May 14, 2004

Mr. Fred R. Dacimo Site Vice President Entergy Nuclear Operations, Inc. Indian Point Energy Center 295 Broadway, Suite 1 P.O. Box 249 Buchanan, NY 10511-0249

SUBJECT: INDIAN POINT NUCLEAR GENERATING UNIT NO. 3 - NRC INTEGRATED INSPECTION REPORT NO. 05000286/2004002

Dear Mr. Dacimo:

On March 31, 2004, the US Nuclear Regulatory Commission (NRC) completed an inspection at the Indian Point Nuclear Generating Unit No. 3 (IP3). The enclosed report presents the results of that inspection. The results were discussed on April 14, 2004, with Mr. C. Schwarz and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations, and with the conditions of your license. Within these areas, the inspection consisted of a selected examination of procedures and representative records, observations of activities, and interviews with personnel.

Based on the results of the inspection, one finding of very low safety significance (Green) was identified. This finding was determined to be a violation of NRC requirements. However, because of its very low safety significance, and because it was entered into your corrective action program, the NRC is treating the finding as a Non-cited Violation (NCV) consistent with Section VI.A. of the NRC Enforcement Policy. If you contest the NCV in this report, you should provide a response within 30 days of the date of this report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555-0001; with copies to the Regional Administrator, Region I; the Director, Office of Enforcement; and the NRC Resident Inspector at Indian Point 3.

Since the terrorist attacks on September 11, 2001, the NRC has issued five Orders and several threat advisories to licensees of commercial power reactors to strengthen licensee capabilities, improve security force readiness, and enhance controls over access authorization. In addition to applicable baseline inspections, the NRC issued Temporary Instruction 2515/148, "Inspection of Nuclear Reactor Safeguards Interim Compensatory Measures," and its subsequent revision, to audit and inspect licensee implementation of the interim compensatory measures required by order. Phase 1 of TI 2515/148 was completed at all commercial power nuclear power plants during calendar year '02 and the remaining inspection activities for Indian Point 3 were completed in January 2003. The NRC will continue to monitor overall safeguards and security controls at Indian Point 3.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room <u>or</u> from the Publicly Available Records (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <u>http://www.nrc.gov/reading-rm/adams.html</u> (the Public Electronic Reading Room).

Sincerely,

/RA/

Eugene W. Cobey, Acting Chief Projects Branch 2 Division of Reactor Projects

Docket No. 50-286 License No. DPR-64

- Enclosure: Inspection Report No. 05000286/2004002 w/Attachment: Supplemental Information
- cc w/encl: G. J. Taylor, Chief Executive Officer, Entergy Operations, Inc.
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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

- Docket No. 50-286
- License No. DPR-64
- Report No. 05000286/2004002
- Licensee: Entergy Nuclear Northeast
- Facility: Indian Point Nuclear Generating Unit No. 3
- Location: 295 Broadway, Suite 3 Buchanan, NY 10511-0308
- Dates: January 1 March 31, 2004
- Inspectors: P. Drysdale, Senior Resident Inspector
 - R. Berryman, Resident Inspector
 - M. Cox, Resident Inspector
 - T. Jackson, Project Engineer
 - B. Norris, Sr. Reactor Inspector
 - J. Noggle, Radiation Specialist
 - D. Silk, Sr. Emergency Preparedness Inspector
- Approved by: Eugene W. Cobey, Acting Chief Projects Branch 2 Division of Reactor Projects

