

August 9, 1984

Docket No. 50-263

Mr. D. M. Musolf
Nuclear Support Services Department
Northern States Power Company
414 Nicollet Mall - 8th Floor
Minneapolis, Minnesota 55401

Dear Mr. Musolf:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION - REANALYSIS OF ADEQUACY
OF STATION ELECTRICAL DISTRIBUTION SYSTEM VOLTAGES

Re: Monticello Nuclear Generating Plant

We are reviewing your submittal on the reanalysis of station electrical distribution system voltages dated December 30, 1983, and find that we need additional information to complete our review. We request that you provide responses to the enclosed questions within 60 days of receipt of this letter.

The information requested in this letter affects fewer than ten respondents; therefore, OMB clearance is not required under P.L. 96-511.

Sincerely,

Original signed by/

Domenic B. Vassallo, Chief
Operating Reactors Branch #2
Division of Licensing

Enclosure:
Request for Additional
Information

cc w/enclosure:
See next page

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Mr. D. M. Musolf
Northern States Power Company
Monticello Nuclear Generating Plant

cc:

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REQUEST FOR ADDITIONAL INFORMATION

NORTHERN STATES POWER COMPANY

MONTICELLO NUCLEAR GENERATING PLANT

DOCKET NO. 50-263

LONG TERM DEGRADED VOLTAGE ANALYSIS DATED DECEMBER 30, 1983

1. Provide the basis for the demand factor of 0.25 used on intermittent loads such as single pumps, drain pumps, air compressors, etc.
2. It is indicated that all motor-operated valve loads were excluded because of their short duty cycle. This may be acceptable for the steady state portion of the analysis, however, describe the magnitude of the effect of eliminating motor operated valves on the transient portion of the analysis.
3. In the analysis, a setting range of + 18 volts was assumed for the degraded voltage relays. This is only .43% of 4160 volts. Can such a tight tolerance realistically be maintained on the relays between calibration periods? Provide the manufacturer's tolerance values for these relays.
4. It's not clear what Case 7 is intending to demonstrate. If the intent is to demonstrate that the degraded voltage relays will not be actuated given the Case 7 conditions over the range of generator and 1R source voltages, then, it has done just the opposite. Since the required generator and 1R source voltages for this condition necessary to keep the relays from actuating is higher than the minimum voltage normally maintained from the sources, the relays will actuate whenever the source voltage is less than that found in Case 7. Please provide an explanation.
5. Demonstrate how the 345 kV grid minimum and maximum voltages given in paragraph 3.3 were derived.
6. Provide details of the design changes described in your report for staff review. Also provide a copy of the revised Technical Specifications for staff review.