John D. O'Toole
Vice President

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4 Irving Place, New York, NY 10003
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April 5, 1985

Re: Indian Point Unit No. 2
Docket No. 50-247

Thomas T. Martin, Director
Division of Radiation Safety
and Safeguards
Region I
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pa. 19406

Dear Mr. Martin:

This refers to I.E. Inspection 50-247/85-02 conducted by Mr. J R. White of your office on January 14-18, 1985 of activities authorized by NRC License No. DPR-26 at Indian Point Unit No. 2. Your March 12, 1985 letter requested a description of the action taken or planned relative to the items identified therein. Provided herewith as Attachment A is our response.

Should you or your staff have any questions, please contact us.

Very truly yours,

John D. O'Toole

attachment
cc: Senior Resident Inspector
U. S. Nuclear Regulatory Commission
P. O. Box 38
Buchanan, New York 10511

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ATTACHMENT A

RESPONSE TO ITEMS IDENTIFIED IN I.E. INSPECTON
REPORT 50-247/85-02 REQUIRING IMPROVEMENTS

ITEM 85-02-01

1. Revise the procedures as necessary to permit more flexibility in determining dilution factors for grab samples of post accident conditions that may not approach worst case conditions.

RESPONSE

The procedure for sampling the Reactor Coolant System, IPC-E-001, is being revised to include various gross activity concentrations up to and including the worst case accident. The procedure is expected to be approved by July 1, 1985 and retraining completed by December 1985.

2. Depending on the essentiality of qualifying and quantifying particulates and halogens in containment atmosphere for estimating core damage, 1) verify the representatives of the sample method, 2) revise procedure IPC-E-002 to be more realistic about what can be accomplished in the current sampling arrangement.

RESPONSE

The procedure for containment air particulate and iodine analysis will not be revised until an in-house line loss study is completed. This study is underway and completion planned by August 1, 1985. If positive results are attained, the procedure will be approved by September 1, 1985. If the study indicates excessive line loss, the sampling system will have to be modified and the study run again. A completion date for this phase will be available by August 15, 1985.

3. Determine the need for data worksheets and recording forms relative to procedures for post accident sampling, and incorporate as necessary.

RESPONSE

Based on the changes to the various emergency procedures, the need for worksheets will be evaluated during the procedural training sessions referred to in our response to item 1 above.

ITEM 85-02-02

The licensee's extensive design and operating experience with the post accident sampling system has led to the identification of the following hardware improvements which are incorporated in the proposed scope of work for job package PN 42706.

1. Replace 5 gallon sump tank in the bottom of the liquid sample panel (LSP) with a new tank containing 1" drain at the bottom to prevent drain clogging. Existing tank is too contaminated to permit installation of a larger bottom drain.

2. Relocate sump pumps outside the liquid sample panel to provide better accessibility for maintenance and provide maintenance valves for easy replacement of pumps. Purchase two spare pumps.

3. Install recirculation line with manual valves arrangement from the discharge sump pumps back to the sump tank to permit chemical cleaning.

*4. Provide run-auto-off control switch for each sump pump with on-off indicating lights and replace solid state relays with magnetic type relays.

*5. Provide a horn and annunciator to alert operator when liquid in the sump reaches extreme high level to prevent overspill. Also provide annunciator for other abnormal conditions on the sampling panel.

6. Replace valves 5524 and 5525 with remote operating valves and install remote operating valve in parallel with valve 5513 so that operator does not need to go behind the panel to realign the valves during post accident conditions, thus avoiding high dose exposure.

7. Reroute the line from valve 5524 to the discharge of the sump pumps to reduce the amount of liquid going through the sump tank.

8. Modify drain from boron analyzer so that waste from the spin cell does not back-up into the titrating unit. Connect both drains further downstream.

9. Purchase shorter reach rod so that those valve handles that are opposite the Chemistry Monitoring Panel can be operated using the reach rod. Current reach rod is too long and does not fit between the Chemistry Monitoring Panel and the Liquid Sample Panel.

*10. Replace all Capsohelic flow indicators with Validyne flow indicators and install total dissolved gas analyzer.

11. Install a second ion chromatograph for measuring chloride.

12. Add a three way valve for the boron analyzer so the calibration liquid and sample can be easily switched into the boron analyzer. Install check valve so that sample does not back-up into the calibration liquid.

13. Install post accident decontamination spray for the liquid sampling panel.

    a) Replace solenoid valves with waterproof valves.
    b) Increase size of gravity drain to sump tank.
    c) Provide drip protection for the circuit box.

*14. Relocate the DP gauge for the ventilation filtration system to the column on side of sampling panel so that it can be visible from the front of the sampling room.

