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February 13, 2001

U. S. Nuclear Regulatory Commission
Washington D. C. 20555-0001

ATTENTION: Document Control Desk

Subject: Duke Energy Corporation

Oconee Nuclear Station
Docket Numbers 50-269, 50-270, and 50-287

McGuire Nuclear Station
Docket Numbers 50-369 and 50-370

Catawba Nuclear Station
Docket Numbers 50-413 and 50-414

Topical Report DPC-NE-2007P-A, Fuel
Reconstitution Analysis Methodology

Reference: Letter from Herbert N. Berkow to M. S. Tuckman,
Safety Evaluation Regarding Topical Report DPC-
NE-2007P, "Fuel Reconstitution Analysis
Methodology" (TAC No. M88082), October 27, 1995.

Duke Energy Corporation submitted a reconstitution analysis methodology topical report to the NRC in September 1993. This report was reviewed and approved by the NRC in the letter referenced above. The report detailed the methodology Duke would use to analyze non-heat producing replacement filler rods in the event such filler rods were used in fuel assembly reconstitution. DPC-NE-2007P-A states the following on Page 2 (last paragraph of Introduction):

"This report details the methodology and guidelines DPC will use to support fuel assembly reconstitution with filler rods or water holes. The guidelines were developed to ensure acceptable nuclear, mechanical, and thermal-hydraulic performance of reconstituted fuel assemblies. Specific results are provided for the Mark-B and Mark-BW fuel designs with currently licensed codes.

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The methodology will be applicable if different fuel designs or codes are licensed by Duke Power Company."

Within the last year, Duke has transitioned to the Westinghouse RFA fuel design at McGuire and Catawba. This is a 17x17 mixing vane fuel design with the same rod diameter and with Intermediate Flow Mixing Grids. Duke has also transitioned at Oconee to the FCF Mark-B11 fuel design. This is a 15x15 mixing vane fuel design with a smaller fuel rod diameter. All of the methodology changes required for these transitions and fuel assembly designs have been reviewed and approved by the NRC.

The purpose of this letter is to notify the NRC that Duke intends to use the DPC-NE-2007P-A topical report for RFA and Mark-B11 fuel and to notify the NRC that Duke is not planning to revise the DPC-NE-2007P-A topical report to add descriptions of these fuel types. Since DPC-NE-2007P-A was intended to be a methodology description applicable to current and future designs, revision to address specific fuel design nomenclature is not required. The methodologies and guidelines specified in DPC-NE-2007P-A will be used to analyze and confirm acceptability of fuel assembly reconstitution with filler rods. This methodology ensures acceptable nuclear, mechanical, and thermal-hydraulic performance of reconstituted fuel assemblies. The methodology also ensures that all licensing criteria and/or limits are met for any approved fuel design.

Duke will continue to adhere to the all SER restrictions specified in DPC-NE-2007P-A, namely:

- (1) no more than 10 solid rods per assembly,
- (2) no more than 3 solid rods in a row, and
- (3) cycle-specific reload analyses must include the exact configuration and core location of reconstituted rods and assemblies.

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Additionally, no vacancies will be allowed within a reconstituted fuel assembly.

If there are any questions or if additional information is needed on this matter, please call J. S. Warren at (704) 382-4986.

Very truly yours,



M. S. Tuckman

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