UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

July 16, 1997

Inspection Reports IR

Mr. Stephen E. Quinn
Vice President - Nuclear Power
Consolidated Edison Company of
New York, Inc.
Indian Point 2 Station
Broadway and Bleakley Avenues
Buchanan, NY 10511

SUBJECT: NRC INTEGRATED INSPECTION REPORT 50-247/97-07
AND NOTICE OF VIOLATION

Dear Mr. Quinn:

On June 30, 1997, the NRC completed an inspection at your Indian Point 2 reactor facility. In addition to the resident inspection activities, four separate region based specialist inspections were also conducted during this inspection period, the results of which are documented in the enclosed report.

Substantial progress was noted in the completion of activities related to the 1997 refueling outage (RFO) that commenced on May 1, 1997. While performing these activities, your staff identified a number of equipment issues that were appropriately addressed through your corrective action process. We are concerned, however, with the recent identification of a rubber hose found ingested in the 21 reactor recirculation pump (RRP). While historical at this point, as the ingestion is believed to have occurred between 1987 and 1989, the fact that the hose was unknowingly ingested into the pump is another example of poor practices in maintaining foreign material exclusion (FME) in safety-related equipment. NRC Inspection Report 50-247/96-08 documented the inoperability of the plant's feedwater regulating valves as a result of grit intrusion into the feedwater system that resulted from improper FME controls during maintenance work on the high pressure turbine during the 1995 RFO. These two events, together with other FME issues that arose during the current RFO, indicate the need for further improvement in this area.

Based on the results of this inspection, the NRC has determined that violations of NRC requirements occurred. These violations are cited in the enclosed Notice of Violation (Notice) and the circumstances surrounding them are described in the subject inspection report. The violations are of concern because they involve repeat occurrences of similar events for which the NRC has previously taken enforcement action and for which Con Edison had implemented corrective actions. The recurrence of similar events cited in the violations indicates that further management attention to these issues is warranted.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken, and any additional actions you plan, to prevent recurrence. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

N/2

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure(s), and your response will be placed in the NRC Public Document Room (PDR). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction.

The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, Pub. L. No. 96.511.

Sincerely,

John F. Rogge, Chief
Projects Branch 2
Division of Reactor Projects

Docket No. 50-247
License No. DPR-26

Enclosures:
1. Notice of Violation
2. Inspection Report No. 50-247/97-07

cc w/encls:
C. Jackson, Manager, Nuclear Safety and Licensing
B. Brandenburg, Assistant General Counsel
C. Faison, Director, Nuclear Licensing, NYPA
C. Donaldson, Esquire, Assistant Attorney General, New York Department of Law
Director, Electric Division, Department of Public Service, State of New York
W. Stein, Secretary - NFSC
F. William Valentino, President, New York State Energy Research and Development Authority
J. Spath, Program Director, New York State Energy Research and Development Authority

EXHIBIT 1997 INSERVICE Inspection Program Rev

M1.2 Inservice Inspection Program Review

a. Inspection Scope (73753)

A regional specialist performed this inspection to assess the effectiveness of the Inservice Inspection (ISI) Program with particular emphasis on the ISI of steam generators (SGs).

b. Observations and Findings

The Indian Point 2 (IP2) ISI for the 1997 RFO represented the second outage of the third ten-year ISI interval. Since Con Edison is on a 24 month cycle, they have only five scheduled outages per ten year-interval. As a result, two separate ISI plans were being performed during the 1997 RFO. Con Edison took credit for completed examinations as required by the American Society of Mechanical Engineers (ASME) Code Section XI, IWB-2412 and IWC-2412. The inspector verified Con Edison's ISI program scope that groups the ASME Section XI components in physical areas. Con Edison explained that this grouping approach allows them to be more efficient in the use of scaffolding and manpower allocation. In addition, the grouping areas approach helps to reduce radiation exposure to workers.

Con Edison's ISI outage plan included welds on the following components: the reactor head, # 21 SG circumferential welds and secondary side nozzle welds, pressurizer and pressurizer relief nozzles, residual heat removal (RHR) and the regenerative heat exchangers, and various Class 1 and 2 piping welds and pipe supports.

Effectiveness of Licensee Controls over Inservice Inspection (Nondestructive Examination) Activities

The inspector verified that Con Edison has adequate control over the Inservice Inspection nondestructive examination (NDE) activities of the present outage. Con Edison determined the scope of work performed during this outage by the contractor(s) based on the ISI program. The inspector noted that Con Edison reviewed and approved the NDE procedures against check lists developed from the ASME Code in effect for the current inspection interval.

Steam Generator Eddy Current (EC) Procedure

The inspector found the steam generator eddy current analysis procedure to be acceptable, approved by the EC vendor and licensee personnel, and in accordance with ASME Code and TS requirements. This procedure provided clear guidance to primary and secondary analysts on requirements for identification and recording of indications. The procedure also delineated clear criteria for the type of indications that require further inspection in order to be appropriately dispositioned. Examination data and documentation were also in accordance with the EC analysis procedure and ASME Code. Con Edison EC level III closely followed the activities of the contractor performing the steam generator ISI.

