

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

REGION III

Report No. 50-254/79-29; 50-265/79-26

Docket No. 50-254; 50-265

License No. DPR-29; DPR-30

Licensee: Commonwealth Edison Company
P.O. Box 767
Chicago, IL 60690

Facility Name: Quad-Cities Nuclear Power Station, Units 1 and 2

Inspection At: Quad-Cities Site, Cordova, IL

Inspection Conducted: December 3 - 4, 1979

Inspector: *K. D. Ward*
K. D. Ward

1/14/80

Approved By: *D. H. Danielson*
D. H. Danielson, Chief
Engineering Support Section 2

1/14/80

Inspection Summary

Inspection on December 3-4, 1979 (Report No. 50-254/79-29; 50-265/79-26)
Areas Inspected: Torus support modification and inservice inspection (ISI) QA/QC program, implementing procedures, work activities, and review and evaluation of data, nondestructive examination (NDE) and welding reports. This inspection involved eight onsite inspection hours by one NRC inspector.
Results: No items of noncompliance or deviations were identified.

DETAILS

Persons Contacted

Commonwealth Edison Company (CECo)

- *N. Kalivianakis, Station Superintendent
- *W. Burkamper, QC Supervisor
- *R. Gamue, QA Engineer
- *J. Dalmenwald, Technical Staff
- J. Ford, QC Engineer

ITT Grinnel

- *J. Barton, Project Manager
- *J. Raulston, Assistant Project Manager

*Denotes those present at the exit interview.

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

Functional or Program Areas Inspected

1. General

Reference:

- a. NRC Report No. 50-254/79-19; 50-265/79-16 (torus support modification)
- b. NRC Report No. 50-254/79-24; 50-265/79-21 (Paragraph 4, the Standby Gas Treatment System piping restraints)

The next outage for Unit 1 will be approximately September 1980, and Unit 2 approximately Summer, 1981.

Commonwealth Edison Company developed the inservice inspection program and CONAM performed the ISI.

2. Review of Programs and Procedures

The inspector reviewed the following CONAM programs and procedures:

- a. Procedure for Certifying Nondestructive Test Personnel 99-CNTP-001, Revision 1, August 18, 1978, 1975 Edition.
- b. Procedure for Certifying Nondestructive Examination Personnel, No. CMTP-1, January, 1969, 1968 Edition.

- c. Procedure for Certifying Visual Examination Personnel for Preservice/Inservice Examination, 96-VT-001, Revision 0, October 24, 1978.
- d. Visual Examination of Nuclear Reactor Coolant System Components, NDT-V-1, Revision 3, September, 1979.
- e. Ultrasonic Inspection of Pipe Welds, NDT-C-2, Revision 11, February, 1979.
- f. Ultrasonic of Pressure Retaining Bolting from 2" to, and including, 4" in diameter, NDT-C-1, Revision 4, December 21, 1974.
- g. Procedure for Non-Aqueous Red Dye Liquid Examination, NDT-D-2, Revision 3, February, 1979.
- h. Procedure for Non-Aqueous Red Dye Liquid Penetrant Examination of Reactor Vessel Safe-Ends, NDT-D-1, Revision 2, February, 1979.
- i. Ultrasonic of External Support Attachment Weld Areas on Piping, NDT-C-4, Revision 9, February, 1979.
- j. Ultrasonic of Reactor Vessel Welds, NDT-C-5, Revision 8, April, 1979.
- k. Ultrasonic of Inner Radius of Nozzle-to-Vessel Junction, NDT-C-10, Revision 6, February, 1979.
- l. Florescent, NDT-B-1, Revision 1, May 22, 1974.
- m. Ultrasonic Flange Ligaments Between Threaded bolt Holes, NDE-C-11, Revision 8, February, 1979.
- n. Ultrasonic of Reactor Vessel Head Welds, NDE-C-12, Revision 6, March 1979.
- o. Ultrasonic of Pressure Retaining Bolting over 4" in Diameter, NDT-C-14, Revision 5, February, 1799.
- p. Ultrasonic of Ferritic Safe End to Nozzle Welds and Safe Ends, NDT-C-15, Revision 3, February, 1979.
- q. Ultrasonic of Disimilar Metal Pipe Welds, NDT-C-16, Revision 3, February, 1979.

