

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-333/87-23

Docket No. 50-333

License No. DPR-59

Licensee: Power Authority of the State of New York
P.O. Box 41
Scriba, New York

Facility Name: James A. FitzPatrick Nuclear Power Plant

Inspection At: Scriba, New York

Inspection Conducted: November 2-6, 1987

Inspector: *G. Napuda*

G. Napuda, Senior Reactor Engineer

12/10/87
date

Accompanied by: J. Swoboda, Institute of Atomic Energy, People's Republic of Poland (IAEA) - Observer

Approved by: *N. Blumberg*

N. Blumberg, Chief, Operational
Programs Section, OB, DRS

12/17/87
date

Inspection Summary: Unannounced inspection conducted on November 2-6, 1987
(Inspection Report 50-333/87-23)

Areas Inspected: Licensee improvements to post modification controls such as verification of as-installed configurations, dissemination of interim as-built information to appropriate operations personnel and timely updating of engineering drawings to depict final as-built conditions. Licensee action on previously identified inspection findings was also reviewed.

Results: No violations were identified.

DETAILS

1.0 Persons Contacted

Power Authority State of New York (NYPA)

- *R. Converse, Resident Manager
- *R. Liseno, Planning Superintendent
- *R. Locy, Assistant Operations Superintendent
- *R. Patch, Quality Assurance Superintendent
- *D. Ruddy, Senior Plant Engineer
- *V. Walz, Technical Services Superintendent
- *E. Zufelt, Technical Services Supervisor

Other administrative, engineering, operations, QA/QC and technical personnel were contacted during the course of the inspection.

Nuclear Regulatory Commission

- *A. Luptak, Senior Resident Inspector
- C. Marschall, Resident Inspector

*Denotes those present at the November 6, 1987 exit meeting.

2.0 Post Modification Controls

2.1 General

Weaknesses in the post modification area have previously been identified in Inspection Reports 50-333/82-10, 82-11, 82-24, 82-28, 82-19 and 83-06. The major areas of NRC concerns were in updating engineering drawings and the backlog of open modification packages. The licensee evaluated the areas that were of concern to the NRC and described short and long term corrective measures that were planned, in an April 1, 1983 letter (JPN-83-28) to the NRC. Also, Inspection Report 50-333/85-13 discussed a large backlog of drawings awaiting updating as a result of completed modifications. This inspection focused on the improvements and status of corrective measures in the area of post modification engineering drawing controls.

2.2 Implementation and Technical Review

In order to assess the effectiveness of improvements to the quality assurance program with respect to engineering drawings a number of completed modifications were selected for review (see Attachment 1). The status of reducing the backlog of engineering drawings awaiting updating to final as-built condition and timeliness of updating current drawings affected by modifications was determined by reviewing various documents and data bases (see Attachment 1). The technical review included analysis and evaluation of the following aspects of post modification activities.

- Backlog of drawings awaiting update to final as-built condition
- Dissemination of as-installed information to those who had a need to know (e.g. Control Room Operators)
- Adequacy of the interim as-built (i.e. as-installed) information for operations use (e.g., Control Room personnel)
- Accuracy of the information depicted on as-installed and as-built drawings with respect to completed modifications
- Effectiveness of improvements to the quality assurance program in the area reviewed

2.3 Conclusions and Findings

The Sampled Construction As-Built (interim as-built information; as-installed) drawings that were located in the Control Room accurately depicted the verified as-installed configuration of completed modifications as did those sampled drawings that had been updated to Final As-Built condition. The changes as a result of the modifications were identified on both types of drawings. Those Final As-Built drawings awaiting updating as a result of installed modifications were clearly annotated that a given modification affected them. Microfilm Aperture Cards located in the Technical Support Center were also annotated when the as-built drawing they depicted was affected by a modification(s).

The Final As-Built drawings located in the Control Room were laminated in plastic and did not show undue signs of deterioration through use. However, the drawing reproduction process did result in some faintness of certain areas, including those affected by modifications. The Construction As-Built drawings are not overlayed by any protection and those in the Control Room ranged from tattered to a "stick" (FI-82-021) that included ripped drawings, some of which were missing pieces. Discussions with licensee management indicated that efforts are still underway to improve the reproduction of drawings and should a drawing become unreadable for any reasons a new drawing is provided upon request. Immediate action was initiated with respect to replacing the ripped drawings.

