

Docket No. 50-263

Mr. D. M. Musolf, Manager Nuclear Support Services Northern States Power Company 414 Nicollet Mall Minneapolis, Minnesota 55401

Dear Mr. Musolf:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION REGARDING NSP TOPICAL REPORT NSPNAD-8608 (TAC NO. 62763)

Re: Monticello Nuclear Generating Plant

We are reviewing your licensing topical report NSPNAD-8608 (Rev. 0), "Reload Safety Evaluation Methods for Application to the Monticello Nuclear Generating Plant". On April 26, 1988, we met in Rockville, Maryland, to discuss your response to our request for additional information dated August 5, 1987, regarding NSPNAD-8608 (Rev. 0). As a result of that meeting, we concluded that Items 23, 25 and 27 in the August 5, 1987, request for additional information need to be expanded. The additional information requested for these three items is contained in the enclosure. Your final response should address all 29 guestions as amended.

The request in this letter affects fewer than ten respondents; therefore, OMB clearance is not required under PL 96-511.

Sincerely,

original signed by

Robert Wright, Project Manager Project Directorate III-1 Division of Reactor Projects - III, IV, V & Special Projects

Enclosure: As stated

cc w/enclosure: See next page

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UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

May 27, 1988

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cc w/enclosure: See next page Mr. D. M. Musolf Northern States Power Company

Monticello Nuclear Generating Plant

cc: Gerald Charnoff, Esquire Shaw, Pittman, Potts and Trowbridge 2300 N Street, NW Washington, D. C. 20037

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Plant Manager Monticello Nuclear Generating Plant Northern States Power Company Monticello, Minnesota 55362

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Dr. John W. Ferman Minnesota Pollution Control Agency 520 Lafayette Road St. Paul, Minnesota 55155-3898

Regional Administrator, Region III U. S. Nuclear Regulatory Commission 799 Roosevelt Road Glen Ellyn, Illinois 60137

Commissioner of Health Minnesota Department of Health 717 Delaware-Street, S. E. Minneapolis, Minnesota 55440

0. J. Arlien, Auditor
Wright County Board of Commissioners
10 NW Second Street
Buffalo, Minnesota 55313

## ENCLOSURE

## AMENDED REQUEST FOR ADDITIONAL INFORMATION NSP RELOAD SAFETY EVALUATION METHODS FOR MONTICELLO NSPNAD-8608

- 23. The peak power location will generally have a higher void content and undergo a larger increase in local power upon void collapse during an overpressurization transient. Based on the LPRM transient response during the PB-2 turbine trip tests, what is the increase in local power at these high powered locations?
- 25. The DYNODE-B neutronics parameters are represented as a function of local void fraction and fuel temperature. The void fraction dependence, for example, is determined by performing perturbation calculations with both DYNODE-B and the three-dimensional simulator program NDH. In the NSP procedure (described in response to question 9), the change in neutronics parameters observed in NDH (as a result of void changes in NDH) is correlated as a function of the void fraction calculated by DYNODE-B. Since there are substantial differences between the DYNODE-B and NDH system modeling and void calculations, this procedure introduces an additional uncertainty into the DYNODE-B calculation. What is the effect of this procedure on the DYNODE-B predictions?
- 27. The following items concern the DYNODE-B uncertainty analysis.
  - (a) What uncertainty is introduced into the DYNODE-B calculations as a result of uncertainty in the core void coefficient (defined in terms of the core-wide reactivity response to a change in core void fraction)?
  - (b) What uncertainty is introduced into the DYNODE-B calculations as a result of the profile-fit void model?
  - (c) The Monticello Cycle-13 DYNODE-B prediction of  $\triangle$  CPR/ICPR is 0.1556. What is the corresponding GE prediction?