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

Region I

| Report No. <u>50-286/79-16</u> |
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| Docket No. <u>50-286</u> |
| License No. DPR-64 Priority CategoryC |
| Licensee: Power Authority of the State of New York |
| 10 Columbus Circle |
| New York, New York 10019 |
| Facility Name: Indian Point Nuclear Generating Station, Unit 3 |
| Inspection at: Buchanan, New York |
| Inspection conducted: July 8 to September 1, 1979 |
| Inspectors: UM Johnson 9/28/79 |
| T. Rebeløwski, Resident Reactor Inspector date signed |
| W. Baunaek, Reactor Inspector date signed |
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| date signed |
| Approved by: <u>9/28/79</u> R. R. Keimig, Chief, Reactor Projects Section date signed |
| No. 1, RO&NS Branch |
| Inspection Summany |

<u>Inspection on July 8 - September 1, 1979 (Report No. 50-286/79-16)</u> <u>Areas Inspected</u>: Routine inspection of review of plant operation; observation of physical security; review of periodic reports; in-office review of licensee event reports; onsite licensee event followup; refueling outage schedule and base plate and anchor bolt inspection. The inspection involved 49 inspectorhours onsite by the NRC Resident Reactor Inspector. Results: No items of noncompliance were identified.

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Region I Form 12 (Rev. April 77)

DETAILS

Persons Contacted

1.

Mr. J. Bayne, Resident Manager

Mr. J. Dube, Assistant Safety and Security Supervisor

Mr. F. Gumble, Assistant Plant Engineer

Mr. W. Hamlin, Assistant to Resident Manager

Mr. W. Josiger, Technical Services Superintendent

Mr. L. Kelly, Assistant Plant Engineer

Mr. E. Tagliamonte, Operations Superintendent

Mr. S. Zulla, Superintendent of Power

The inspector also interviewed other licensee employees including members of operations, maintenance, health physics, security and quality assurance staffs.

2. Review of Plant Operations

a. Shift Logs and Operating Records

The inspector reviewed the following logs and records for the period June 1 through July 31, 1979.

- -- Senior Reactor Operator Log
- -- Watch Supervisor's Log
- -- Conventional Nuclear Plant Operator Log
- -- Night Order Book
- -- Jumper Log
- -- Flux Difference Log Sheet
- -- Reactor Coolant Leakage Surveillance Sheet
- -- Rod Position Indication Log
- -- Thermal Power Calculation Sheet
- -- Containment Leakage Calculation Sheet

High Radiation Area Locked Gate List

- -- Control Room Log Sheet
- -- Nuclear Area Log Sheet
- -- Chemistry Log

The logs and records were reviewed to verify the following items:

- -- Log book reviews are being conducted by the staff.
- Instructions in the Night Order Book did not conflict with Technical Specifications.
- -- Significant Occurrence Reports confirm compliance with Technical Specification reporting and LCO requirements.
- Log book entries involving abnormal conditions are sufficiently detailed.

Acceptance criteria for the above review included:

- -- Technical Specifications
- -- Station Administrative Procedures
- -- Applicable Parts of the Code of Federal Regulations
- -- Facility Procedures
- -- Inspector Judgement

No items of noncompliance were identified during the inspector's review of logs and records. However, a number of instances were noted in which supervisors review of logs were not signed off as called for on the log sheets. This matter was discussed with licensee representatives who stated that corrective action will be taken. The adequacy of the corrective action will be verified during the continuing review of these logs.

b. Plant Tour

At various times during the inspection, the inspector toured the following accessible plant areas:

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- Control Room
- -- Primary Auxiliary Building
- -- Turbine Building
- -- Intake Structure
- -- Security Control Building
- -- Diesel Generator Rooms
- -- Transformer Yard

The following observation/determinations were made:

- -- Radiation protection controls: step-off pads, storage/disposal of protective clothing, and control of high radiation areas were observed for adequacy in all areas toured.
- -- Fluid leaks: all areas toured were examined for evidence of excessive fluid leakage.
- -- Piping vibrations: all areas toured were examined for evidence of excessive piping vibration.
- -- Control Room and Nuclear Plant manning: these areas were observed to determine compliance with regulatory requirements.
- -- Selected valve positions/equipment start positions were observed.
- -- Discussions with watch personnel pertaining to reasons for selected lighted annunciators: the Watch Supervisor was questioned to determine if he was knowledgeable of the reasons for all lighted annunciators.
- -- Seismic restraint oil levels: a sampling of plant hydraulic restraints was performed.
- Monitoring instrumentation: Control Room instrumentation including radiation monitoring, power range channels, control rod positions, pressurizer levels, pressurizer pressure, accumulator tank levels, S.I. lineups, RC flow, temperature and pressure and containment temperature were observed.

