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

Region I

Report No. 50-220/79-19

Docket No. 50-220

License No. DPR-63 Priority: -- Category: C

Licensee: Niagara Mohawk Power Corporation

Facility Name: Nine Mile Point 1

Inspection at: Scriba, New York

Inspection conducted: May 30-31, 1979, June 1, 1979

Inspectors: R.A. McBrearty 7/30/79
R. A. McBrearty, Reactor Inspector date signed

for J.E. Tripp 8/3/79
W. J. Collins, Sr. Metallurgical Engineer, Division of Reactor Operation Inspection, IE Headquarters date signed

Approved by: J. E. Tripp 8/3/79
L. E. Tripp, Chief, Engineering Support Section No. 1, RC&ES Branch date signed

Inspection Summary:

Inspection on May 30-31, 1979 and June 1, 1979 (Report No. 50-220/79-19)
Areas Inspected: Routine, unannounced inspection of nondestructive examination results associated with repair welding of the isolation condenser nozzle and the licensee's response to I.E. Bulletin 79-07. The inspection involved 23 inspector hours onsite by one regional based NRC inspector and one IE Headquarters based NRC staff member.
Results: No items of noncompliance were identified.

DETAILS

1. Persons Contacted

Niagara Mohawk Power Corporation

F. Hawksly - ISI Coordinator
G. Leskiw - NDE Level III
*M. Meehan - Technical Assistant To Superintendent
**D. Palmer - Manager, Operations QC
**T. Perkins - Plant Superintendent
G. Young - Associate Sr. Mech. Engineer, Mech. Design Div.

General Electric Co.

R. Wagner - NDE Level III

*Denotes those present at the meeting on May 31, 1979

**Denotes those present at the meeting on May 31, 1979 and at the exit meeting on June 1, 1979.

2. Seismic Stress Analysis of Safety-Related Piping (Bulletin 79-07)

IE Bulletin 79-07 addresses NRC concerns with piping computer codes used to analyze earthquake loads. At the time of this inspection, all of the seven systems identified by the licensee for reanalysis had been reanalyzed and found acceptable.

The inspector selected two of the systems identified by the licensee, the High Pressure Reactor Feedwater System and the Reactor Recirculation System, for verification of the installed configuration.

The inspection consisted of visual examination of the two systems for comparison with the system piping isometric drawing and with specific hanger drawings. The following were included in the inspector's examination:

System	Support Number
Reactor Feedwater	31-H3, H4, H5, H7, H8, H9, H10, H11 and H12
Reactor Recirculation	32-H1, H2, H3, H4, H5, H6 HS9, HS11, HS12, HS14, HS15, and HS20

The inspector found that the above-listed supports appeared to agree with the applicable drawings. The inspector had no further questions concerning this matter.

3. Nondestructive Examination (NDE) of Isolation Condenser Nozzle Weld Repair

The subject repair involved removal of defective piping and welding of new piping to the N5B nozzle. NDE, in the form of radiography and ultrasonic examination, was performed on the completed welds to determine their compliance with applicable acceptance criteria and to meet the requirements of Section XI of the ASME B&PV Code.

The licensee reported to the NRC that linear indications were observed on the radiographic films associated with weld EC-1, the safe end to nozzle weld. This weld attached type 304L SS base material to inconel buttering on the nozzle using inconel filler material. The licensee additionally informed the NRC that the EC-1 weld radiographs were evaluated and the weld was deemed acceptable.

The inspectors reviewed NDE procedures and documentation associated with NDE of the repair welds in order to ascertain that applicable licensee, Regulatory and Code requirements were met. The following were included in the review:

-- Radiographic examination procedure 18XA8600, Revision 1 for welds greater than 3/4" thick.

-- Ultrasonic Examination procedure 80A2321 for nozzle to safe end welds.

-- Ultrasonic examination procedure 80A0835 for austeintic piping and safe end welds.

-- Nonconformity Report (NCR) 004, Revision 1, dated 5/24/79, issued by General Electric Company

-- Licensee response to NCR 004 and documentation supporting the licensee conclusions

-- Radiographic films for weld EC-1, weld EC-2 and weld EC-4.

-- Ultrasonic examination calibration data sheets 2321-1, -2, -3, 0835-102, -103, -104 and -105 and associated ultrasonic examination weld scan data sheets.

As a result of NCR 004, the licensee initiated an investigation to determine the cause of the linear indications observed on the EC-1 weld radiographs.

The investigation included the following:

(a) Reradiograph the welding procedure qualification sample using the same type of film used on the production joint.

(b) Examination of the macro samples of the procedure qualification test specimen.

(c) Radiograph the macro specimen.

(d) Examination of the production joint radiographs by licensee consultant, Dr. Warren F. Savage, Director of Welding Research at Rensselaer Polytechnic Institute.

(e) Ultrasonic examination of the production weld joint.

The licensee response to NCR 004 documents the above-listed actions and concludes that weld EC-1 is free of defects based, in part, on the following:

(a) The welding procedure qualification sample radiograph revealed linear indications similar to those observed on the production joint films. The qualification weld was previously found acceptable by virtue of having successfully passed the required ASME Code destructive and nondestructive examinations.

(b) Radiographs showing identical characteristics which had been investigated and determined to be non-defects were supplied by the Chicago Bridge and Iron Co. along with supporting documentation.

(c) Ultrasonic examination of weld EC-1 revealed no defects.

The inspectors met with the licensee representatives on May 31, 1979 and stated that, based on their review, they found the licensee's actions acceptable and had no further questions concerning this matter.

The licensee agreed to submit to the NRC, when it becomes available, a copy of the report prepared by Dr. Savage.

4. Exit Interview

The inspectors met with the licensee representatives (denoted in Paragraph 1) on May 31, 1979 at the conclusion of the nozzle repair phase of the inspection, and the inspector met with the licensee representatives at the conclusion of the inspection on June 1, 1979. The inspector summarized the purpose and scope of the inspection and the findings.