A significant reduction was noted in the backlog of drawings awaiting update to Final As-Built condition compared to previous years 1982 through 1987. Tracking the status of this effort for licensee management is accomplished by the QA organization by way of audits and surveillances, several of which were reviewed during this inspection (see Attachment A). The QA overview activity was determined to be

adequate and their results were consistent with the conclusions and findings of this inspection. However, there still are a number of drawings not yet updated where the modification had been completed over two years ago. The Resident Manager stated that senior licensee executives are currently addressing solutions to rectify this condition (See Paragraph 3.6, Unresolved Item 50-333/85-13-02).

Additionally, the following minor discrepancies were identified and discussed with licensee representatives and management during the inspection.

- Modification 83-001 had been incorporated into Final As-Built drawings but the drawings were still annotated as affected by this modification. Immediate corrective action was taken.
- Some drawings are affected by up to four different modifications and it is somewhat difficult to ascertain as-installed conditions using five drawings. Licensee management acknowledged this situation and stated that various methodologies were being evaluated to eliminate or reduce this condition.
- The Control Room is not provided with a binder/book of Drawing Change Requests (DCRs). These DCRs could at times change the depicted configuration of a system. Licensee management acknowledged such a need could exist and indicated an intent to review this area with plant operators.

It was concluded that none of the above three areas discussed with licensee management constituted a violation or significant safety concern.

3.0 Licensee Action on Previously Identified NRC Inspector Findings

3.1 (Closed) Inspector Followup Item (333/82-10-06): Update RCIC System drawings. Inspection Report 333/86-23 discussed the status of correcting the identified drawing discrepancies and verified those that had been corrected. During this inspection, it was verified that the following remaining discrepancies had been resolved.

- Drawing OP-19-1, Revision 12 now shows no valve between Valves 5 and 405.
- The valve line up Table of OP-19-1, Revision 12 and Drawing FM-22A, Revision 18 now depict Valves 405 and 409 as vents.
- Valve 13 AOV13 is now shown as open on Drawing FM-22B-Sheet 2, Revision 13.

- Valves 102A and B are now shown on Drawing FM-22B-Sheet 2, Revision 13.

Based on the above, this item is closed.

- 3.2 (Closed) Inspector Followup Item (333/82-11-02): Correct Emergency Service Water (ESW) System drawing discrepancies. It was verified that Drawing FM-46A-Sheet 1, Revision 17, with respect to piping lines WE S-151-117 and 118, directs the user to Drawing FB-18H, Revision 13, that does depict Valves ESW 24A and B. It was also verified that Drawings FM-15A, Revision 26 and OP-40-1, Revision 13 both depict the three existing vent valves. Further, DCR 87-140 has been issued to verify the valve and piping configuration with respect to Valve ESW 401 and correct either FM-15A or OP-40-1 since the two drawings differ in the subject area. Based on the above, this item is closed.
- 3.3 (Closed) Inspector Followup Item (333/82-19-05): Correct discrepancies between Containment Atmosphere Dilution (CAD) System drawings. NRC Inspection Report 333/86-23, paragraph 3.5 discussed the correction of the discrepancies except that Valves PCV-134A and B had not yet been added to Drawing FM-18A. It was verified that FM-18A, Revision 27 now depicts the two valves. During the review of modifications discussed in paragraph 2.0, it was noted that Valve CAD 61 had been removed in conjunction with Modification FI-84/072 and appropriate drawings were annotated that revisions were in process. Based on the above and conclusions discussed in paragraph 2.3, this item is closed.
- 3.4 (Closed) Inspector Followup Item (333/82-28-02): Correct discrepancies between drawings and valve lineups with respect to as-built conditions. The licensee corrections of the discrepancies resulted in agreement between the as-built conditions and Drawings FM-22A, Revision 18 and OP-19-1, Revision 12 with respect to the identification of Valve 13-PCV-24 vs. Valve 13-PCV-28, the non existence of a sensing line and welded caps on the two body drains of Valve 13-ADV-22. Also Local Leak Rate Testing in accordance with Procedure F-ST-39B during the last refueling outage verified the existence of Valves 772 and 773 upstream of Valve 13-MOV-30. Further, Drawings FM-22A, Revision 18 and OP-19-1, Revision 12 now depict only Valves 761 and 762 in series which is the as-built configuration.
- 3.5 (Open) Inspector Followup Item (333/83-06-02): Correct discrepancies in Core Spray System drawings and valve lineups. It was verified licensee corrective actions included the following.
 - Valves 14PS 47A and B are now shown on Drawing OP-14-1, Revision 8.