- -- Plant housekeeping conditions/cleanliness were noted.
- LSSS/LCO: equipment status or operating parameters were observed for conformance to the LSSS/LCO requirements.
- Shift turnovers of control room operators and watch supervisors were observed on regular and back shifts.
- -- Fire fighting and emergency equipment for operability.

Acceptance criteria for the above items included:

- -- Technical Specifications Table 6.2.1
- --- 10 CFR 50.54(k)
- -- 10 CFR 20.203
- -- AP-10, Work Permits, Radiation Exposure Authorizations, Operating Orders
- -- AP-21.5, Confines of the Control Room
- -- AP-27.2, Housekeeping
- -- AP-27.3, Fire Protection
- -- Inspector Judgement

No items of noncompliance were identified during the plant tours.

3. Observation of Physical Security

The resident inspector made observations, witnessed and/or verified, during regular and off-shift hours, that the selected aspects of the security plan were in accordance with regulatory requirements, physical security plans and approved procedures.

- a. <u>Physical Protection Security Organization</u>
 - -- Observations and personnel interviews indicated that a full time member of the security organization with authority to direct physical security actions was present, as required.

- Manning of all three shifts on various days was observed to be as required.
- All physical security members observed appeared capable of performing their assigned tasks.

b. Physical Barriers

Selected barriers in the protected area (PA) and the vital areas (VA) were observed and random monitoring of isolation zones was performed. Observations of truck and car searches were made.

c. Access Control

Observations of the following items were made:

- -- Identification, authorization and badging
- -- Access control searches
- -- Escorting
- -- Communications
- -- Compensatory measures when required
- d. <u>Preparation and Actions Relating to Anti-Nuclear Demonstration</u>

The inspector reviewed Indian Point Station's preparation for the announced anti-nuclear demonstration that occurred on August 5, 1979.

The review included the areas of augmented:

- -- Compensatory measures;
- -- Communications;
- -- Access control;
- -- Physical barrier;
- -- Organizational review;
- -- Arrangement for off-site agency support; and,

-- Emergency medical facilities.

The resident inspector verified implementation of licensee actions by observations on site on August 5, 1979. No penetration of the protective area fencing was identified.

e. <u>Findings</u>

No items of noncompliance were identified.

4. <u>Review of Periodic Reports</u>

a. <u>Monthly Operating Reports</u>

The Monthly Operating Reports for June and July were reviewed. The review included an examination of selected Maintenance Work Requests and an examination of significant occurrence reports to ascertain that the summary of operating experience was properly documented.

b. Findings

The inspector verified through record reviews and observations of maintenance in progress that:

- -- The corrective action was adequate for resolution of the identified items;
- -- The information in the reports was identified as licensee event reports where required per TS 6.9.1.6; and,
- -- The Operating Report included the requirements of TS 6.9.1.4.

The inspector had no further questions on the reports reviewed.

5. Licensee Reported Items

a. <u>In-Office Review of Licensee Event Reports</u>

A review was conducted of the Licensee Event Reports (LER's) received in the Resident Inspector's office to verify that the details of the events were clearly reported, including the accuracy of the description of the cause and the adequacy of the corrective action. The inspector conducted this review to determine whether generic problems were indicated and whether the event warranted on-site followup. The following licensee events were reviewed:

| Report Number | Subject |
|------------------|--|
| LER 78-032/03L-0 | Ruptured Fire Protection Loop |
| LER 78-033/03L-0 | Quadrant Power Tilt |
| LER 78-034/03L-0 | Plant Vent Radio Gas Monitor Alarm |
| LER 78-035/03L-0 | Damaged Fire Protection Valve PIV-17 |
| LER 78-037/03L-0 | Pressurizer Level Channel Inoperable |
| LER 79-001/03L-0 | Removal of 138KV Feeders |
| LER 79-002/03L-0 | Release of Radio Gas in Primary Auxiliary Building |
| LER 79-003/01T-0 | Single Rod Drop Analysis |
| LER 79-004/03L-0 | Condensate Storage Tank Below TS Limits |
| LER 79-005/03L-0 | Service Water Pump Failure |
| LER 79-006/01T-0 | High Energy Line Break Analysis |
| LER 79-007/03L-0 | Boric Acid Transfer Pump Seal |

8

b. Onsite Licensee Event Followup

All the LER's reviewed in Paragraph a above were followed up onsite. The inspector verified that the reporting requirements of Technical Specifications, Section 6.9.1.6, guidance in Regulatory Guide 1.16 and the licensee's initial identification of reportable events as described in Administrative Procedure 8, Revision 2, had been met, that appropriate corrective action had been taken, that the event was reviewed by the Superintendent of Power and that continued operation of the facility was conducted in conformance with the Technical Specification limits.

