U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report No. 50-263/80-05

Docket No. 50-263 License No. DPR-22

Licensee: Northern States Power Company
414 Nicollet Mall
Minneapolis, MN 55401

Facility Name: Monticello Nuclear Generating Plant

Inspection At: Monticello site, Monticello, MN

Inspection Conducted: February 26-27, and March 10, 1980

Inspector: K. D. Ward 4/14/80

Approved By: D. H. Danielson, Chief 4/14/80
Engineering Support Section 2

Inspection Summary:

Inspections on February 26-27, and March 10, 1980 (Report No. 50-263/80-05)
Areas Inspected: Inservice Inspection (ISI) and torus structural modifications, QA/QC programs, implementing procedures, work activities, and review and evaluation of nondestructive examination (NDE) and welding data and reports. This inspection involved a total of 17 inspection hours on site by one NRC inspector.
Results: No items of noncompliance or deviations were identified.

DETAILS

Persons Contacted

Northern States Power Company (NSP)

L. Eliason, Plant Manager
P. Krumphs, Supt. Materials and Spec. Processes
*D. Antony, Supt. Opr. Engr.
D. Collins, Principal QA Engr.
*D. Hansen, Asst. Matrls. and Spec. Proc. Engr.
C. Harmsen, Construction Supt.
*E. Sasges, Elect. Supr. QA
L. Dahlman, Matrl. and Spec. Proc. Specialist
*L. Winter, Project Manager Plant Eng. and Const.
*W. Mahoney, QA Specialist
P. Suleski, Supervising Engr. QA
D. Vincent, Project Engr.

Hartford Steam Boiler Engineering and Insurance Company

C. Lindstrom, Authorized Nuclear Inservice Inspector (ANII)

Lambert- MacGill -Thomas Incorporated (LMT)

B. Thomas, Level III Examiner

Cherne Contracting Corporation (Cherne)

*T. Hanson, QC Manager

The inspector also contacted and interviewed other licensee and contractor employees.

*Denotes those present at the final exit interview on March 10, 1980.

1. General Information

   a. Lambert, MacGill, Thomas, Incorporated (LMI) performed the in-service inspection (ISI) in accordance with ASME Section XI, 1974 Edition, Summer 1975 Addenda.

   b. The ANII was present for the ISI.

   c. The next outage will be approximately March 1981.

   d. NUTECH prepared the Project Analysis Report for the following torus modifications inside the suppression chamber and drywell for NSP in accordance with ASME Section XI, 1977 Edition, Winter 1978 Addenda.

- Catwalk support
- SRV line support modification
- T-Quencher support modifications
- Downcomer to vent header intersection stiffener modification
- Torus water level instrumentation

e. Cherne Contracting Corporation performed the torus modification, welding and NDE.

f. The Core Spray Sparger Visual Inspection was performed March 5, 1980 by General Electric/Field Services in accordance with NSP Visual Examination of Monticello Reactor Vessel Interior, NSP-VT-4, Revision 0, February 18, 1980. One end bracket pin out of seven at the "C" sparger end of the "B" sparger is lifted and the keeper was also bent up.

2. Review of Program and Procedures

a. Inservice Inspection

The inspector established through review and discussions with the licensee representatives that the NSP ISI Program was in accordance with ASME Section XI, 1974 Edition, Summer 1975 Addenda and the requirements of the Monticello Nuclear Generating Station Technical Specification Section 4.6.1. This is the second outage in the third period.

The following NSP manual and procedures were prepared by LMT and reviewed by the inspector:

- The Lambert, MacGill, Thomas Incorporated Operating and Quality Assurance Manual, Revision 12, No. 62, October 22, 1979.
- Visual Examination of Assembled Hanger Assemblies, No. NSP-VT-2, Revision 1, September 18, 1978.
- Liquid Penetrant Examination, No. NSP-P-T-1, Revision 1, September 8, 1977.
- Magnetic Particle Examination Yoke Method No. NSP-MT-1, Revision 1, September 8, 1977.
- Ultrasonic Examination of Pipe Welds, No. NSP-UT-1, Revision 0, March 18, 1977.
- Automatic Data Recording, No. NSP-UT-2, Revision 0, March 18, 1977.
- Ultrasonic Examination of Ferritic Vessels with Wall Thickness 2.5" and Greater, No. NSP-UT-3, Revision 0, March 18, 1977.

- Ultrasonic Examination of Studs and Bolts No. NSP-UT-4, Revision 0, March 18, 1977.

- Qualification and Certification of NDE Personnel LMT, QA-6, Revision 11, June 5, 1979.

- Control and Certification of NDE Measuring and Test Equipment, LMT, QA-9, Revision 3, February 23, 1978.

- Visual Examination of Pump and Valve Internal Pressure Boundary Surfaces, NSP-VT-3, Revision 0. February 8, 1980.

- Visual Examination of Reactor Vessel Interior, NSP-VT-4, Revision 0, February 25, 1980.

- Ultrasonic Examination of Reactor Vessel Nozzle Forging Inner Radii, NSP-UT-5, Revision 01, February 19, 1980.

- Ultrasonic Examination of Reactor Vessel Nozzle Bore, NSP-UT-6, Revision 1, February 19, 1980.

- Ultrasonic Tester Calibration, QA-10, Revision 4, March 3, 1978.

- Nonconforming Materials, QA-11, Revision 4, January 8, 1979.