TABLE OF CONTENTS

SUMMARY OF FINDINGS iii
SUMMARY OF PLANT STATUS1
REACTOR SAFETY 1 1R01 Adverse Weather Protection 1 1R04 Equipment Alignment 1 1R05 Fire Protection 2 1R06 Flood Protection Measures 4 1R07 Heat Sink Performance 4 1R11 Operator Requalification Inspection 5 1R12 Maintenance Effectiveness 5 1R13 Maintenance Risk Assessment and Emergent Work Control 6 1R14 Personnel Performance During Non-routine Plant Evolutions and Events 7 1R16 Operator Work-Arounds 8 1R19 Post-Maintenance Testing 8 1R22 Surveillance Testing 9 1R23 Temporary Modifications 10 1EP4 Emergency Action Level and Emergency Plan Changes 10 1EP6 Drill Evaluation 11
RADIATION SAFETY 11 2OS1 Access Control to Radiologically Significant Areas 11 2OS2 ALARA Planning and Controls 12 OTHER ACTIVITIES 13 4OA1 Performance Indicator Verification 13 4OA2 Problem Identification and Resolution 14 4OA3 Event Follow-up 15 4OA5 Other Activities 16
40AS Other Activities 16 40A6 Meetings 17 ATTACHMENT: SUPPLEMENTAL INFORMATION 17 KEY POINTS OF CONTACT A-1 LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED A-2 LIST OF DOCUMENTS REVIEWED A-2 LIST OF ACRONYMS A-11

SUMMARY OF FINDINGS

IR 05000286/2004002, on 01/01/2004 - 03/31/2004, Indian Point 3 Nuclear Generating Unit 3; Fire Protection.

The report covers a three-month period of inspection by resident inspectors, regional operations and project engineers, a reactor inspector, a radiation specialist, and an emergency preparedness inspector. One Green Non-cited Violation (NCV) was identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process," (SDP). The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process" Revision 3, dated July 2000.

A. NRC-Identified and Self-Revealing Findings

Cornerstone: Initiating Events

• <u>Green</u>. The inspectors identified a Green NCV involving the failure to perform a transient combustibles evaluation (TCE) for combustible materials in an area of the Primary Auxiliary Building (a Level II combustible fire zone). Procedure ENN-DC-161, Transient Combustibles Program," Section 5.2 requires that a TCE be performed when more than five gallons of combustible liquids are introduced into a Level II combustible control zone. Contrary to the above, between April 7, 2003, and February 24, 2004, approximately 200 gallons of combustible oil was stored inside the radiological drumming station in the Primary Auxiliary Building without a TCE.

This finding is greater than minor because it represents conditions similar to those described in Example 4.k. of Appendix E to IMC 0612, in that the combustible material exceeded the maximum fire loading by 24%. The finding is of very low safety significance because no credible fire scenario was identified due to the design and integrity of the oil storage containers and no credible fire ignition source was present. (Section 1R05)

B. Licensee Identified Violations

None

Report Details

SUMMARY OF PLANT STATUS

At the beginning of the inspection period, the Indian Point 3 (IP3) reactor was at 100% power. On February 18, 2004, reactor power was reduced to approximately 92% for scheduled periodic testing of the main turbine stop and control valves. Following those tests, the reactor was returned to 100% power. The plant remained at 100% power for the remainder of the inspection period.

1. REACTOR SAFETY (Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, Emergency Preparedness)

- 1R01 Adverse Weather Protection
- a. <u>Inspection Scope</u> (71111.01 1 sample)

The inspectors reviewed IP3 procedure OD-37, "Seasonal Weather Preparation," and the associated cold weather preparations checklists to verify that the checklists were completed in accordance with procedural requirements. The inspectors verified that the actions taken by the licensee to assure freeze protection of plant equipment were completed consistent with prevailing weather conditions for the months of January, February, and March 2004. On January 14 - 16, 2004, the inspectors walked down outside areas to evaluate the susceptibility of external plant equipment to the very low ambient temperatures (5F to -5F) during that period. The inspectors evaluated accessible areas inside and outside of the plant's operating and auxiliary support structures to assess the adequacy of freeze protection measures. The inspectors also looked for vulnerable systems or components not previously identified by Entergy.

b. Findings

No findings of significance were identified.

- 1R04 Equipment Alignment
- a. <u>Inspection Scope</u> (71111.04Q 3 samples)

<u>Partial System Walkdowns</u>: The inspectors performed system walkdowns during periods of system train unavailability in order to verify that the alignment of the available train was proper to support the availability of safety functions, and to assure that the licensee had identified and properly addressed equipment discrepancies that could potentially impair the functional capability of the available train.