The inspector's findings regarding the licensee events were acceptable with the following comments:

(1) LER's 78-034/03L-0 and LER 79-002.

The above LER's occurred due to problems associated with the charging pumps failure to maintain plunger packing due to plunger scoring.

Studies undertaken and completed by licensee indicated that by the reduction of pressure surges the packing life could be lengthened. The licensee designed and has purchased material to install a pressure suppression system, that is scheduled to be installed during the forthcoming refueling.

Completion of the system may be limited by material availability. The licensee has proceeded in this effort to reduce reoccurrences of radiogas release events. The inspector will review progress of modifications during refueling outage.

(2) LER 79-004/03L-0

A review of water sources to Unit 3 indicated that Administrative Memorandum of Understanding No. 4, Revision 0, dated January 6, 1978, requires Con Edison, Inc. to provide demineralized water and condensate makeup on an as needed basis to Unit No. 3.

Unit 2 has the ability to supply approximately 200,000 lbs/hr for makeup. The licensee will review the area of simultaneous demand for makeup by both units to maintain Technical Specification limits.

The licensee presently scheduled for completion his own water manufacturing facilities in late November, 1979, with a online capability scheduled for January, 1980. The inspector will monitor the licensee's program in this area.

(3) LER 79-005/03L-0, Service Water Pump Failure

Discussions with licensee resulted in the following determination:

- (a) A preventive maintenance program for service water pumps has been instituted with a tentative fixed two year overhaul interval.
- (b) Preventive Maintenance Procedures for service water pumps have been written and formal review is in progress.
- (c) Six of nine service water pumps have been overhauled.

The inspector will monitor the extent of implementation of the preventive maintenance program for safety related components.

The inspector did not identify any items of noncompliance in the review of the Licensee Event Reports.

6. Refueling Outage

The licensee has scheduled his refueling outage from September 15, 1979 to December 8, 1979. The present schedule calls for completion of the Steam Generator Inspection Program prior to fuel shuffle. Procedures to support refueling are presently under review by the licensee.

The inspector will monitor through observations and verification the status of this planned outage.

7. <u>IE Bulletin 79-02</u>, Revision 1, Base Plate and Anchor Bolt Inspection

The licensee has instituted a base plate and anchor bolt inspection program to meet the requirements of IE Bulletin 79-02.

The licensee's response to the Office of Inspection and Enforcement indicated that the licensee had to further evaluate the base plate flexibility and minimum embedment calculations.

The licensee initial program of verificaton consisted of adherence to the sampling suggested in the bulletin.

The following procedures were established to support the program:

- -- 3-CM-Gen-3, Base Plate and Anchor Bolt Inspection for Concrete Mounted Hangers, Revision 1, June 22, 1979.
- -- 3-CM-Gen-2, Repair of Seismic Class I and II Pipe Hangers, Restraints and Supports, Revision 0, June 14, 1979.
- -- MOD 79-3-084-STR, Revision O, General Piping Support Modification Procedure, in review.
- -- Quality Assurance Procedure No. WQA-4-0-17 (original installation, QA (WEDCO)). A random sample of applicable supports in seismic class I systems was taken on July 6, 1979. Results of the survey were reported in response to IE Bulletin 79-02.

The inspector reviewed the survey package of PAB restraints and supports identified on UE&C Drawing No. 9321F5515-7. The licensee has chosen to verify by UT the depth of embedment of concrete fasteners. The data sheets indicate hanger line, support number, hanger type, anchor type, whether leveling nuts are used, conditions of base plate, anchor bolts and date of inspection. The UT instrument data and technician/engineer UT level is documented. Torque values are recorded.

A review of data and discussions with the licensee indicated that the response of the licensee to Bulletin 79-02 could not be verified in the following areas:

- -- The identity of the sampled areas was not determined (additional sampling was in progress).
- -- The UT examination qualifications on Kwick Bolts was not available.
- -- The QC construction documents were not available.
 - In one instance a review of completed data indicated that for one bolt insufficient embedment depth was indicated. However, three additional bolts on the same support plate were satisfactory.

The above items were reviewed on a sampling basis and will be inspected during a subsequent inspection. This item is unresolved (286/79-16-01).

8. Unresolved Items

An item about which more information is required to determine acceptability is considered unresolved. Paragraph 7 of this report contains an unresolved item.

9. Exit Interview

At periodic intervals during the course of the inspection, meetings were held with senior facility management to discuss inspection scope and findings.