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MUSOLF,D. Northern States Power Co.
RECIP.NAME RECIPIENT AFFILIATION
Office of Nuclear Reactor Regulation, Director

SUBJECT: Responds to NRC 840306 safety evaluation re demonstration of containment purge & vent valve operability.No addl license restrictions re containment purge valve operability should be imposed since evaluation not based on all info provided.

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Northern States Power Company

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April 19, 1984

Director
Office of Nuclear Reactor Regulation
U S Nuclear Regulatory Commission
Washington, DC 20555

MONTICELLO NUCLEAR GENERATING PLANT
Docket No. 50-263 License No. DPR-22

Demonstration of Containment
Purge Valve Operability

In a letter dated March 6, 1984 from Mr Domenic B Vassallo, Chief, Operating Reactors Branch #2, Division of Licensing, USNRC, we were provided with a document entitled, "Safety Evaluation by the Office of Nuclear Reactor Regulation, Demonstration of Containment Purge and Vent Valve Operability (B-24)". We were requested to respond within 30 days of receipt of this letter with our assessment of the operability of these valves in light of the concerns expressed in the Safety Evaluation.

We have reviewed the evaluation provided with Mr Vassallo's letter and have found that it is based on incomplete information. The Safety Evaluation appears to have been based on only one document, an April 19, 1982 evaluation performed for Northern States Power Company by the Fisher Controls Company. This evaluation was provided to our Project Manager in the Division of Licensing. No indication was given to us that additional information was required or that earlier information provided for Staff review was not being utilized. Letters sent to Northern States Power Company by the NRC dated November 13, 1981 and March 14, 1984 have lead us to believe that all significant Staff concerns have been addressed.

A detailed assessment of the NRC Staff evaluation is attached. Since the evaluation was not based on a review of all of the material provided by Northern States Power Company, we believe that there is no reason, at this time, to impose additional license restrictions related to containment purge valve operability. It should be noted that the 18-inch purge and vent path is used for only a few hours per year above cold shutdown for containment inerting and de-inerting. At all other times purging and venting is accomplished with 2-inch bypass valves.

David Musolf
Manager-Nuclear Support Services

DMM/js

cc: Regional Administrator-III
NRR Project Manager, NRC
Resident Inspector, NRC
G Charnoff

Attachment

A054
1/1

UNITED STATES NUCLEAR REGULATORY COMMISSION

NORTHERN STATES POWER COMPANY

MONTICELLO NUCLEAR GENERATING PLANT

Docket No. 50-263

License No. DPR-22

LETTER DATED APRIL 19, 1984
RESPONDING TO NRC LETTER DATED MARCH 6, 1984
OPERABILITY REVIEWS FOR 18" BUTTERFLY VALVES

Northern States Power Company, a Minnesota corporation, by this letter dated April 19, 1984 hereby submits a response to an NRC letter dated March 6, 1984 related to the demonstration of containment purge valve operability.

This letter contains no restricted or other defense information.

NORTHERN STATES POWER COMPANY

By David Musolf
David Musolf
Manager - Nuclear Support Services

On this 19th day of April, 1984, before me a notary public in and for said County, personally appeared David Musolf, Manager - Nuclear Support Services, and being first duly sworn acknowledged that he is authorized to execute this document on behalf of Northern States Power Company, that he knows the contents thereof and that to the best of his knowledge, information and belief, the statements made in it are true and that it is not interposed for delay.

Betty J. Dean

BETTY J DEAN
NOTARY PUBLIC - MINNESOTA
RAMSEY COUNTY
My Commission Expires Dec 13 1987

Northern States Power Company
Monticello Nuclear Generating Plant

Assessment of Safety Evaluation Dated
March 6, 1984, Demonstration of Containment
Purge and Vent Valve Operability (B-24)

Section	Comment
2.0	The Staff SER stated that the use, valve model number, actuator manufacturer, and actuator model number has not been provided. This information was provided to our Project Manager in the Division of licensing (reference 1) in the form of a detailed engineering response to NRC questions prepared by Fisher Controls.
3.0	The Staff SER states that a Fisher stress analysis of critical valve parts was not provided. This information was provided to our Project Manager in the Division of Licensing (reference 2).
4.0	Fisher tests did not include inlet piping configurations involving elbows. The Staff believes that for elbow-shaft in-plane installations, a factor of 1.5 times T_D (uniform flow should be used. The Staff believes that for elbow-shaft out-of-plant installations, a factor of at least 3.0 times T_D should be used.

Fisher has applied a factor of 1.5 to take into account flow into the hub side. This was found to be acceptable.

Valve	Fisher Factor	Staff Recommendation
AO-2377	1.5	1.5 (OK)
AO-2378	1.5	3.0
AO-2381	1.5	1.5 (OK)
AO-2383	1.5	1.5X1.5=2.3
AO-2386	1.5	3.0
AO-2387	1.5	3.0
AO-2396	1.5	1.5X1.5=2.3

The conservative factors specified by the Staff were not accompanied by a detailed basis. The factor of 3.0 in particular appears to be inconsistent with information supplied to us by Fisher controls. The factors are not incorporated in Regulatory Guides, sections of the Standard Review Plan, or NUREG reports that are available to us. We are unable to make a judgement as to their applicability.

Section	Comment
4.5	The Staff SER stated that the licensee did not: 1. Provide a description of the stress analysis used to assess the valve parts. 2. Present the results of the stress analysis i.e., identify the critical valve part(s) and demonstrate that adequate design margin(s) exists. 3. Demonstrate that the actuators have sufficient torque margin to stroke and seat the disc from the initial open position. 4. Demonstrate that the actuators are structurally capable of absorbing the resultant torque loads where these loads act to close the disc. 5. Demonstrate that the valve assemblies are seismically qualified. These issues were addressed in Reference (2) which was provided to our Project Manager in the Division of Licensing. Deviations from current requirements for environmental and seismic qualification of mechanical equipment were noted. Resolution of these matters is currently being addressed by the Commission on a generic basis.

References:

1. Fischer Control Company letter dated December 4, 1981, Engineering Response/NRC Questions

2. Fisher Control Company letter dated March 19, 1981, 18" Type 9200 Containment Isolation Valves