

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-333/85-08

Docket No. 50-333

License No. DPR-59 Priority -- Category C

Licensee: New York Power Authority

P.O. Box 41

Lycoming, New York 13093

Facility Name: James A. FitzPatrick Nuclear Power Plant

Inspection At: Scriba, New York

Inspection Conducted: April 9-12, 1985

Inspectors:

D. J. Vito
D. J. Vito, Reactor Engineer

5/8/85
date

J. Hodson
J. Hodson, Reactor Engineer

5/10/85
date

S. Kucharski
S. Kucharski, Reactor Engineer

5/15/85
date

Approved by:

H. H. Nicholas for
L. Bettenhausen, Chief
Operations Branch, DRS

5/29/85
date

Inspection Summary:

Inspection on April 9-12, 1985 (Inspection Report No. 50-333/85-08)

Areas Inspected: Routine, unannounced inspection of the containment leakage testing including procedure review of CILRT & LLRT procedures, LLRT test results review, containment volume and volume fractions calculations, and general tours of the facility. The inspection involved 75 hours onsite by three region based inspectors.

Results: No violations were identified.

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DETAILS

1.0 Persons Contacted

New York Power Authority

B. Carlson	I&C Supervisor
*R. Converse	Superintendent of Power
*W. Fernandez	Operations Superintendent
*H. Glovier	Resident Manager
*J. Greene	Operating Experience Engineer, Asst. ILRT Test Director
*D. Johnson	LLRT Supervisor
L. Johnson	QA Supervisor
*H. Keith	I&C Superintendent
*R. Patch	QA Superintendent
J. Prokrop	QA Inspector
*P. Swinburne	Performance Engineer, ILRT Test Director
*V. Walz	Senior Plant Technical Services Engineer

NRC

*L. Doerflein, Senior Resident Inspector

*Denotes those present at exit meeting on 4/12/85.

2. Containment Local Leak Rate Testing

2.1 Documents Reviewed

- Procedure F-ST-39B, Type "B" and "C" LLRT of Containment Penetrations, Revision 14, March 20, 1985.
- Procedure F-ST-39A, Type "B" Leak Rate Test (Air Locks), Revision 8, September 9, 1983.
- Calibration Records for LLRT Test Boxes (IC215 and IC216).
- Selected Piping and Instrument Drawings

2.2 Scope of Review

The inspector reviewed the above listed documents to determine compliance with the regulatory requirements of Appendix J to 10 CFR 50, Technical Specifications and applicable industry standards and with station administrative guidelines. The inspector held discussions with the licensee regarding the documentation of test result, the repair and retesting following failed tests, and the relationship of these items to the "As-Found" and "As-Left" conditions of containment as applied to CILRT results. Further details are discussed below.

2.3 Procedure Review

The procedures reviewed were technically accurate and in conformance with the regulatory requirements of Appendix J to 10 CFR 50 and applicable industry standards. The LLRT coordinator and associated licensee personnel have made a concerted effort via plant system walk downs to assure that the valve line ups used for local leak rate testing are accurate and in accordance with leakage testing requirements. No unacceptable conditions were identified.

2.4 LLRT Instrument Calibration

The inspector reviewed the calibration records for the Volumetric LLRT test boxes IC215 and IC216. The calibrations were current and traceable to the National Bureau of Standards. The instruments were marked with current calibration stickers. However, during a tour of the reactor building the inspector noticed that the Volumetrics calibration seals of both test boxes were broken. The licensee had broken the seals to check out problems that had developed. IC215 had problems with a flow orifice for the high range meter. After the problem was corrected the instrument was checked for flow accuracy by station procedures. The licensee notified Volumetrics of what they had done and Volumetrics sent a letter stating that it should not have changed the calibration. For IC216, a problem was discovered in the high range flow meter itself. The licensee has taken the high-range flow meter out of service but lacks verification from the vendor stating the fact that the calibration was not changed by the licensee's action. The licensee agreed to acquire similar authorization for the use of the low and mid-range meters of IC216 from Volumetrics. This will be verified during the ILRT inspection. No other unacceptable conditions were identified.

2.5 Test Results

The inspector reviewed portions of the LLRT results for those tests completed at the time of the inspection. The inspector also discussed analysis of the test results and the status of repairs and retest with the licensee. The "As Found" and "As Left" leak rate for every test done on each penetration isolation valve are documented by the licensee in the LLRT running leakage total. The complete LLRT results will be reviewed during the ILRT inspection. No unacceptable conditions were identified.

3.0 Containment Integrated Leak Rate Test

3.1 Documents Reviewed

-- Procedure F-ST-39F Type "A" (60 psia)

- Primary Containment Integrated Leak Rate Test, Revision 4, 3/27/85
- Containment Volume and Volume Fraction Calculations, Stone and Webster Engineering Corporation, 8/12/73.
- CILRT Computer Program
- Selected Piping and Instrument Drawings

3.2 Scope of Review

The inspector reviewed the above listed documents for technical adequacy and to determine compliance with the regulatory requirements of Appendix J to 10 CFR 50, Technical Specifications and applicable industry standards.

3.3 Procedure Review

Review of the CILRT procedure indicated that it was technically adequate and generally in compliance with the regulatory requirements of Appendix J, the Technical Specifications, and appropriate industry standards.

The inspector noted, however, that a "10 minute averaging" of test data was considered for input to the leak rate calculation. The inspector expressed concern over this method of inputting data and requested that instantaneous mass data points at ten minute intervals be used in the leak rate calculation. The licensee agreed to change the procedure accordingly. The inspector also reaffirmed the following items concerning the CILRT:

- The CILRT should be restarted after any leaks are isolated.
- The licensee should perform, in addition to the as-left CILRT calculation, an as-found calculation using data from the individual local leak rate tests. The results from this calculation should be compared to 1.0 La. This requirement is reflected in 10 CFR 50, Appendix J, Section III.A.1 and ANSI N45.4-1972, Section 4.2.

The licensee acknowledged these items which will be verified during the CILRT inspection.

No unacceptable conditions were identified.

3.4 CILRT Volume Fractions/Instrumentation

Prior to this inspection, the licensee requested approval for the use of more accurate information for the volume fractions used in the leakage rate calculation. This information is supported by the Stone and Webster calculation listed in Section 3.1. The inspector reviewed the Stone and Webster document and verified that the

calculations were accurate. The inspector noted that the use of new volume fractions for leakage rate calculations would be incorporated into the licensee's computer code, MASS1.

The inspector was unable to review the calibration records for the CILRT instrumentation because the information was not available during this inspection. The inspector will review the calibration records during the CILRT inspection.

4.0 Independent Calculations

The inspector performed independent calculations of the containment volume and volume fractions as presented by Stone and Webster for the licensee. Details are included in Section 3.4 of this report.

5.0 QA/QC Involvement

The integrated leak rate testing activity is being monitored by plant QA/QC personnel. The inspector verified this by discussions with the QA/QC audit personnel. The inspector concluded that coverage is adequately planned for the ILRT activity. For the LLRT activity, there was no QA/QC coverage. The last audit performed by QA/QC was in 1980. The inspector requested that some LLRT surveillances be performed before the ILRT. The licensee agreed to do so. This will be verified by the inspector during the CILRT inspection. No unacceptable conditions were identified.

6.0 Tours

The inspector toured the reactor building and other areas of the facility to observe containment leakage testing activities, component tagging, other work in progress, and general housekeeping. No unacceptable conditions were identified.

7.0 Exit Meeting

A meeting was held on April 12, 1985, to discuss the scope and findings of the inspection as delineated in this report. At no time during this inspection was written information provided to the licensee.