

Indian Point 3
Nuclear Power Plant
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L. M. Hill
Resident Manager

February 23, 1995
IPN-95-019

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

SUBJECT: Indian Point 3 Nuclear Power Plant
Docket No. 50-286
License No. DPR-64
System Certification Program

Dear Sir:

Attachment I to this letter provides a description of the system certification program, as we discussed during a meeting with the NRC staff on February 1, 1995. The system certification program is one of four self-assessment activities included in the Startup Readiness Evaluation (SURE) Program, developed to assess the readiness for restart of Indian Point 3.

The New York Power Authority (NYPA) is currently conducting the system certification program. As described in Attachment I, the system certification program is being revised to include more definitive acceptance criteria. NYPA will notify the NRC when system certification and the other elements of the SURE Program have been completed, as required by the NRC's Confirmatory Action Letter (1-93-009) of June 17, 1993. We would be happy to discuss system certification with you in more detail at your convenience.

The new commitments in this letter are listed on Attachment II. If you have any questions, please contact Mr. K. Peters.

Very truly yours,

A handwritten signature in black ink, appearing to read "L. M. Hill".

L. M. Hill
Resident Manager
Indian Point 3 Nuclear Power Plant

Attachments

cc: next page

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INDIAN POINT 3
SYSTEM CERTIFICATION PROGRAM

OVERVIEW

The Start-up Readiness Evaluation (SURE) program is the organized framework of assessments and reviews that is being used to certify to NYPA's management that Indian Point 3 is ready to be returned to service. The SURE program consists of four elements as described in NYPA's Restart and Continuous Improvement Plan.

- Operational Readiness Review - departmental self assessments;
- Oversight and Assurance - an independent review of restart action plan effectiveness conducted by NYPA's Quality Assurance Department;
- Start-up Evaluation for Readiness Team (SERT) Review - a comprehensive and independent team assessment of NYPA's readiness for Indian Point 3 restart; and
- System Certification - an assessment of the Indian Point 3 safety-related systems to demonstrate plant readiness for operation. Safety-related means those systems relied upon to (1) assure the integrity of the reactor coolant pressure boundary, (2) assure the capability to shutdown the reactor and maintain safe shutdown, and (3) assure the capability to prevent or mitigate the consequences of an accident which could result in offsite exposure comparable to 10 CFR Part 100 exposure guidelines.

SYSTEM CERTIFICATION

The certification process consists of field walkthroughs, system reviews, evaluations and other activities necessary to: assure the integrity of system configuration relative to system design; assure the adequacy of system material condition and maintenance; and assure proper system performance relative to system design. These elements of system certification will be controlled in the System Certification Program Plan which is being issued by the Indian Point 3 Technical Services Department. The major elements of system certification are described below.

System Configuration

Walkdowns are being conducted by NYPA's System Engineers in order to assure the integrity of system configuration relative to system design. Walkdowns and comparison of system configuration against the Indian Point 3 critical plant drawings will serve as the foundation of this certification element. Because of unacceptable work practices of the past, NYPA's system walkdown procedure (TSP-043, "System Engineering Walkdowns") provides a focus on observations for unauthorized and undocumented modifications. In addition to these system walkdowns, further

assurance in system integrity has been provided through "extent of condition" investigations related to piping and valves, supports, welding, setpoints, fuse control, control room HVAC, control room panel walkdowns, motor-operated valve design basis verifications for Generic Letter 89-10, and other similar activities. These investigations have encompassed thousands of plant components in almost all of Indian Point 3's plant systems.

Material Condition

As part of the certification process, walkdowns are being conducted by the Indian Point 3 Technical Services (i.e., Systems Engineers) and Operations Departments in accordance with TSP-043, "System Engineer Walkdowns" and OD-36, "Operator Rounds and Log Sheets," respectively. The purpose of these walkdowns is to review and assess the condition of the systems relative to system material and operational conditions. The program plan or the walkdown procedure will contain guidance and objective criteria for performing the walkdowns. In addition to the walkdowns, the System Engineers evaluate backlogged corrective maintenance work items and open technical issues to ensure that neither will adversely impact system performance. This evaluation considers issues identified during the material condition walkdowns. The certification process will provide assurance that such issues are either resolved prior to start-up, or have been evaluated and determined to have no impact on system function.

System Performance

The certification process includes an assessment of system performance. The certification process will draw upon data sources such as the surveillance program, modification acceptance testing, post maintenance tests, and system operating data. An assessment of key system operating parameters will be conducted to assure that system performance is consistent with system design. This element of system certification will provide further assurance of proper system configuration and material condition acceptability.

This certification process is being used to assess 74 plant systems/subsystems, including all safety-related systems at Indian Point 3. System certification activities are being conducted by the Indian Point 3 Technical Services Department and Operations Department. The completion of system certification will be accomplished through mutual approval of the certification packages by the Operations Manager and Technical Services Manager. For reporting purposes, information on related subsystems may be combined into single certification package. Completion of the certification process, with the exception of activities which can only be performed during the startup sequence, is a prerequisite to plant start-up as described in the Indian Point 3 Start-Up and Power Ascension Procedure.

Many elements of the system certification process will be performed on a continuous basis as part of the Indian Point 3 Systems Engineering Program TSP-050, "Systems Engineering

Program." This program provides for periodic and continuing assessments of the Indian Point 3 plant systems beyond plant start-up.

SYSTEM READINESS FOR RESTART

As described above, system certification is a process that will be used by NYPA to assess safety-related systems so as to demonstrate plant readiness for operation. In addition to system certification, NYPA will use a system operability checklist included as part of the Indian Point 3 Startup and Power Ascension Procedure, for the Technical Specification and Operational Specification systems that are included in the system certification program. The checklist has been designed to assure closure of outage work and test activities, as well as other technical and administrative matters that could affect system operability. In summary, the system certification process is used in conjunction with the system operability checklist to determine that a system is ready for operation.

CONCLUSION

When the plant was shutdown in 1993, it was recognized that many of the plant's procedures and work processes were inadequate. Assessments were carried out by NYPA which identified procedural and programmatic deficiencies within maintenance, operations, system engineering, surveillance testing, the corrective action program, and quality assurance. With regard to the Indian Point 3 plant systems, corrective actions developed based upon the above assessment activities were designated for resolution prior to restart, as appropriate. Plant equipment and material deficiencies, engineering, and procedural issues were reviewed in accordance with newly developed station directives to determine the need for incorporation into the outage scope of work. Determination for inclusion in the outage scope was based upon nuclear safety, personnel safety, equipment reliability, and regulatory commitments. Coupled with many changes in key staff positions, the recovery of Indian Point 3, including the recovery of Indian Point 3 plant systems, has been founded upon improved communications, especially in the area of management expectations and process discipline based upon a questioning attitude and commitment to quality.

In summary, the system certification process provides assurance in the physical configuration of safety related systems, assurance of appropriate material condition, and assurance of reliable operation throughout the operating cycle. The certification process, coupled with system operability determinations by the Operations Department, will provide NYPA with added assurance that the physical plant is ready for restart. The collective improvements brought about by the new processes and enforced expectations will assure the management team that operations, engineering, and maintenance activities are performed properly and in conformance with our design basis.

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IPN-95-019
Attachment II
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List of Commitments

Number	Commitment	Due
IPN-95-019-01	Complete preparation of and implement the system certification program plan.	Prior to exceeding cold shutdown
IPN-95-019-02	Define additional guidance and objective criteria for system certification program system walkdowns.	Prior to exceeding cold shutdown