

February 20, 1997

Mr. M. S. Tuckman
Senior Vice President
Nuclear Generation
Duke Power Company
P. O. Box 1006
Charlotte, NC 28201

SUBJECT: CATAWBA AND MCGUIRE NUCLEAR STATIONS - USE OF THE BWU-Z CRITICAL
HEAT FLUX CORRELATION IN LICENSING ANALYSES (TAC NOC. M97139,
M97140, M97141, AND M97142)

Dear Mr. Tuckman:

In a letter of October 22, 1996, Duke Power Company requested approval to reference the BWU-Z critical heat flux (CHF) correlation included in the descriptions contained in the topical report BAW-10199P-A in licensing documentation describing the VIPRE code for its Catawba and McGuire Nuclear Stations, and incorporate that correlation in its VIPRE code for licensing analyses for those plants. We reviewed your submittal and find that the BWU-Z CHF correlation may be referenced and used as requested. Details of our review and conclusions are set forth in the enclosed safety evaluation (SE).

You also requested to add the statement "Other CHF correlations that have been reviewed and approved by the NRC may also be used to perform DNBR analyses," currently found in the approved topical report DPC-NE-3000, Revision 1, into topical reports DPC-NE-3001, DPC-NE-2004, and DPC-NE-2007. We conclude that apparently you have misconstrued the intent of approving the subject statement to stand in DPC-NE-3000, Revision 1. With your apparent interpretation, the wording is unacceptable for inclusion in the other reports, and is permitted to stand in DPC-NE-3000, Revision 1, only with the understanding as given in the attached SE.

If you have any questions regarding this review please contact me. This completes our effort on your submittal.

Sincerely,
Original signed by:

Peter S. Tam, Senior Project Manager
Project Directorate II-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket Nos. 50-369, 50-370, 50-413
and 50-414

Enclosure: Safety Evaluation

cc w/encl: See next page

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

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Peter S. Tam, Senior Project Manager
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Division of Reactor Projects - I/II
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Docket Nos. 50-369, 50-370, 50-413
and 50-414

Enclosure: Safety Evaluation

cc w/encl: See next page

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McGuire Nuclear Station
Catawba Nuclear Station

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Catawba Nuclear Station

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