



**DUKE POWER**

November 4, 1991

U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555

Subject: McGuire Nuclear Station  
Docket Nos: 50-369 and 50-370  
Generic Letter 88-20

Dear Sir:

In response to GL-8820, Duke Power Company has completed the Individual Plant Examination (IPE) for severe accident vulnerabilities for the McGuire Nuclear Station, and the attached reports present the IPE results. The McGuire IPE program was conducted consistent with the approach and methodology described in our November 1, 1989 60-day submittal letter, which was accepted by the NRC by its letter of January 24, 1990.

This submittal includes the enclosed McGuire IPE Submittal Report and the three-volume McGuire Probabilistic Risk Assessment Report. The IPE Submittal Report summarizes the methods, results, and conclusions of the McGuire IPE.

The McGuire PRA study and the IPE process involved a comprehensive, systematic examination of the McGuire reactors in regard to potential severe accidents. This examination employed detailed systems analysis and in-plant and ex-plant consequence analysis, took into account plant modifications as of December 1990 and pertinent plant operating experience, and addressed both internal and external initiating events. The McGuire IPE has identified the severe accident sequences of significance, both internally and externally induced with quantitative perspectives on their likelihood and fission product release potential. The insights from this study have prompted some plant enhancements, as discussed in Section 3 of the IPE report. The examination process and the accompanying dialogue with operations as well as technical and management personnel have created a level of appreciation and improved understanding for the varied mechanisms, complexity, and severity of types of accidents. The integrated safety profile evident from the risk results confirms that the McGuire Nuclear Station poses no undue risk to the public health and safety. Therefore, the objectives of Generic Letter 88-20 are fully satisfied.

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As part of the McGuire IPE process, USI A-45 and USI A-17 have been evaluated, and it has been concluded that these issues can be considered adequately resolved for McGuire. Also, Generic Issues GI-105, GI-130 and the Containment Performance Issue have been evaluated for resolution for McGuire.

In conclusion, the McGuire IPE consisting of a complete Level 3 PRA with a detailed analysis of internal and external events, computations of containment performance, and risk calculations has been completed. The insights resulting from this examination have been utilized to enhance the plant capability during severe accidents. This IPE submittal contains adequate information to resolve the severe accident vulnerability issue for McGuire.

I declare under penalties of perjury that the statements set forth herein are true and correct to the best of my knowledge.

Very truly yours,



H. B. Tucker

xc: S.D. Ebnetter, Regional Administrator, RII  
P.K. Van Doorn, Resident Inspector, McGuire N.S.  
Tim Reed, Project Manager