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Robert J. Barrett Site Executive Officer

June 23, 1997 IPN-97-081

U. S. Nuclear Regulatory Commission Document Control Desk Washington, DC 20555

- Subject: Indian Point 3 Nuclear Power Plant Docket No. 50-286 License No. DPR-64 Material Condition Improvement Progress Report
- References: 1. NRC Letter, dated January 27, 1997; H. L. Thompson, Jr. to C. D. Rappleyea; regarding results of January 1997 NRC Senior Managers Meeting.

This letter provides an overview of material condition improvements achieved at Indian Point 3 and provides an update on additional improvements being made during the current refueling outage which began May 15, 1997.

During the transition period of returning Indian Point 3 to service following the Restart and Continuous Improvement Outage completed in 1995, a number of equipment issues emerged which indicated the need for continued management attention to overall material condition. Initiatives implemented by the Authority to establish priorities and focus resources have resulted in measurable successes, such as a reduction in maintenance backlog, improved housekeeping, and an overall reduction in new emergent issues. The following sections provide additional details to address your concerns expressed in Reference 1.

#### Maintenance Backlog Reduction

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An increased focus on material condition and equipment performance was initiated in September 1996. Performance expectations were communicated site-wide with specific goals established for backlog reduction and schedule adherence. Process improvements were established such as development of the Fix-it-Now (FIN) team and enhanced teamwork among departments was emphasized. The success of these efforts is reflected in our trended performance measures and can be seen in both the performance and appearance of the facility. The corrective maintenance (non-outage) backlog goal for 1996 was achieved when the number of open items was reduced from approximately 1250 in September 1996 to less than 700 by the end of that year. The year-end goal for 1997 has been set at 300 and recent performance trends indicate that this is achievable. Year-to-date progress has shown a steady work-off rate with the backlog currently reduced to approximately 570. In addition, the FIN Team has typically completed 20-25 tasks per week which prevents these items from





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being added to the backlog and minimizes interruptions in routine scheduled maintenance. Over 700 of the 900 tasks on the outage corrective maintenance backlog are schedule to be performed during the current refueling outage. Substantial progress in the completion of preventive maintenance tasks has reduced the number of overdue PMs to zero prior to the beginning of the refueling outage.

### **Recently Completed Projects**

Indian Point 3 was shut down for 31 days during January and February 1997 for maintenance. The shutdown was initiated to repair a feedwater heater tube leak. Additional projects completed during the outage include the following:

- Replacement of the pressurizer Power Operated Relief Valves with an upgraded valve design.
- Replacement of the pressurizer manway gasket. RCS leakrate during subsequent plant operation has been consistently in the range of 0% - 10% of the Technical Specification limit.
- Stiffeners were installed to minimize main generator lead box vibrations.
- Over 450 tasks previously assigned to the Spring 1997 refueling outage were completed.

Other projects have since been accomplished during the operating period following the outage. Examples include replacement of a service water pump and motor, and the restoration of the electrical cable tunnel sprinkler system.

#### Improvements to Support Operator Duties

Equipment conditions and configurations which can require extra effort on the part of plant operators are monitored through various parameters such as Operator Work Arounds (OWAs), Temporary Modifications (TMs), Control Room Deficiencies, and Catch Containments. The total number of these conditions, which can be worked without an outage, has been reduced by about 26% since the beginning of the year. The specific items addressed were identified based on a review of priority with respect to operator performance. Station goals have been established to substantially reduce these 'operator challenges' during the current refueling outage.

# Maintenance Rule Implementation

Activities performed under the Maintenance Rule Program, which was implemented at IP3 during the second quarter of 1996, have also contributed to material condition improvements. Since July 1996, 13 of the 115 systems assigned to the MR program have been classified as 'A(1)'; i.e. additional improvement needed to achieve specified performance criteria. Actions taken to date have resulted in 3 of these systems being restored to 'A(2)' status; i.e. special monitoring no longer required. Action Plans are in place for the remaining 10 systems that are categorized as A(1). These systems are expected to be restored to 'A(2)' by the end of 1997 based on work scheduled during the current refueling outage and allowing for an appropriate period of time following the outage for performance monitoring.



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## Refueling Outage Projects

Refueling Outage 9 (R09) commenced on May 15, 1997 at Indian Point 3. A substantial maintenance and modification work scope is being performed to further support the Authority's long-range plan for improved material condition and to provide for the continued safe and reliable operation of Indian Point 3. The following summary highlights some of the more significant projects in progress or scheduled for work during the outage:

- Main generator rotor replacement
- Overhaul of the main generator exciter
- Upgrades to the fuel manipulator crane and transfer system
- Control Room layout and communication improvements
- Control Room air conditioner condenser changeout
- Upgrade to provide 480 volt bus ammeter for control room indication
- Replace main turbine generator hydrogen coolers and dryer
- Radiation Monitoring systems upgrades
- Completion of Generic Letter 89-10 Motor-Operated Valve Program
- Replace selected extraction steam line piping based on erosion / corrosion monitoring program results
- Service water system upgrade including replacement of valves and approximately 2000 feet of piping, using improved material
- Realignment of Emergency Diesel Room ventilation fan power sources

The Authority is confident that the focused attention and effort over the past year regarding the material condition of Indian Point 3 has achieved positive results and that our continuing efforts will yield additional meaningful results.

There are no new commitments made by the Authority with this letter. If you have any questions, please contact Mr. K. Peters at (914) 736-8029.

Very truly yours Jul C

Robert J/Barrett Site Executive Officer Indian Point 3 Nuclear Power Plant

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