



September 8, 1988

Northern States Power Company

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NRC Bulletin 88-05

Director of Nuclear Reactor Regulation U S Nuclear Regulatory Commission Attn: Document Control Desk Washington DC 20555

> PRAIRIE ISLAND NUCLEAR GENERATING PLANT Docket Nos. 50-282 License Nos. DPR-42 50-306 DPR-60

Interim Response to NRC Bulletin 88-05

In response to NRC Bulletin 88-05, "Nonconforming Materials Supplied by Piping Supplies, Inc. (PSI) at Folsom, New Jersey and West Jersey Manufacturing (WJM) Company at Williamstown, New Jersey, the following information is provided:

### 1. Bulletin Action

Review purchasing records for your facility and determine whether any WJM- or PSI-supplied ASME Code or ASTM materials have been furnished to your facility. Supplement 2 identifies Chews Landing Metal Manufacturers (CLM) as an affiliated company.

### Response

No direct procurement by NSP was made from the above sources. Procurement records were researched and a computerized database created to track all known procurement via other suppliers to NSP. Technical information from this database has been communicated to NUMARC/EPRI for reporting to the NRC in accordance with arrangements made between NRC and NUMARC. All sources of related procurement are believed to be identified at this time.

The procurement of 196 WJM flanges was identified during this investigation. No items from PSI or CLM were identified. Although further investigation has been suspended in accordance with Supplement 2 to the Bulletin, personnel have been alerted to inform management of any other questionable item that may be identified.

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# 2. Bulletin Action

For ASME Code and ASTM materials furnished by PSI or WJM that are either not yet installed in safety-related systems at your facility or are installed in safety-related systems of plants under construction, the following actions are requested: (perform action a and either action b or c)

- a. Provide a list of WJM- and PSI-supplied materials that are found to be in conformance with the applicable code requirements or procurement specifications and identify the applications in which these materials are used or will be used. Include the material specification, the nature of the components (e.g., pipe flange), size and pressure rating; also indicate the chain of purchase, and either
- b. Take actions that provide assurance that all received materials comply with ASME Code Section III, ASTM, and applicable procurement specification requirements, or that demonstrate that such materials are suitable for the intended service. For example, this program should include specific verification that austenitic stainless steels have been received in a non-sensitized condition, or.
- c. Replace all questionable fittings and flanges with materials that have been manufactured in full compliance with ASME Code Section III, ASTM, and the applicable procurement specification requirements.

### Response

All identified unused items within the scope of this Bulletin have been tested using the EQUOTIP method. Results through the end of August, 1988 have been reported to NUMARC. Results are acceptable for all but four unused items. No stainless steel items have been received to date that fall within the scope of the Bulletin.

Four unused/warehoused items that had been purchased as safety-related exhibited EQUOTIP Brinnel hardness readings of less than 137. They have been placed on hold and will remain on hold pending further evaluation or final disposition. Other WJM unused/warehoused items have been tested with acceptable results and have also been placed on hold following recommendations from NUMARC.

# 3. Bulletin Action

For ASME Code and ASTM materials furnished by WJM or PSI already installed in safety-related systems in operating plants, the following actions are requested:

- a. Provide a list of the WJM- and PSI-supplied materials that are found not to be in conformance with the applicable code requirements or procurement specifications and identify the applications in which the materials are used. Include the materials specification, the nature of the component (e.g. pipe flange), size, and pressure rating; also indicate the chain of purchase.
- b. Take actions requested in 2b or 2c above. However, an evaluation should be undertaken prior to replacing questionable materials in accordance with 2c above that considers the occupational radiation exposure that would be received during the replacement process. This evaluation should be considered in developing the method and timing of material replacements. timing
- c. Document and maintain for inspection a basis for continued plant operation if the program requested in item 3b has not been completed within 120 days of the date of receipt of this bulletin.

#### Response

Detailed information on the WJM flanges identified during our investigation is being provided to the NRC via NUMARC as part of the industry wide database created by NUMARC. The method of testing utilized the EQUOTIP hardness measuring device for calculation of the Brinnell hardness and estimated tensile strength.

Only one nonconforming installed flange (blind flange on Unit 2 inservice purge supply line for containment) was found. This flange had a Brinnell hardness of 136 compared to a minimum required Brinnell hardness of 137. This item was subjected to an engineering evaluation which demonstrated the available strength of the material is appreciably far in excess of that required to perform its function in the system (Item 4-03 in database). This condition does not reduce safety margins as defined in the plant Technical Specifications.

# 4. Bulletin Action

For any PSI- or WJM-supplied materials having suspect CMTRs and used in systems that are not safety-related, take actions commensurate with the function to be performed.

# Response

Additional testing revealed seven installed nonsafety-related items that did not meet the minimum Brinnell hardness criterion. They are installed in the waste gas compressor system and have been evaluated as acceptable.

# 5. Bulletin Action

Maintain for inspection the documentation of the specific actions taken for the identified materials.

## Response

All procedures, test and inspection records, and evaluations are on file at the plant for review by NRC. Reports made to NUMARC are also being communicated to NRC as part of the industry wide response.

## 6. Bulletin Action

For operating plants, all scheduled actions should be completed before a restart from the next major outage starting after 180 days from the date of receipt of this bulletin. For plants under construction all scheduled actions and the reporting required by 2 below should be completed prior to the planned fuel load date. If any addressee cannot meet this schedule, they should justify to the the NRC their proposed alternative schedule.

#### Response

All required actions, through Supplement 2 to NRC Bulletin 88-05, are complete at this time. Additional reporting to NRC is being made by NUMARC on a generic basis. Additional reports will be made by NSP as directed by the Commission.

In summary, 152 flanges were tested (safety/nonsafety related) and 12 were found with marginal hardness. All exhibited a Brinnell hardness of 124 or better. Based on the testing performed, none of the test results appear to present a safety concern. Test results are summarized on the attached table.

Please contact us if you have any questions related to the information we have provided.

C E Larson

Vice President Nuclear Generation

c: Regional Administrator, Region III, NRC Sr Resident Inspector, NRC NRR Project Manager, NPC G Charnoff B Bradley, NUMARC W J Bilanin, EPRI

Attachment

Director of NRR September 8, 1988 Attachment

# PRAIRIE ISLAND NUCLEAR GENERATING FLANT NONCONFORMING PIPING MATERIALS/CERTIFICATION NRC BULLETIN 88-05 SUMMARY

Flanges Procured and Not Yet Found

14 (believed not in use)

	Total No.	No. Tested	No. < 137 Hardness
Flanges Installed Safety Related	37	37	1
Flanges Installed Non-Safety Related	83	59	7
Flanges Inaccessible	0		
Flanges Unused/ Warehoused	56	56	4

#### UNITED STATES NUCLEAR REGULATORY COMMISSION

NORTHERN STATES POWER COMPANY

PRAIRIE ISLAND NUCLEAR GENERATING PLANT

DOCKET NOS. 50-282

50-306

## INFORMATION REQUIRED BY NRC BULLETIN 88-05

Northern States Power Company, a Minnesota corporation, with this letter is submitting information required by NRC Bulletin 88-05 for the Prairie Island Nuclear Generating Plant.

This letter contains no restricted or other defense information.

NORTHERN STATES POWER COMPANY

C E Larson

Vice President Nuclear Generation

On this 8 day of September, 1988 before me a notary public in and for said County, personally appeared C E Larson, Vice President Nuclear Generation, 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.

MARCIA K LECORE
NOTARY PUBLIC—MINNESOTA
HENNEPIN COUNTY
My Commission Expires Sept. 24, 1993

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