- Valves CSP 722A and B are now shown as locked closed on Drawings OP-14-1, Revision 8 and FM-23A, Revision 16.
- Valves CSP 69A and B now shown as open on Drawings OP-14-1, Revision 8 and FM-23A, Revision 16.
- Valves CSP 789A and B are now shown as closed and capped on Drawing FM-23A, Revision 16. DCR 87-140 has been issued to correctly depict the valves as uncapped on the drawing.
- Valves CSP 781A and B, CSP 789A and B, CSP 790A and B, and CSP 791A and B are now shown on Drawing FM-23A, Revision 16. DCR 87-140 has been issued to verify the correct location of Valve 791A and revise either Drawing FM-23A or OP-14-1 as appropriate.

This item will remain open pending verification of the following.

- The handwheel was replaced on Valve CSP 24B.
- The cap was replaced on the vent pipe of Valve CSP 401B.

3.6 (Open) Unresolved Item (333/85-13-02): Resolution of the drawing revision backlog. The results of the licensee effort to improve the accuracy and timeliness of updating drawings affected by currently completed modifications; and the reduction of the backlog of drawings needing updating because of modifications completed a number of years in the past is discussed in paragraph 2.0. Based on the discussions in Paragraph 2.0, this area of NRC concern remains open and will be reviewed further during a subsequent NRC inspection(s).

4.0 Management Meetings

Licensee management was informed of the scope and purpose of the inspection at the entrance interview on November 2, 1987. The findings of the inspection were discussed with licensee representatives during the course of the inspection and presented to licensee management at the November 6, 1987, exit interview (see Paragraph 1 for attendees).

At no time during the inspection was written material provided to the licensee by the inspector. The licensee did not indicate that proprietary information was involved within the scope of this inspection.

ATTACHMENT A

Drawings Reviewed and Used

FM-17E, Flow Diagram Radwaste System-Sheet 5, Revision 21 (also OP- ?
FM-15A, Flow Diagram Reactor Building Cooling Water, Revision 26 (also
OP-40-1, Revision 13)
FM-18A, Flow Diagram Drywell Inerting C.A.D. and Purge System, Revision 27
(also OP 37-1A, Revision 12)
FM-20D, Flow Diagram Residual Heat Removal System-Sheet 4, Revision 20
FM-22A, Flow Diagram Reactor Core Isolation Cooling, Revision 18
FM-25A, Flow Diagram High Pressure Coolant Injection System, Revision 21
FM-23A, Flow Diagram Core Spray System, Revision 16 (also OP-14-1, Revision 8)
FM-22B, Flow Diagram Reactor Core Isolation Cooling System-Sheet 2,
Revision 13 (also OP-19-1, Revision 12)
FM-46A, Flow Diagram Service Water System-Sheet 1, Revision 17 (also FB-18H,
Revision 13)
FM-24A, Flow Diagram Reactor Water Cleanup System, Revision 16
FM-26A, Flow Diagram Reactor Water Recirculating System, Revision 18
FM-20C, Flow Diagram Residual Heat Removal System-Sheet 3, Revision 17
11825-1.83, Elementary Diagram Automatic Depressurization System-Sheet 2,
Revision 14.

Note: Various previous revisions of the above drawings were also reviewed when
affected by the modifications listed below.

Modifications (Selective Aspects Reviewed)

F1-78-052, Automatic Depressurization System
F1-75-253, Residual Heat Removal System
F1-78-030, Radwaste System
F1-82-021, EPIC DAS Signal Cabinet
F1-83-001, High Pressure Coolant Injection

Other Documents Reviewed

QA Audit Report 514, Control of Construction Documents

QA Surveillance Report 1152, Status of NYPA Commitments to the Operational Assessment Team (OAT) Findings

FitzPatrick Master Modification Listing

Drawing Maintenance Program Status of Work Report

DCAR (QA corrective action document) 87-141, Drawing Discrepancies

NCA (QA corrective action document) 583, Drawings Not Updated

Procedure TSSO-3, Performance of Design Document As-Built Verification, Revision 0