

Duke Power Company
P.O. Box 1006
Charlotte, NC 28201-1006

M. S. TUCKMAN
Senior Vice President
Nuclear Generation
(704)382-2200 Office
(704)382-4360 Fax



DUKE POWER

October 13, 1995

U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Document Control Desk

Subject: Catawba Nuclear Station
Docket Numbers 50-413 and -414
McGuire Nuclear Station
Docket Numbers 50-369 and -370
Use of the BWU-Z Critical Heat Flux Correlation

Duke met with NRC staff on August 15, 1995 and discussed several options for obtaining NRC approval of newly-developed or applied methodologies by Duke; to reduce or eliminate the need for formal NRC review. Such approvals would be accomplished by Duke's notifying NRC of a proposed methodology, and then NRC's doing one of the following: (1) issuing a letter of concurrence with no further action, (2) requesting a Duke presentation, or (3) scheduling an audit at Duke. The NRC staff concurred with this approach and directed Duke to proceed. These methods of approval are similar to the recent NRC approvals for Duke use of TACO-3 (Reference 1: NRC letter from Herbert N. Berkow to M.S. Tuckman, Duke Power Company's Use Of TACO-3 And The Fuel Rod Gas Pressure Criterion For The Oconee, McGuire, and Catawba Nuclear Stations, April 3, 1995) and CROV 9.0 (Reference 2: NRC letter from Herbert N. Berkow to M.S. Tuckman, Duke Power Company Use Of CROV Computer Code, June 19, 1995).

In keeping with the above agreement, Duke is notifying NRC of its intent to begin using BWFC's BWU-Z critical heat flux (CHF) correlation (Reference 3: BAW-10199, The BWU Critical Heat Flux Correlations, BWFC, submitted November 1994) on Catawba 2 Cycle 9. BWU-Z is scheduled to be approved in December 1995. This correlation will be used in approved Duke methods (Reference 4: DPC-NE-2005P-A, Duke Power Company Thermal-Hydraulic Statistical Core Design Methodology, February 1995). Transitioning to analyses for McGuire/Catawba with Mark-BW fuel and BWU-Z will be another combination of separately approved codes, methods, and correlations. No modified or non-NRC approved analysis components are introduced.

200610

ADD 1/0

October 13, 1995

Page 2

Duke will perform the routine engineering analyses necessary to document validity of the correlation limit in VIPRE-01 as well as to determine the statistical design limit with BWU-Z. All of these methods are approved (Reference 4, above). Following receipt of the approval for use of BWU-Z, all Core Operating Limits Report values and existing approved topical reports will be revised to reflect the new correlation

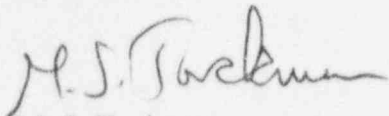
Duke plans to implement the BWU-Z CHF correlation into analyses for the Catawba 2 Cycle 9 core design according to the following schedule:

Duke initiate C2C9 Final Fuel Cycle Design Analysis	10/30/95
NRC approval of BWU-Z CHF correlation (Reference 3)	12/31/95
Duke initiate C2C9 Maneuvering Analysis, using BWU-Z	5/1/96

Please confirm the acceptability of the above schedule by 12/1/95.

If you have any questions, please call Scott Gewehr at (704) 382-7581.

Very truly yours,



M. S. Tuckman

cc: Mr. V. Nerses, Project Manager
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Mail Stop 14H25, OWFN
Washington, D. C. 20555

Mr. R. E. Martin, Project Manager
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Mail Stop 14H25, OWFN
Washington, D. C. 20555

Stuart D. Ebnetter, Regional Administrator
U.S. Nuclear Regulatory Commission - Region II
101 Marietta Street, NW - Suite 2900
Atlanta, Georgia 30323

U. S. Nuclear Regulatory Commission

October 13, 1995

Page 3

Mr. G. F. Maxwell
Senior Resident Inspector
McGuire Nuclear Station

Mr. R. J. Freudenberger
Senior Resident Inspector
Catawba Nuclear Station