(Use also for Staff Suspected Wrongdoing)

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Date Received: 11/14/00 Allegation No. **RI-2000-A-XXXX**

Received via: [] Telephone [] In-person [] Letter [] Facsimile **(staff suspected wrongdoing)**

Employee Receiving Allegation or suspecting wrongdoing (first two initials and last name):
Source of information (please check one box): **[X] NRC staff**

Alleger Name: * Home Address: *
Home Phone: * City/State/Zip: *

Alleger's Employer: * Alleger's Position/Title:*
* Do not complete these sections for issues of staff suspected wrongdoing.
Facility: Indian Point 2 Docket No. 50-247

Was alleger informed of NRC identity protection policy? Yes _ No_ (SSW)
If H&I was alleged, was alleger informed of DOL rights? Yes _ No_ N/A X
If a licensee employee or contractor,
did they raise the issue to their management? Yes _ No _ N/A X
Does the alleger object to referral of issues to the licensee? Yes _ No _
Provide alleger's direct response to this question verbatim on the line below:

Was confidentiality requested? Yes _ No X
Was confidentiality initially granted? Yes _ No _ N/A X

Criteria for determining whether the issue is an allegation:
Is it a declaration, statement, or assertion of impropriety or inadequacy? Yes
Is the impropriety or inadequacy associated with NRC regulated activities? Yes
Is the validity of the issue unknown? Yes / No ????
If **No** to any of the above questions, the issue is not an allegation and should be handled by other appropriate methods (e.g. as a request for information or an OSHA referral).

Allegation Summary or staff suspected wrongdoing:

[1] During the 1997 refueling outage at Indian Point 2, steam generator tube inspections were conducted from mid-May to mid-June 1997. Periodic telephone calls were between the NRC and Con Ed on 5/27/97, 6/2/97, 6/3/97, and 6/29/97, to discuss the results of the tube inspections, among other issues. While Con Ed was asked if any degradation was identified in the U-bends of low row tubes, (Rows 1, 2, and 3), Con Ed's only response was that the Row 1 tubes had been preventively plugged before commercial operations. On 7/27/97, Con Ed submitted a report of the steam generator tube inservice inspection per Tech Spec 4.13.C.2. The report noted that a tube in Row 2, Column 67, of the 24 Steam Generator, with a single axial indication at the apex of the U-bend region, had been plugged.

DIFFERENT THAN A WE ANSWER AS DISCUSSED IN other AREA

When Con Ed knew about the tube indication on the tube is in question. If Con Ed knew about the U-bend indication, but chose not to report the indication to the NRC, this may have been done intentionally to preclude extension of the refueling outage (i.e., as a result of an anticipated NRC request to enlarge the steam generator tube testing sample).

A detailed time line developed by NRR of the discussions held between the NRC and Con Ed befere the issuance of the steam generator tube inspection report is provided below:

Functional Area (please check one box): **[X] Power Reactor**
Discipline for each concern: **[1] Wrongdoing**

NRR

Detailed Description of Allegation or **staff suspected wrongdoing**:

Questions on the Steam Generator Tube Leakage Event at Indian Point Unit 2

Background

The NRC staff conducts phone calls with licensees during their steam generator tube inspections on a routine basis. The topics of discussion in the phone calls include inspection scope, inspection techniques, degradation mechanisms, repair methods, degradation history, tube leakage at the end of the operating cycle, and eddy current inspection results.

During the steam generator tube inspection, an eddy current probe is inserted into and travels inside of the tube to collect electrical signals from imperfections on the inside and outside surfaces of the tube. The signals are processed and stored in a software and are presented on the computer monitor. The data analysts review the signals in real-time and determine if the signals represent flaws or not.

During the 1997 refueling outage, Consolidated Edison Company (ConEd) started inspecting steam generator tubes at Indian Point Unit 2 sometime in the middle of May 1997, and completed the tube inspection on June 13, 1997.

On May 27, 1997, the staff held a phone call with ConEd to discuss the results of its tube inspection in the Indian Point Unit 2 steam generators to that point in time. In the phone call the staff asked ConEd whether any indications were detected in the U-bend regions of low row tubes. On the basis of hand-written notes of NRC staff participating in the phone call, ConEd stated that no indication(s) was identified in the U-bends of row 2 or row 3 tubing. ConEd stated that row 1 tubes were preventively plugged before commercial operation. We interpreted this to mean that ConEd had inspected the U-bend regions of row 2 and row 3 tubes and found no flaws in row 2 and row 3 U-bends.

On June 2, 1997, the staff held a follow-up phone call with ConEd to discuss the final results of the steam generator tube inspection and candidate tubes for in-situ pressure tests. During the phone call, ConEd discussed the number of tubes that will be plugged and the tubes that will be pressure tested. ConEd also discussed that two indications were found in the sludge piles which were detected for the first time. ConEd did not mention any indication in the U-bend region in the phone call.

On June 3, 1997, ConEd discussed with the NRC staff its in-situ pressure test results and certain other probe tests. ConEd did not discuss any U-bend indication in the phone call.

On June 29, 1997, ConEd discussed with the NRC staff the results of certain probe qualification tests. The U-bend indication was not discussed in the phone call.

By a letter dated July 29, 1997, ConEd submitted a report of the steam generator tube inservice examination pursuant to Technical Specification 4.13.C.2. In Table 6 of the report, ConEd reported a single axial indication at the apex of the U-bend region in the tube located in Row 2 Column 67 in steam generator 24. The tube was plugged.

On February 15, 2000, the row 2 column 5 tube in steam generator 24 was ruptured at the U-bend region.

Discussion

There is a discrepancy between the ConEd's statement made in the May 27, 1997 phone call and the inspection results presented in the ConEd's steam generator tube inspection report submitted on July 29, 1997. In the July 29, 1997 report, ConEd reported a U-bend indication on the row 2 column 67 tube in steam generator 24. However, in the May 27, 1997 phone call, ConEd stated that it did not identify any U-bend indication(s) in row 2

or row 3 tubes. In addition, ConEd did not mention any U-bend indications in row 2 or row 3 tubes in the June 2, 1997, or June 3, 1997, phone calls. From June 3, 1997 to July 29, 1997, ConEd did not communicate to the staff the existence of the U-bend indication in the row 2 column 67 tube.

Two scenarios that could have led to the aforementioned discrepancy are as follows:

(1) The U-bend indication on the row 2 column 67 tube was in the eddy current test (ECT) data but ConEd's analyst did not identify the indication by May 27, 1997; June 2, 1997; or June 3, 1997. It is not clear to the staff when ConEd identified the U-bend indication. ConEd may have re-reviewed the ECT data sometime after June 3, 1997, and identified the U-bend indication because the indication was included in the July 29, 1997 report. However, ConEd did not inform the NRC, before July 29, 1997, of this difference with information conveyed previously by phone.

(2) ConEd identified the U-bend indication before or on June 3, 1997, but choose not to report the indication to the staff before or during the June 3, 1997 phone call.

The staff held discussions with OGC in the Summer 2000 time frame to determine whether any follow up actions regarding this discrepancy. In these discussions OGC noted the difficulties involved in resolving the discrepancy and no further actions were taken at that time