



## Northern States Power Company

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October 28, 1987

Dr. Brian W. Sheron, Director Division of Reactor & Plant Systems Office of Nuclear Regulatory Research U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Dear Dr. Sheron:

In response to your letter dated July 20, 1987, I am pleased to forward a draft copy of a document entitled "EPRI/WOG Analysis of Decay Heat Removal Risk at Point Beach." This study, sponsored by EPRI and the Westinghouse Owners Group, was prepared by Science Applications International Corporation and Westinghouse Electric Corporation with the assistance of Wisconsin Electric Power Company, the owners and operators of Point Beach. The NUMARC Working Group on DHR has followed and endorsed this effort.

The primary purposes of this study were to provide a best-estimate analysis of DHR risk at a selected USI A-45 Case Study plant and to quantify the differences discussed in our June 22 comment letter on the Case Studies. The results of this Point Beach reanalysis, as they now stand, indicate an approximate factor of thirty reduction in core-melt frequency for the sequences included in the scope of the NRC study; an approximate factor of seven reduction in the offsite consequences of these sequences, over and above the core-melt frequency reduction; and an approximate 50-400% increase in the estimated cost of the various backfit proposals evaluated in the NRC study. The EPRI/WOG findings indicate that the core-melt frequency estimate for Point Beach (1.0 x 10<sup>-5</sup> per reactor year) is a factor of ten lower than the core-melt frequency target in the NRC's Safety Goal. The EPRI/WOG study, like the NRC study, also concludes with a very high degree of confidence that an add-on, dedicated SDHR system would not be cost-beneficial for Point Beach.

We would be pleased to meet with you and members of your staff, as suggested in your letter, to discuss the methodologies, technical bases and findings contained in both studies. We have provided you with this draft report prior to publication to allow sufficient time for your staff to familiarize themselves with the EPRI/WOG reanalysis in advance the meeting. In anticipation of that meeting, EPRI and WOG are continuing to double-check the models used in their analysis against the final, as published, numerical values used in the NRC study. Although some small changes in the comparative estimates of core melt frequency could occur in some instances, we expect the

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overall results and conclusions of the EPRI/WOG study to remain essentially unchanged. In the meanwhile, we would be pleased to schedule a meeting for the first mutually convenient opportunity.

Sincerely,

G H Neils Chairman

NUMARC Working Group on DHR

GHN/vf

cc: B. Lee, NUMARC

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