SUMMARY OF FINDINGS

Indian Point 2 Nuclear Power Plant
NRC Inspection Report 05000247/2000-007

The inspection was conducted from May 15-26, 2000, using the guidance contained in NRC Inspection Manual Chapter 2515. The inspection followed an NRC Augmented Inspection Team (AIT) review of the steam generator tube failure event that occurred on February 15, 2000. The Augmented Inspection Team (AIT) inspection was conducted immediately after the steam generator tube failure to promptly establish the facts associated with the event. The results of the AIT inspection is documented in Inspection Report No. 05000247/2000-002. This AIT Follow-up inspection was performed after Con Edison's initial recovery efforts, and focused on Con Edison's short term corrective actions and the enforcement aspects of the issues previously identified during the AIT inspection. As a result, many of the issues discussed in the AIT report are further discussed in this report. The cause of the tube failure was outside the scope of this inspection, and was being reviewed separately by the NRC. In addition, the emergency preparedness findings related to the event will be discussed in Inspection Report No. 05000247/2000-006. The report also includes an NRC review of permanent plant modifications performed on April 17-26, 2000. The significance of issues is indicated by their color (GREEN, WHITE, YELLOW, RED) and was determined by the Significance Determination Process in Inspection Manual Chapter 0609 (see Attachment 1).

Cornerstone: Mitigating Systems

- **Green** - The final calculation for the charging pump seal water tank, which provided the long term basis for operability, was not approved, accepted or entered into the Con Edison Calculation Indexing Program contrary to procedure requirements. This issue was determined to have very low risk significance since the equipment operability was not impacted. Deficient control, review and approval of these calculations and of the associated operability determination are collectively considered a violation of 10 CFR 50, Appendix B, Criterion V and is being treated as a non-cited violation (Section R15).

- **Unresolved Problem** - Con Edison did not resolve conditions adverse to quality associated with the gas turbine Nos. 2 and 3 remote start capabilities. This problem had been identified by Con Edison for several years. This issue is unresolved pending additional NRC review (Section R16).

- **Green** - The safety evaluation for a modification to the chemical volume and control system power supply did not completely define the scope of work. The safety evaluation incorrectly stated that the associated modification did not add any new wires or cables. The failure to assess the full scope of the modification in the safety evaluation was determined to be a non-cited violation. Failure to include and evaluate the new cables in the safety evaluation was determined to have very low risk significance because it did not change the overall conclusions reached in the safety evaluation regarding an unreviewed safety question, and did not adversely impact the plant design modification (Section R17).

- **Green** - Con Edison did not take timely corrective actions for the steam generator leak monitoring (N-16) recorder deficiency. The failure to take adequate corrective actions was determined to be a non-cited violation, and was an issue of very low risk significance in that there was a minimal impact on the operators' ability to determine the magnitude of the steam generator tube leak (Section 4OA2).

Cornerstone: Initiating Events

- **Green** - During the initial plant cooldown following a tube leak in the steam generator, the Technical Specification cooldown limit for the reactor coolant system was exceeded. The evaluation of the excessive cooldown determined that there was no adverse impact on the reactor coolant system components and, therefore, is considered a very low risk significant issue. This non-cited violation resulted from the operation crew's deficient monitoring of plant parameters and high pressure steam dump system deficiencies (Section OA3.1).

- **Green** - Deficiencies in emergency operating procedures delayed necessary plant cooldown actions by the operators. The non-cited violation was determined to be an issue of very low risk significance, because the cooldown delay did not result in a measurable increase in the release of activity during the steam generator failure event (Section OA3.1).

- **Green** - Deficiencies in standard operating procedures delayed necessary plant cooldown actions by the operators. The non-cited violation was determined to be an issue of very low risk significance, because the cooldown delay did not result in any appreciable increase in the release of activity during the steam generator failure event (Section OA3.1).

Other

Cross-cutting Issues: Identification and Resolution of Problems

- **Green** - Con Edison did not properly disposition or enter some conditions adverse to quality into their corrective action program as required by procedure. A selected review of the Communications to Staff (CTS) database, a database of procedure enhancement recommendations, determined that one CTS item was not adequately resolved and two additional CTS items met the threshold for initiating a condition report (CR) for which a CR was not initiated. This non-cited violation is associated with the failure to initiate condition reports as required by Con Edison's procedures. The issue was determined to be of very low risk significance, because the most notable problem was related to a delay in reducing plant pressure, and did not result in any appreciable increase in the release of activity during the steam generator tube failure event (Section 4OA2).

- **No Color** - The control room operators did not enter significant plant items, such as event declaration and implementation of the emergency plan, in the control room logs, as required by Con Edison procedures. This procedure violation was a problem that was also noted for the August 31, 1999, loss of bus event. The failure to enter significant items into the control room logs was determined to be a non-cited violation. Although this issue does not affect any of the seven cornerstones (Attachment 1), it was