On January 15, 2004, the inspector performed a partial system walkdown of the auxiliary feedwater system during and after the maintenance on the 32 Auxiliary Boiler Feedwater Pump (ABFP). The inspector used procedure 3PT-Q120B, "32 ABFP (Turbine Driven) Surveillance and IST," clearance 3C13-3-AFW - 32 ABFP, and drawing 9321-F-20193, "Flow Diagram Boiler Feedwater," to check for correct valve and power alignments.

On February 17, 2004, the inspector performed a partial system walkdown of the service water system supply to the 31, 32, and 33 Emergency Diesel Generators (EDGs) during and after completion of twelve-year preventive maintenance on the 32 EDG. The inspector used procedure COL-RW-002, "Service Water System," and clearance 3C13-3-EDG-32 EDG 12 YR PM during the walk-down to assess the general condition of the system and to verify correct system alignment.

On March 8 - 10, 2004, the inspectors performed a partial system walkdown of the 32 component cooling water (CCW) heat exchanger (HX) during the scheduled inspection and eddy current testing (ECT) on the 31 CCW HX. The inspectors used procedure SOP-CC-001B, "Component Cooling System Operation," and clearance 3C13 3-CCW-31 CCW HX MMEC during the walkdown to evaluate the general condition of the system and to verify the correct system alignment.

b. Findings

No findings of significance were identified.

- 1R05 Fire Protection
- a. <u>Inspection Scope</u> (71111.05Q 8 samples)

The inspectors conducted fire protection tours in the fire zones listed below to ensure that the licensee was controlling transient combustibles in accordance with fire protection procedure FP-9, "Control of Combustibles;" to ensure that ignition sources were controlled in accordance with FP-8, "Controlling of Ignition Sources;" to ensure that fire protection equipment specified in the Pre-Fire Plans (PFPs) was available and functional; and to assess the general material condition of fire protection barriers and fire suppression equipment. The fire zones were selected for inspection based on their relative fire initiation risk and the safe shutdown equipment located in the areas.

- 53-ft elevation of the Control Building, including the Central Control Room (CCR) (Fire Zone 15).
- 15-ft elevation of the Diesel Generator Building; 32 EDG Cell (Fire Zone 101A).
- 15-ft elevation of the Auxiliary Feedwater Building; ABFP Room (Fire Zone 109). The inspectors verified the licensee formally responded to the discovery of a portable space heater cable that had not been evaluated by a fire protection engineer for the impact on fire loading (CR IP3-2004-00500).
- Main generator hydrogen seal oil control panel and dryers; 31 and 32 6.9KV switchgear panels; motor control center MCC-34; station service transformers SST-312 and -313; and the 36 battery charger room (Fire Zones 36 & 37A).
- Upper Cable Tunnel and Penetration Area (Fire Zones: 60A, 73A)
- Lower Cable Tunnel and Penetration Area (Fire Zones: 7A, 74A)

- Primary Auxiliary Building (PAB) Drumming Station (Fire Zone: 21A). The inspectors verified that the licensee formally responded to the discovery of approximately 200 gallons of oil stored in the drumming station (CR-IP3-2004-00668).
- 95-ft elevation inside the vapor containment (Fire Zone: 86A)

b. <u>Findings</u>

<u>Introduction</u>: The inspectors identified a Green NCV for a failure to evaluate transient combustibles in the Primary Auxiliary Building (PAB) that exceeded the maximum fire loading for the area, as specified in the Indian Point 3 Fire Hazards Analysis. Four 55-gallon barrels of lubricating oil were stored in the radiological waste drumming station (Fire Zone 21A) for approximately one year without a transient combustible evaluation (TCE) as required by plant procedures.

<u>Description</u>: On February 24, 2004, the inspectors observed four 55-gallon barrels filled with reactor coolant pump (RCP) motor oil that were stored inside the radiological drumming station on the 55-ft elevation of the PAB. Labels attached to the barrels indicated that they had been stored inside the area since April 2003. Procedure ENN-DC-161, "Transient Combustible Program," requires that a TCE be performed when more than five gallons of combustible liquids are introduced into a Level II combustible control zone. The drumming station is defined as a Level II combustible control zone and is analyzed (reference calculation IP3-CALC-FP-02795) in the Fire Hazards Analysis (IP3-ANAL-FP-02143) for a fire load of approximately 150 million British Thermal Units (BTU). The four barrels contained approximately 200 gallons of oil, which added approximately 29 million BTUs (24%) to the maximum analyzed fire load for Zone 21A. However, the licensee did not perform a TCE for the additional material. No combustible oil was assumed in the fire loading calculation for that zone. To immediately address this non-conforming condition, the licensee relocated the oil-filled barrels to an area that was previously analyzed for transient oil fire loading.