CECo, Equipment Manual, Set #52

No items of noncompliance or deviations were identified.

3. Review of Data Reports and Audits

The inspector reviewed the following:

- a. Information available for the ISI activities, and the torus modification to date including UT, VT during hydrostatic testing.
- b. QA surveillance reports and audits of Graver Northeast Energy Systems, torus support external modification Unit 1, by CECO.

No items of noncompliance or deviations were identified.

4. Material and Equipment Certifications

The following materials and equipment certifications were reviewed:

- a. Ultrasonic couplant, Glycerol AR batch No. 709.A08.
- b. Liquid Penetrant, Magnaflux Materials
Penetrant - batch No. 79J136
Cleaner - batch No. 79J044
- c. Ultrasonic instruments, transducers, and calibration blocks.

No items of noncompliance or deviations were identified.

5. NDE Personnel Certifications

The inspector reviewed the following Nuclear Energy Services, Inc. (NES) NDE personnel certifications in accordance with SNT-TC-1A, 1975 Edition.

<u>NAME</u>	<u>VT</u>	<u>PT</u>	<u>MT</u>	<u>RT</u>	<u>UT</u>	<u>ET</u>
G. Wos	II	II	II			
B. Creech	III	III	III	III	III	
M. Creech	II	II	II		II	
R. Wilson	II	II	II		II	
R. Odegaard	II	II	II		II	
R. Bipes	II	II	II		II	
V. Goetz	II	II	II	II		
R. Fensky	II		II	II	II	
T. Randle		II	II	II	II	
B. Horstmann		II	II		II	
B. Servin	II	II	II		II	
P. Perrin	II	II	II		I	
D. Moore		II	II		I	
K. Haines		II	II		I	

No items of noncompliance or deviations were identified.

6. Independent Inspection

a. Standby Gas Treatment Systems (SBGTS) declared inoperable
Unit 1 (LER/RO 79-32/01T-0)

While the licensee was evaluating piping restraints in accordance with IE Bulletin 79-02, SBGTS A and B were declared inoperable. Analyses indicated that piping restraints 1/2 - 75-04-164 and 165 had a safety factor of less than two. Reevaluation of the design of the restraints found the design safety factors to be less conservative than originally analyzed. The restraints were modified to a safety factor of greater than four and the SBGTS was declared operable. The modification of the restraints appears to be in accordance with the drawings provided by Sargent & Lundy (S & L). ITT Grinnell performed all work using station approved ITT Grinnell procedures and Field Planner (traveler). The inspector reviewed the weld inspection reports, weld maps, field planner and control reports and the as-built drawings. (See RIII Report No. 50-254/79-24; 50-265/79-21, Paragraph 4).

b. Safety Related Welding

The inspector requested to review all Grinnell welding personnel qualifications including the 1 1/2" bent coupons for certification for welding on the torus, IE Bulletin 79-02 and IE Bulletin 79-14.

- (1) Torus: All welding personnel certification coupons are radiographed.
- (2) IE Bulletin 79-14: No welding has been performed.
- (3) IE Bulletin 79-02; Five hangers and the plate washers were welded with fillet welds. The following personnel welded the hangers as indicated. The coupons and personnel certifications were reviewed.

<u>Hanger</u>	<u>Name</u>	<u>ID</u>
R-165	D. Lund	A-5
R-165	J. Westervelt	A-3
R-164	J. Westervelt	A-3
R-164	C. Fancher	A-4
R-164	D. Lund	A-5
R-193	D. Lund	A-5
R-193	J. Westervelt	A-3
R-192	D. Lund	A-5
1-1005B-H87	D. Lund	A-5
1-1005E-H87	C. Fancher	A-4
1-1005B-H87	J. Westervelt	A-3

No items of noncompliance or deviations were identified.

Exit Interview

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