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DUKE POWER

September 14, 1992

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

Subject: McGuire Nuclear Station, Units 1 and 2
Docket Nos. 50-369 and 50-370
NRC Bulletin 88-08
Thermal Stresses in Piping Connected
to the Reactor Coolant System

Dear Sir;

In a letter dated January 2, 1991, Duke Power presented some of the results obtained while monitoring the temperatures within the McGuire Unit 2 safety injection lines, in response to NRC Bulletin 88-08. The data collected at that time indicated that a Farley type event was not in progress, that is, there was no significant temperature cycling in any of the class 1 piping (between the check valves and the Reactor Coolant System (RCS)). The data, however, suggested that the gate valves separating the charging pumps from the PCS (up stream from the check valves) may be leaking. The data also appears to suggest that the check valves may be leaking as well, although not in a fashion to cause stratification, nor significant cycling behavior. This observed phenomenon was evaluated on a qualitative basis from which it was concluded at that time that the bounding analysis described within Hal B. Tucker's letter dated August 28, 1989 still enveloped the phenomenon.

To address the observed events, Duke committed to perform an ASME Code compliance calculation. By a May 31, 1991 letter, Duke reported that subsequent preliminary evaluations indicated a possible problem in showing an ASME Code fatigue factor of less than one for the full 40 year life of the units. However; the evaluations did justify continued operation for the next five calendar years, up to May, 1996. The May 31, 1991 letter also committed that an action plan would be formulated and the details of the plan would be submitted to the NRC by September 15, 1991.

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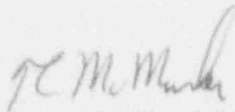
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In a subsequent September 13, 1991 letter, a brief outline of our action plan to address the issue of exceeding the fatigue factor sometime during the 40 year life of the unit was provided. In addition, the September 13, 1991 letter committed to provide a status report by August 1, 1992. In parallel, an NRC letter dated September 17, 1991 advised that the requirements of Bulletin 88-08 for McGuire Nuclear Station were met and no further action was required, in that the response was consistent with the modification or monitoring alternative stated in the bulletin.

The current status is that we are continuing our evaluation and re-analysis efforts of the data. Based on the results of our efforts, appropriate actions will be taken to ensure that the predicted fatigue levels will remain within acceptable levels. Meanwhile, the conservative bounding analysis performed thus far allows continued operation up to May, 1996 with currently installed piping configuration. Please note that information related to our efforts is available for NRC review at the McGuire Nuclear Site. For these reasons, further submittal of reports to you on this issue will not be made.

Please contact Paul Guill at (704) 875-4002 if there are any questions regarding this issue.

Very truly yours,



Ted C. McMeekin

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