<u>Analysis</u>: Entergy's failure to perform the transient combustible evaluation is a performance deficiency associated with the Initiating Events Cornerstone, and is contrary to NRC regulations. Traditional enforcement does not apply because an event did not occur that resulted in an actual safety consequence, the unevaluated fire loading did not impact the NRC's regulatory function, and the lack of a TCE was not the result of a willful violation of NRC requirements. The inspectors determined that this issue is greater than minor because it represents conditions similar to those in Example 4.k. of Appendix E to IMC 0612, in that the additional fire loading was not bounded by the analyzed fire loading limit for Fire Zone 21A. The inspectors performed a Phase 1 SDP screening and determined that the finding is of very low safety significance because no credible fire scenario was identified due to the design and integrity of the oil storage containers and no credible fire ignition source was present.

<u>Enforcement</u>: Technical Specification 5.4.1, "Administrative Controls," paragraph d. requires that Fire Protection Program procedures be properly implemented. Procedure ENN-DC-161, Transient Combustibles Program," Section 5.2 requires that a TCE be performed when more than five gallons of combustible liquids are introduced into a Level II combustible control zone. Contrary to the above, between April 7, 2003, and February 24, 2004, approximately 200 gallons of combustible oil was stored inside the radiological drumming station in the Primary Auxiliary Building without a TCE completed in accordance with fire protection procedure ENN-DC-161. Because the failure to perform this TCE is of very low safety significance and this condition was entered into the licensee's Corrective Action Program (reference CR-IP3-2004-00668), this issue is being treated as a non-cited violation, consistent with Section VI.A. of the NRC Enforcement Policy. (NCV 05000286/2004002-01, Inadequate implementation of fire protection procedures.)

- 1R06 Flood Protection Measures
- a. <u>Inspection Scope</u> (71111.06 1 sample)

The inspectors reviewed and toured the 55-ft elevation of the PAB containing equipment used to detect and mitigate internal flooding within the building. The plant areas selected contained risk significant equipment based on the IP3 Individual Plant Examination for Internal Events (IPE), Appendix C, "Internal Flood Analysis." Internal flooding initiated from potential fire protection line breaks inside the PAB contribute approximately one percent to the overall core damage frequency for IP3. The inspectors verified the accuracy of the descriptive text in the IPE and compared it with actual plant conditions in the PAB.

b. Findings

No findings of significance were identified.

- 1R07 Heat Sink Performance
- a. <u>Inspection Scope</u> (71111.07A 1 sample)

The inspectors performed observations of a safety-related heat exchanger inspection and cleaning to assess the adequacy of the licensee's preventive maintenance to minimize the effects of biofouling on heat exchanger performance.

Work Order IP3-02-20502: On January 5 and 6, 2004, the inspector observed the condition of the 32 Component Cooling Water (CCW) heat exchanger after it was opened for periodic inspection and cleaning. The inspectors visually examined the heat exchanger when it was first opened to assess the adequacy of Entergy's periodic cleaning to avoid excessive fouling. The inspectors also reviewed the as-found eddy current testing results and compared it to previous testing data.

b. Findings

No findings of significance were identified.

1R11 Operator Regualification Inspection

a. <u>Inspection Scope</u> (71111.11Q - 1 sample)

On January 26, 2004, the inspectors observed simulator training for licensed operators on Operations Team "3A." The inspectors reviewed a remedial training scenario, performed per lesson plan LRQ-SES-60, "Pressurizer Pressure Fails High, Steam Generator Tube Leak, Steam Break in Turbine Hall, Steam Generator Tube Rupture, Failure of Atmospheric to Close," involving a steam line rupture coincident with a steam generator tube rupture. The inspectors determined if the scenario contained: 1) clear event descriptions with realistic initial conditions; 2) clear start and end points; 3) clear descriptions of visible plant symptoms for the crew to recognize; and, 4) clear expectations of operator actions in response to abnormal conditions. This remedial simulator training was required after the crew had failed an "as-found" simulator scenario on January 26, 2004.

