



Nebraska Public Power District
Nebraska's Energy Leader

NLS2000036
March 29, 2000

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555-0001

Gentlemen:

Subject: Design Basis Accident Radiological Assessment Computational
Methodology - Supplemental Seismic Information
Cooper Nuclear Station, NRC Docket No. 50-298, DPR-46

- References:**
1. Letter to U.S. Nuclear Regulatory Commission (NLS2000035) from John H. Swailes (Nebraska Public Power District) dated March 24, 2000, Design Basis Accident Radiological Assessment Computational Methodology - Response to Request For Additional Information (Question #6).
 2. Letter to Mr. J. H. Swailes (Nebraska Public Power District) from Lawrence J. Burkhardt [signed by Robert A. Gramm] (U.S. Nuclear Regulatory Commission) dated March 6, 2000, Cooper Nuclear Station - Request for Additional Information (TAC No. MA7758).

By letter dated March 24, 2000 (Reference 1) the Nebraska Public Power District submitted a response to a request for additional information from the Nuclear Regulatory Commission (NRC) (Reference 2). Based on verbal discussion with the NRC Staff on March 27, 2000, further clarification of a portion of the seismic design provided in Reference 1 was requested.

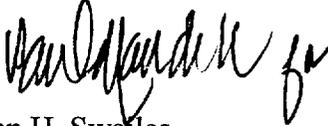
The following paragraph contains the requested additional information and is provided as a replacement paragraph for Reference 1, Attachment 1, Section V ("MSIV Leakage Pathway (Piping) to the Condenser"), third paragraph:

The dynamic analysis shows that under postulated SSE loading the maximum calculated stress in the system (approximately 28,000 psi) is less than the operability limit of 36,000 psi ($2.4S_h$ or $2.4 \times 15,000$ psi). Amplified floor response spectra do not exist for the Turbine Building; therefore, horizontal seismic loads were computed using the ground response spectra multiplied by 1.5 with 5% damping. This methodology was selected based on the Safety Evaluation Report for Monticello's power uprate program dated September 16, 1998. The primary piping pathway located in the Turbine Building is attached with pipe supports to the reinforced concrete portion of the Turbine Building

structure and to the turbine which is also mounted to the reinforced concrete structures of the Turbine Building. This piping is located approximately between elevations 940' and 908', which is less than 40' above plant grade. Over 95% of the total lineal footage of this primary piping pathway is located below elevation 932'-6" which is approximately 30' above plant grade. Vertical seismic acceleration was also applied in accordance with standard CNS requirements for seismic Class IS piping analyses. The operability limit was determined per the recommendations of Generic Letter 91-18, Enclosure 2 (NRC Inspection Manual, Part 9900, Technical Guidance, Operable/Operability: Ensuring the Functional Capability of a System or Component, Section 6.13). Support loads were reviewed and found to be similar in magnitude to those produced by the steam hammer event mentioned above. The system has previously experienced the steam hammer event and did not sustain any damage. This would indicate that the supports would also remain operable under SSE loading. Additionally, supports with higher loads were examined and found to be operable by engineering judgement.

Should you have any questions concerning this matter, please contact Sharon Mahler at (402) 825-5236.

Sincerely,



John H. Swalles
Vice President of Nuclear Energy

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Attachment

cc: Regional Administrator w/attachment
USNRC - Region IV

Senior Project Manager w/attachment
USNRC - NRR Project Directorate IV-1

Senior Resident Inspector w/attachment
USNRC

NPG Distribution w/o attachment

