



Duke Power Company

A Duke Energy Company

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June 19, 2000

U. S. Nuclear Regulatory Commission

Washington, D. C. 20555-0001

Attention: Document Control Desk

Subject: Duke Energy Corporation
McGuire Nuclear Station, Units 1 and 2
Docket Numbers 50-369 and 50-370
Catawba Nuclear Station, Units 1 and 2
Docket Number 50-413 and 50-414

License Amendment Request, Implementation of
Best-Estimate Large Break LOCA Analysis
Methodology

References: 1) Letter, M. S. Tuckman (DEC) to U. S. Nuclear
Regulatory Commission, "Implementation of Best-
Estimate Large Break LOCA Methodology", dated
April 10, 2000.

2) Letter, M. S. Tuckman (DEC) to U. S. Nuclear
Regulatory Commission, "Implementation of Best-
Estimate Large Break LOCA Methodology", dated
April 17, 2000.

References 1 and 2 informed the NRC of Duke Energy
Corporation's plans and approach for implementing the NRC-
approved Westinghouse best-estimate large break LOCA
(BELOCA) methodology for the McGuire and Catawba Nuclear
Stations. These submittals followed an initial phone call
with the NRC on March 9, 2000. A meeting was held with NRC
staff in White Flint on June 12, 2000 to further discuss
related topics, including Duke's intent to have
Westinghouse perform one application of the BELOCA
methodology by the use of a composite plant model that
bounds all four McGuire and Catawba units. The above

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references and the June 12, 2000 meeting handout (which are to be included in the NRC meeting minutes) describe the composite plant model approach and the technical justification for the selection of the bounding reactor vessel, steam generator, and cold leg accumulator designs. Based on the results of the June 12, 2000 meeting, it is our understanding that the composite plant model approach is acceptable to the NRC staff provided that staff concerns regarding the process for addressing future plant changes and issues are resolved. Of particular concern is the potential for a future plant change or issue to have a greater effect on one unit or plant than on the composite plant model. The purpose of this letter is to describe the process that Duke and Westinghouse will use to address future issues of this nature.

As future plant changes or issues emerge, or when issues related to the Westinghouse BELOCA methodology or application emerge, the application of the BELOCA methodology and the results must be evaluated for continued validity and any impact on plant operation within the licensing basis analyses. The types of plant changes that are anticipated would be an increase in the steam generator tube plugging level, a change in the performance of an ECCS system, etc. Such situations are no different than the current requirement to review the licensing basis analyses to address emerging issues, with one exception. The exception is that a composite plant model is being used to bound all four McGuire and Catawba units for this application of the BELOCA methodology. In addition to evaluating the impact of a plant change or issue on the composite plant model and the results of the BELOCA methodology, there is also a need for a second evaluation of the plant change or issue on an individual unit or plant basis. This second evaluation will assess whether the change or issue will have a more significant impact on one unit or plant than on the composite plant model. The results of the second evaluation will be communicated to the NRC along with the evaluation of future plant changes or issues on the composite plant model and the results of the BELOCA methodology.

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Another topic that was discussed at the June 12, 2000 meeting was the process for administrative controls on the values of plant parameters that are inputs to the LOCA analysis. Duke maintains the inputs to the LOCA analysis in the form of an engineering document that is controlled under Duke's QA program. Changes to the LOCA analysis inputs require independent review and management inspection prior to being forwarded for use by Westinghouse.

This letter is intended to address NRC concerns identified during the June 12, 2000 meeting. Please address any additional questions to J. S. Warren at (704) 382-4986.

Very truly yours,

A handwritten signature in black ink that reads "M. S. Tuckman". The signature is written in a cursive style with a large, prominent initial "M".

M. S. Tuckman

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