During the simulator exercise, the inspectors evaluated the team's performance for: 1) clarity and formality of communications; 2) correct use and implementation of emergency operating procedures (EOPs), off-normal operating procedures (ONOPs), and abnormal operating procedures (AOPs); 3) operators' ability to properly interpret and verify alarms; and, 4) operators' ability to take timely actions in a safe direction based on transient conditions. In addition, the inspectors evaluated the control room supervisor's ability to exercise effective oversight and control of the crew's actions during the exercise. The inspectors verified that the feedback from the instructors was thorough, that they identified specific areas for improvement, and that they reinforced management expectations regarding crew competencies in the areas of procedure use, communications, and peer-checking. The inspectors also evaluated the licensee's post-scenario critique.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness

Corrective Maintenance Effectiveness

a. <u>Inspection Scope</u> (71111.12Q - 2 samples)

The inspectors reviewed the maintenance activities listed below, and recent performance issues with systems and components to assess the effectiveness of the licensee's Maintenance Rule program. Using 10 CFR 50.65, "Requirements for monitoring the effectiveness of maintenance at nuclear power plants," and Regulatory Guide 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," the inspectors verified that Entergy was implementing their Maintenance Rule program

in accordance with NRC regulations and guidelines, properly classifying equipment failures, and using the appropriate performance criteria for Maintenance Rule systems in 10 CFR 50.65 (a)(2) status.

The inspectors also reviewed work orders (WOs), and associated post-maintenance test (PMT) activities, to assess whether: 1) the effect of maintenance work in the plant had been adequately addressed by control room personnel; 2) work planning was adequate for the maintenance performed; 3) the acceptance criteria were clear and adequately demonstrated operational readiness consistent with design and licensing documents; and, 4) the equipment was effectively returned to service. The below listed maintenance activities and associated documents were observed and evaluated.

- WO IP3-02-23322: On February 25 and 26, 2004, the inspector observed maintenance activities to troubleshoot and repair the 32 Weld Channel and Containment Penetration Pressurization System (WCCPPS) air receiver inlet check valve IA-FCV-1177-2. The inlet check valve was observed by the licensee to have seat leakage which was allowing air receiver pressure to drop when instrument air header pressure dropped below air receiver pressure. The inspector verified licensee response to the discovery of a condition which could have adversely impacted the operability of the WCCPPS system.
- WO IP3-03-13352 and WO IP3-04-09079: On February 19, 2004, the inspectors observed the maintenance activities to inspect the mechanical condition and exercise the dampers on the 35 fan cooler unit. Following the inspection, a defective flow switch was identified (CR-IP3-2004-00568), and subsequently replaced. The inspectors also reviewed the post-maintenance test on the flow switch.
- b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessment and Emergent Work Control

a. <u>Inspection Scope</u> (71111.13 - 3 samples)

The inspectors reviewed maintenance risk assessments, work request tags (WRTs), corrective maintenance work order packages for emergent and scheduled work, observed the repair activities in the plant, and discussed the degraded conditions with cognizant plant personnel (system engineers, technicians, and maintenance workers). The inspectors also reviewed the licensee's risk assessments for the impact of emergent work upon the existing work schedule to assure that the emergent work did not impose an unacceptable level of risk to continued plant operations. The below listed activities were reviewed.

• WO IP3-04-09231: Replacement of frequency meter and fuses on 33 Static Inverter. The licensee discovered the 33 static inverter output frequency was reading lower than actual frequency (CR-IP3-2004-00508).

- WO I3-02770961: 31 Charging pump relief valve failure, troubleshooting, and replacement (CR-IP3-2004-02178).
- WRT IP3-04-09235: Valve SWN-55 repair following weld leak (CR-IP3-2004-00778).
- b. <u>Findings</u>

No findings of significance were identified.