Tube Examination Program Implementation

Con Edison's tube examination program was prepared in accordance with the Electric Power Research Institute (EPRI) steam generator tube inspection guidelines. As a result of early eddy current inspection findings, an expansion was made to inspect all support plate intersections with the Cecco-5 probe and the full lengths of all the unplugged tubes with the bobbin coil probe.

EC data acquisition personnel followed appropriate procedures, controlled critical parameters, and performed calibration checks as required. The scope of the EC inspections with the bobbin coil, Cecco-5, and Plus-Point coil probes exceeded TS requirements. A Cecco-5 EC probe was used for screening indications of the tubing support plate intersections and 20 inches above followed by a characterization using Plus Point probes. The bobbin coil portion of the Cecco-5 probe is being used to examine the straight portions of the tube at elevations higher than 20 inches above the tube sheet. The tube sheet area and the lower 20 inches are being examined with the Cecco probe.

EC analyst (primary, secondary and resolution) appeared to be performing analysis in accordance with the EC analysis procedure. Con Edison had an independent EC level III contractor reviewing EC data to ensure the proper identification and recording of indications.

Qualifications of Eddy Current Examination Personnel

The inspector reviewed records of the qualifications and certifications of the Westinghouse personnel involved in the performance of the steam generator tubing eddy current data acquisition and analysis activities. Based on this review, and interviews with eddy current personnel, the inspector determined that these individuals met the qualification and certification requirements stated in the pertinent supplement of SNT-TC-1A and ASME Code Section XI.

c. Conclusion

Con Edison appeared to have an effective means to control the NDE activities by determining the NDE scope of activities, and by reviewing and approving NDE procedures submitted by the contractor performing the NDE activities. The inspector found the steam generator eddy current analysis procedure to be acceptable and in accordance with ASME Code and TS requirements.

The inspector found the steam generator tube inspection program procedures and implementation acceptable. The personnel managing and implementing the program were knowledgeable and followed procedures. Con Edison appropriately expanded inspections based on inspection findings.

Based on the review of Con Edison's specification, qualification and certification records, interviews with EC personnel and direct observation of the EC activities in

progress, the inspector concluded that Con Edison maintained good oversight of the qualification and certification of EC personnel.

Overall, Con Edison effectively monitored and controlled the ISI Program, in particular the ISI of the steam generators.

M1.3 Control of Contractors (40500, 62707 and 71707)

a. Inspection Scope

A specialist inspector performed a review of contractor work controls to obtain an understanding of the effectiveness of Con Edison in defining the scope of contracted work, obtaining capable contractors, monitoring the contractor work force during the performance of work, and documenting the work performed including the basis of its acceptability.

Specific areas inspected included contracted work tasks for the reactor coolant pump maintenance, instrumentation and control maintenance and calibration, in-core thermocouples, internal weld overlay of crossunder piping, wet steam piping replacement as corrective and preventive action to address flow accelerated corrosion, motor operated valve corrective and preventive maintenance, as well as other valve maintenance by a second contractor; heat exchanger opening, cleaning, tube eddy current testing and closeup; qualification and training screening of nondestructive testing technicians, field engineering staff augmentation, systems test review, and surveillances performed by the site Quality Assurance group of outage related work including that performed by contractors. The review of contractor control included attention to the use of workers from other parts of the Con Edison system to do work during the refueling outage.

Steps in the contracting process including specification of the work scope, the contractor selection process, the post selection contractor meeting to review the work scope and work conditions, evaluation of contractor employee qualifications, and the task work packages were examined. Discussions of the contracted work were held with the responsible supervisory individuals and observations of work in progress and completed were made by the inspector.

b. Observations and Findings

For the areas inspected, the work scope was noted to be well defined and the contractor was provided with specifics of the work and work practices prior to the start of the work. Emphasis was given to personnel safety, foreign material accountability and exclusion, and environmental concerns in the contracting process and during the performance of work. An individual responsible for the work scope definition and proper execution of work as the task Con Edison contact was assigned. Work packages were prepared for each work task. The work packages were found to be comprehensive and appropriate for the work scope. For the most part, work packages were current with the work as completed, although some minor problems with documentation were noted. Quality Assurance (QA) had also

From: Scott Barber
To: A. Randolph Blough, Ashok Thadani, Bill Bateman,...
Date: Fri, Mar 24, 2000 10:55 AM
Subject: IG Event Inquiry - IP2 Tube Failure

Lisa Hoston and Lisa Pace of the Office of the Inspector General will be in Region I on on April 5 through April 7 to perform interviews for an Event Inquiry (EI). The EI will be performed on the IP2 Tube Failure Event. Their effort is not like an investigation since there is no target for the investigation. No names will be used in their report, just phrases like "DRP or DRs staff said this....". They will start with regional interviews and then proceed with headquarters interviews.

If you were involved with IP2 either before, during, or after this event, you will be considered a candidate for an interview. The IG will make the final decision of who they talk to and they will coordinate directly with you to set up interviews. If your name appears on this list you may be interviewed. If you know of anyone that should or wants to be be interviewed, please contact Lisa Hoston directly.

CC: Lisa Hoston, Lisa Pace