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 50-270 Oconee Nuclear Station, Unit 2, Duke Power Co. 05000270
 50-287 Oconee Nuclear Station, Unit 3, Duke Power Co. 05000287

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 TUCKER,H.B. Duke Power Co.
 RECIP.NAME RECIPIENT AFFILIATION
 DENTON,H.R. Office of Nuclear Reactor Regulation, Director
 STOLZ,J.F. Operating Reactors Branch 4

SUBJECT: Provides addl info re ECCS calculations utilizing cladding models contained in NUREG-0630.

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March 7, 1983

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

Attention: Mr. John F. Stolz, Chief
Operating Reactors Branch No. 4

Subject: Oconee Nuclear Station
Docket Nos. 50-269, -270, -287

Dear Sir:

By letter dated August 12, 1982, Duke Power provided an initial response to an NRC letter dated July 13, 1982 regarding ECCS calculations utilizing the cladding models of NUREG-0630. At that time, Duke anticipated that the results of this effort would be complete by March 1983.

The results of a bounding analytical assessment of NUREG-0630 on LOCA and operating kW/ft limits were provided to Duke March 2, 1983. The implementation of NUREG-0630 will result in a 0.5 kW/ft penalty on the LOCA limit at the 2 ft. elevation. As NUREG-0630 requirements mainly affect the LOCA limits of the lower core elevations, which are limited by the ruptured node temperatures, the 0.5 kW/ft penalty was also assigned to the LOCA limits at the 4 and 6 ft. elevations. The LOCA limits at the 8 and 10 ft. elevations are limited by the unruptured node temperature, and enough margin exists that the NUREG-0630 will not impose any penalty at these elevations. The analysis was performed for the BOL conditions at which the average fuel temperature is at its maximum value. At higher burnups the lower fuel temperature will compensate for the impact of NUREG-0630 and no penalty will be required.

The Oconee units are presently greater than 50 EFPD and, thus, no changes to existing Technical Specifications are necessary. However, as a result of this bounding analysis, additional analysis will be required to assure optional operating limits. These will be factored into the reload analysis and submittals which are planned for later this year.

Very truly yours,

H.B. Tucker / HBT
Hal B. Tucker

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Mr. Harold R. Denton, Director
March 7, 1983
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cc: Mr. James P. O'Reilly, Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, NW, Suite 2900
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Mr. E. L. Conner, Jr.
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Mr. J. C. Bryant
NRC Resident Inspector
Oconee Nuclear Station