

MAR 11 1975

Docket No. 50-263

For cy of encl.  
See Docket 50-220

Northern States Power Company  
ATTN: Mr. L. O. Mayer  
Director of Nuclear  
Support Services  
414 Nicollet Mall  
Minneapolis, Minnesota 55401

Gentlemen:

In connection with our continuing review of recent occurrences of cracking in stainless steel pipes, we are requesting supplemental data from operating BWR plants. You are requested to provide water chemistry data, preferably in graph form (sample graphs are attached), showing the results of all analyses performed over the last year of operation. The data should include chlorides, pH, conductivity, and oxygen under the following conditions:

- a. Prior to start-up (non-pressurized, below 212 F and/or cold shutdown)
- b. When the reactor is pressurized (above 212 F and up to 10% of rated power)
- c. During hot stand-by
- d. During routine operating conditions (above 10% rated power)

The locations from which the data were taken should be indicated. The preferred sample locations are those representative of the bulk reactor coolant rather than the effluent from a demineralizer.

If any material was added to the reactor coolant at anytime, please indicate the material, the location of the addition, and the portion of the operating cycle during which the additions were made.

Please provide a copy of the ultrasonic test procedure and identify acceptance standards followed in the examination of austenitic steel piping in your plant. You should determine whether such procedures comply with the rules of ASME Code, Section III, Section V or Section XI and, if not, discuss the comparability of the procedure. Also indicate the corporate affiliations and ASNT levels of the inspector and the evaluator of each U.T. procedure performed.

*Misc*  
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A metallurgical evaluation, including photomicrographs with the results of fractographic analysis, and an analysis of deposits adjacent to, and within the crack are needed for our review. This metallurgical evaluation should be performed on at least one crack in a pipe removed from service.

As-built detail drawings of the pipe joints adjacent to portions of the 4" pipe in which you have reported finding cracks are requested. All welding procedures for these pipe joints, including copies of filler metal chemical specification analysis and deviations, if any; heat input; number of passes; insert chemical analysis and deviations, if any; and any pre- or post-weld cleaning or finishing, both mechanical and chemical also are requested for our review.

Since the requested operational data should be readily available, please provide this information within 10 days of receipt of this letter. The remaining requested information should be supplied as soon as possible. You are requested to provide the above information in one signed original and thirty-nine additional copies.

This request for generic information was approved by GAO under a blanket clearance number B-180225 (R0072); this clearance expires July 31, 1977.

Sincerely,

Original signed by

Dennis L. Ziemann

Dennis L. Ziemann, Chief  
Operating Reactors Branch #2  
Division of Reactor Licensing

Enclosure:  
Sample Graphs

cc w/encl:  
See next page

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SURNAME	BBuckley/tc	DLZiemann				
DATE	3/10/75	3/11/75				

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