15. Provide vent for the demineralizer water tank and run it down so that the vent valve can be reached from the floor.

*16. Install mountings for placing portable lead shielding plates around the inlet and outlet lines behind the liquid sampling panel to reduce fields during the normal operation.

While all of these items are considered important to the continual good operation of the system, the enhancements designated with an asterisk(*) should be considered for priority action since these items directly affect the safe operation of the system in post accident conditions.

RESPONSE

Project Number 42706 is under review. As a result of the review, items 7, 13 and 15 above have been dropped. The project appropriation request is scheduled for review in May 1985. If the appropriation is approved, engineering would begin November 1985 and continue through August 1986. Items 1, 2, 3 and 6 above require an outage, which could be the refueling outage in 1987-1988. During the engineering phase of the project Con Edison will review taking priority action for the items designated with an asterisk(*).

ITEM 85-02-03

- Responsibility for the follow-up of work orders should be defined and better coordination of available personnel and resources should be initiated, so as to keep the system fully operational.

RESPONSE

Follow-up work orders are the responsibility of the Nuclear Power Generation Department. NPO watch log sheets have been changed so that the NPO observes and reports the status of the noble gas monitor each shift. Off normal values are reviewed by the Operations Section and appropriate follow-up action is taken.

- The reasons for the failure of the transducers and the apparent presence of moisture in the sampling lines should be investigated.

RESPONSE

The NPO watch log sheets have been changed to include instructions to the NPO, each shift, to blow down the sampling line traps and report any malfunctions through the maintenance work order procedures. Blowing down the traps is expected to prolong the life of the transducers. (See Response to 85-02-04).

- Adequate training and descriptive materials should be developed and made available to all licensee personnel who may be involved with the monitoring system.

RESPONSE

Ample procedural information is available to operators. Station Operating Procedure (SOP) 12.2 and Check-Off List (COL) 12.3 address the operation of the WRGM from the Operations standpoint. SOP's and COL's are periodically reviewed in training/retraining sessions.

- The basis for the calibration factor for the wide range gas monitor and the main steam line monitors should be established and the response of these monitors to the variable isotopic mix for a given time after shut-down should be understood and made known to the emergency dose assessors.

RESPONSE

The wide range gas monitor, R-27, has been added to the Chemistry program for monitors. The program will verify the monitor factor for the existing isotopic mix. ALARA precludes verifying the high range portion by gaseous standards. The quarterly three point scale test will verify the monitor's capability to detect noble gases at high concentrations. The basis for the calibration factor for the main steam line monitors is under review. Based on the review appropriate action, responsive to this item, will be taken.

ITEM 85-02-04

The licensee should consider the full utilization of the WRGM, both for the monitoring of noble gases and the sampling of particulates at routine low-range concentrations and at mid-high range concentrations. However, it would be necessary to demonstrate that this system would provide a representative sample.

RESPONSE

An in-house line loss study is not possible due to the low concentrations of particulates and halogens in the plant vent. The present concentrations are very close to the lower limits of detection (LLD's).

Engineering has contacted several vendors, including SAIC, who have been provided prints and isometric diagrams to conduct a lab model line loss study. We anticipate the study will be completed by October 1985.

Engineering is considering various modifications to the R-27 sample stream if the line loss is beyond the tolerance of 25% error.

The operation is being covered by daily NPO surveillance. A quarterly surveillance test, conducted by the Test and Performance Section, will be completed by July 1, 1985.

ITEM 85-02-05

The capability to perform periodic radiological verifications of the response of the high-range containment monitors should be developed.

RESPONSE

The containment high range monitor can only be source checked during refueling outages. The need to and the feasibility of source checking these instruments will be evaluated.

ITEM 85-02-06

The licensee should clearly document the training provided the health physics technicians who are involved with inplant iodine monitoring under accident conditons.

RESPONSE

Part of the Radiation Protection Technician (RPT) Retraining program is a review of the course "Mitigating Core Damage", as applicable to RPT's. One of the subjects reviewed in this course is iodine monitoring under accident conditions. This course is documented in the training record.

ITEM 85-02-07

The licensee requested an extension for the environmental qualification of in-containment high range monitors (R-25 and R-26). This request was approved by NRC permitting the licensee to complete the qualification by March 31, 1985.

The licensee stated that the environmental qualification tests for these two monitors were essentially complete. However, the test reports were not yet complete and therefore unavailable for review.

RESPONSE

The Victoreen Hi-Range Radiation Monitors (R-25 and R-26) were successfully tested to environmental qualification parameters specific to Indian Point Unit 2 in October 1984. The final test report indicating that these monitors were environmentally qualified was included in the Indian point auditable environmental qualification file in accordance with Technical Specification 6.13 on January 31, 1985.