 1990

List of pages valid for this revision:

<u>Pages</u>	<u>Revision</u>
6-3	1
8-4	1

Table 6-1. Thermal Hydraulic Design Conditions

	<u>Cycle 11</u>	<u>Cycle 12</u>
Design power level, MWt	2568	2568
System pressure, psia	2200	2200
Reactor coolant flow, % design flow	109.5	107.5
Core bypass flow <sup>(a)</sup> , % total flow	7.9	8.6
Vessel inlet/outlet coolant temp at 100% power, °F	556.2/601.8	554.7/603.4
Ref design radial-local power peaking factor	1.71	1.71
Ref design axial flux shape	1.5 cosine	1.5 cosine
Active fuel length, in.	141.8	141.8
Avg heat flux at 100% power, 10 <sup>3</sup> Btu/hr-ft <sup>2</sup>	176 <sup>(b)</sup>	174
CHF correlation	BAW-2/BWC	BAW-2/BWC
Min DNBR with densification penalty	>1.30/>1.18	>1.30/>1.18
Hot channel factors:		
Enthalpy rise	1.011/1.011	1.01/1.0111
Heat flux	1.014/1.014	1.01/1.0144
Flow area	0.98/0.97	0.98/0.97

Rev. 1

(a) based on  $\geq 8.0\%$  core bypass flow for cycle 11,  
 $\geq 9.0\%$  core bypass flow for Cycle 12.

Generic analyses

(b) Heat flux based on a conservative minimum densified length of 140.3 in.

Figure 8-2

Protective System Maximum Allowable Setpoints For Oconee 3 Cycle 12

Rev. 1

