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December 15, 1983

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Ms. E. G. Adensam, Chief
Licensing Branch No. 4

Re: McGuire Nuclear Station
Docket Nos. 50-369, 50-370

Dear Mr. Denton:

My letter of November 18, 1983 transmitted proposed amendments to Facility Operating Licenses NPF-9 and NPF-17 which would reduce the minimum Reactor Coolant System (RCS) flow rate for Unit 2. Proposed Technical Specification changes were also provided. This letter also requested that this amendment be issued under the emergency provisions of 10 CFR 50.91 since, in our view, the circumstances exist to justify such treatment, namely, 1) Unit 2 is derated to 90% power and 2) timely action was taken to apply for the change.

There is a perception within the Staff that Duke Power Company should have recognized the need for this change over a year ago and should have taken action at that time to revise the RCS flow requirements on Unit 2. In fact, the problem with low RCS flow was recognized several years ago and a change to the McGuire Unit 1 Technical Specifications was requested by Duke and authorized by the NRC in November 1981 which enabled Unit 1 to continue operating at 90% power. This change, Amendment 9 to NPF-9, allowed McGuire Unit 1 to operate at 90% power until additional analysis could be done to justify a lower minimum flow rate.

On November 23, 1982 Duke requested a change to the McGuire Unit 1 Technical Specifications which lowered the minimum RCS flow requirements by reducing the uncertainty in the flow measurement from 3.5% to 1.8%. At the time of this submittal, Unit 2 was not licensed. This change was issued as Amendment 22 to NPF-9 (Unit 1) and Amendment 3 to NPF-17 (Unit 2), Unit 2 having received an operating license in the interval between the amendment request and issuance. This change allowed Unit 1 to operate at full power and there was every expectation that Unit 2 could likewise operate at full power.

The first valid flow measurement was made on Unit 2 after escalation to 75% power. RCS flow measurements made by the precision heat balance method are not generally made at power levels less than about 75% due to reduced accuracy. McGuire Unit 2 initially achieved 75% RTP on September 10, 1983, and a precision heat balance measurement completed on September 13, 1983 provided the first

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indication of low RCS flow -- 390,300 gpm. RCS flow measurements completed on October 12, 1983 while at 90% RTP indicated 392,500 gpm total flow. McGuire Unit 2 completed the required startup testing for power ascension above 90% RTP on October 12, 1983 and has been derated since that date. After the low flow condition was identified, Duke Power initiated efforts to evaluate a proposed reduction in the RCS flow requirements; this safety evaluation was essentially completed on November 10, 1983.

Even though over three weeks have elapsed since our initial submittal on November 18, 1983, Duke Power still requests emergency consideration. Unit 2 has not operated at full power and a planned outage is scheduled for December 23, 1983. Approval of the requested amendment would allow check-out of Unit 2 performance prior to the outage and would allow any deficiencies noted to be corrected during the outage. Also, additional startup testing is required at full power including a full power unit trip. This evolution could be performed as an entry into the planned outage.

Please advise if there are any further questions regarding this matter. Your prompt attention to this matter would be appreciated.

Very truly yours,

Hal B. Tucker

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cc: Mr. W. T. Orders
NRC Resident Inspector
McGuire Nuclear Station

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