- Audits of LMT Operations and Supplies, QA-12, Revision 4, January 8, 1979.

b. Torus

The inspector reviewed the following Cherne manual, welding and NDE procedures; also, the NUTECH Specifications:

- Cherne Controlled Quality Assurance Manual No. 14, April 3, 1979.

- P-1 to P-1 Double Bevel Thickness Range 0.187" to 1.875", SMI-1C, Revision 1, February 11, 1980.

- P-1 to P-1 Fillet Weld with E-6010, W-10, Revision 0, January 10, 1980.

- P-1 to P-1 Double Bevel Thickness Range 0.187 to 1.875, SMI-1C, Revision 0, January 10, 1980.

- P-1 to P-1 with Backing Ring Thickness Range 1/16" to 1/2", SMI-1A, Revision 0, June 21, 1979.

- P-8 to P-8, Thickness Range 1/16" to 0.56", SM8-2A, Revision 0, January 4, 1980.

- P-1 to P-8, Open Butt Thickness Range 1/16" to 0.56", SM18-2A, Revision 0, January 4, 1980.

- P-1.Gp2 to P-1 Gp. 2 with Impact Test at $0^{o}E$, Thickness

- Range 3/16" to 1-1/2", SM1-1B(1T), Revision 0, January 15, 1980 Visual Examinations, 7960-14, Revision 0, January 15, 1980.

- Magnetic Particle Yoke Examination, 14.4.1.77, Revision 3, February 2, 1979.

- Visible Dye, Solvent Removed Liquid Penetrant Examination, 14.2.12.76, Revision 2, February 1, 1979.

- Nondestructive Examination Personnel Qualification and Certification Program Manual, 14.1.12.76, Revision 4, July 6, 1979.

- NUTECH Specificatio No. NSP-39-010, "Design Specification for SRV Discharge Line Support Modifications in the Suppression Chamber", Revision 1.

- NUTECH Specification No. NSP-39-023, "Design Specification for SRV Discharge Line Support Modifications in the Drywell," Revision 1.

- NUTECH Specification No. NSP-41-001, "Design Specification for Torus Internal Catwalk Support Modifications", Revision 1.

- NUTECH Specification No. NSP-41-007, "Design Specification for T-Quencher Support Modifications in the Suppression Chamber", Revision 1.

- NUTECH Specification No. NSP-41-012, "Design Specification for Downcomer to Vent Header Intersection Stiffener Plates", Revision 1.

- NUTECH Specification No. NSP-45-001, "Design Specification for Torus Water Level Instrumentation Addition", Revision 0.

No items of noncompliance or deviations were identified.

3. Material and Equipment Certification

a. ISI

The inspector examined and verified the adequacy of the ultrasonic calibration standards and certification documents relative to the following items:

- Ultrasonic Couplant - LMT Gel - batch No. LMT 111778
- Liquid Penetrant Materials, Magnaflux
- Various ultrasonic calibration blocks, instruments, transducers and recorders, also a magnetic partical yoke instrument and thermometers.

b. Torus

The inspector reviewed the following items:

- Receipt inspection reports
- Liquid Penetrant Materials, Magnaflux
- Material Test Reports

No items of noncompliance or deviations were identified.

4. NDE Personnel Certifications

a. ISI

The inspector reviewed the following LMT NDE personnel certifications in accordance with SNT-TC-1A, 1975 Edition.

Name	VT	ET	MT	PT
E. Thomas	III	I	III	III
M. Gustely	II		II	II
R. Kellerhall	II		II	II
A. Weealdon	II		II	II

b. Torus

The following Cherne NDE personnel certifications were also reviewed in accordance with SNT-TC-1A, 1975 Edition.

Name	MT	PT
J. Johnson	I	II
D. Corbesia	II	II
T. Lambert	II	II
B. Enfield	II	II

The inspector reviewed the following Cherne welder qualifications:

Name	Symbol No.	Name	Symbol No.
B. Dahlen	A	G. Seifert	N
P. Dahlgren	B	D. Matteson	O

J. Kasper	D	S. Foard	P
R. Hudson	E	W. Lamere	H
R. Rice	G	D. Schaller	R
J. O'Neil	L	P. Bouliey	S
G. Brunette	K	H. Olson	T
R. Kendle	J	J. Johnson	U
D. Tuohy	I	B. Branstad	V
C. Lund	M	B. Edberg	W

No items of noncompliance or deviations were identified.

5. Observation of Work Activities

a. ISI

The inspector observed the ultrasonic examinations of HPCI TW3-12" weld C1AJ-63 plus base metal from weld -0- let to the "T" junction and had discussions with LMT NDE personnel during review of ISI activities. These observations included calibration, preparation of welds, performance of the examinations and the documentation.

b. Torus

The inspector also observed magnetic particle examination of a support weld No. DE-3, welding of various supports, and painting.

No items of noncompliance or deviations were identified.

6. Data and Audit Review

a. ISI

Review of the data files indicate that the QA/QC and technical requirements were met. The specified information was available for the ultrasonic (UT), liquid penetrant (PT), magnetic particle (MT) and visual (VT) performed, also the NSP surveillance reports of LMT were reviewed.

b. Torus

The inspector reviewed the following reports:

- NSP surveillance reports of Cherne
- NSP nonconformance reports of Cherne
- Cherne surveillance reports of Cherne
- Cherne audit reports of Cherne.

No items of noncompliance or deviations were identified.

Exit Interview

The inspector met with the site representatives at the conclusion of the inspection. The inspector summarized the scope and findings of the inspection noted in the report.