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July 24, 2001

U. S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

ATTENTION: Document Control Desk

**Subject:** Catawba Nuclear Station, Units 1 and 2  
Docket Nos. 50-413, 50-414

McGuire Nuclear Station, Units 1 and 2  
Docket Nos. 50-369, 50-370

Topical Report DPC-NE-2009P, *Westinghouse Fuel Transition Report*,  
Revision 0, December 1999

**Reference:** WCAP-15063P-A, *Westinghouse Improved Performance Analysis and Design Model (PAD 4.0)*, Revision 1, July 2000.

Duke Energy Corporation submitted topical report DPC-NE-2009 to the NRC as the basis for the transition to the Westinghouse RFA fuel design at McGuire and Catawba. This report contained all methodology changes required to license the RFA fuel for operation at these two sites. Included in this report was the fuel rod analyses and methodology based on the then currently approved Westinghouse fuel rod performance code, PAD 3.4. The report was submitted in July of 1998 and Duke received approval for use of this methodology on September 22, 1999. Duke employs the same fuel rod design code and fuel analyses methodology as licensed by Westinghouse for the RFA fuel design.

During this time period, Westinghouse was actively pursuing updating the PAD code and related methodology to address the cladding liftoff issue. Duke was cognizant of this effort and included the following paragraph in DPC-NE-2009 (page 4-3):

“The current version of the PAD code is PAD 3.4 (WCAP-10851P-A, Improved Fuel Performance Models for Westinghouse Fuel Rod Design and Safety Evaluations, August 1988). This version of the code includes an updated fission gas release model, fuel densification and swelling models, and cladding creep model. The PAD code has been certified for use in safety-related analyses according to Duke Power’s Quality Assurance program. When any new versions of the PAD code are submitted to the NRC by Westinghouse, Duke Power plans to use the new version after its is approved for licensing analyses.”

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The intent was to implement the updated PAD code and methodology at Duke in exactly the same manner as Westinghouse, once the NRC approved the new code for use. Westinghouse has received approval of the new code, PAD 4.0, as per the referenced WCAP. Duke representatives discussed this matter in a telephone conference call with R. E. Martin, C. P. Patel, and S. Wu of the NRC that was held during the week of June 18, 2001. This letter is being provided to document this conference call. Duke is requesting no specific NRC action on this matter at this time. Further, this letter is to inform the NRC that Duke will transition to the new code version, PAD 4.0, starting with the second Westinghouse RFA cores operated at McGuire and Catawba. The schedules for these reload cycles are as follows:


Catawba 2 Cycle 11, startup in October 2001  
McGuire 2 Cycle 15, startup in March 2002  
Catawba 1 Cycle 14, startup in May 2002  
McGuire 1 Cycle 16, startup in October 2002

The initial cores will be analyzed by Westinghouse with PAD 4.0. Once Duke has imported the code and methodology in-house and completed certifications as required by the Quality Assurance Program, Duke will perform the PAD 4.0 analyses.

Duke currently has scheduled a revision to DPC-NE-2009 for the spring of 2002 to address some technical changes. At that time, the wording and references in Chapter 4 will be updated to reflect the transition to PAD 4.0. The update will be identified in this future revision as an administrative change.

Inquiries on this matter should be directed to J.S. Warren at (704) 372-4986.

Very truly yours,



M. S. Tuckman

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