1R14 Personnel Performance During Non-routine Plant Evolutions and Events

a. <u>Inspection Scope</u> (71111.14 - 1 sample)

On January 9, 2004, the inspectors observed the control room operator response to the "Over-Temperature Delta-Temperature Channel Trip or Rod Stop" alarm annunciator. The inspectors reviewed operator logs, plant computer data, and strip charts to determine what occurred, and verified the licensee followed the applicable Alarm Response Procedure (ARP). The operators determined that instrument TI-423A, "Over-temperature delta-temperature set point for Loop 33," had failed low (CR-IP3-2004-00072) and caused the alarm to actuate. The instrument was subsequently repaired in accordance with WO IP3-04-9231.

b. Findings

No findings of significance were identified.

- 1R15 Operability Evaluations
- a. <u>Inspection Scope</u> (71111.15 4 samples)

The inspectors selected operability evaluations the licensee had generated that warranted review on the basis of potential risk significance. The selected samples are addressed in the CRs listed below. The inspectors assessed the accuracy of the evaluations, the use and control of compensatory measures, if needed, and compliance with the Technical Specifications (TS). The inspectors review included a verification that the operability evaluations were made as specified by procedure ENN-OP-104, "Operability Determinations." The technical adequacy of the evaluations was reviewed and compared to the TS, Technical Requirements Manual (TRM), the Final Safety Analysis Report (FSAR), and associated design basis documents.

- CR IP3-2004-00116: Containment temperature less than the lower limit (ninety degrees) specified in the FSAR.
- CR IP3-2004-00214: 31 EDG jacket water pump seal leakage.
- CR-IP3-2004-00550: Quadrant power tilt alarm did not initiate during an apparent tilt condition.

- CR-IP3-2004-00315: 32 Station battery rack missing four bolts.
- b. <u>Findings</u>

No findings of significance were identified.

- 1R16 Operator Work-Arounds
- a. <u>Inspection Scope</u> (71111.16 1 sample)

The inspectors performed a review of operator workarounds to assess the cumulative effects on system reliability, availability, and the potential for mis-operation of a system. The inspectors also toured various areas of the plant to evaluate deficient conditions and their potential impact on operators during EOP, AOP, and ONOP usage. This review included the operator work-around list, CCR deficiencies list, CCR turnover sheets, and system operating procedure SPO-SD-01, "Work Control Process." In addition, the inspectors reviewed the work control and condition reporting programs to assess the open WRTs and CRs for potential operator work-around consideration.

b. Findings

No findings of significance were identified.

- 1R19 Post-Maintenance Testing
- a. <u>Inspection Scope</u> (71111.19 4 samples)

The inspectors reviewed post-maintenance test (PMT) procedures and associated testing activities to assess whether: 1) the effect of testing in the plant had been adequately addressed by control room personnel; 2) testing was adequate for the maintenance performed; 3) acceptance criteria were clear and adequately demonstrated operational readiness consistent with design and licensing documents; 4) test instrumentation had current calibrations, range, and accuracy for the application; and, 5) test equipment was removed following testing.

The selected testing activities involved components that were risk significant as identified in the IP3 Individual Plant Examination. The regulatory references for the inspection included Technical Specification 6.8.1.a and 10 CFR 50, Appendix B, Criteria XIV, "Inspection, Test, and Operating Status." The following testing activities were evaluated.

- WO IP3-03-03928: PMT after repair of EDG oil sump drain oil leak; performed on January 20, 2004.
- WO IP3-03-17932: PMT to perform 3PT-Q120C, 33 ABFP surveillance test following repairs to correct rough operation of auxiliary feedwater regulating valve BFD-FCV-406C; performed on February 11, 2004.

- WO IP3-04-13034: PMT on EDG service water cooling outlet valves SWN-FCV-1176 and -1176A following repairs to correct slow valve opening times. The inspector verified licensee response to the discovery of the air supply regulator for the valve operator IA-PR-1643 that failed high (WO IP3-04-04671); performed on March 16, 2004.
- WO IP3-04-04512: PMT on 32 instrument air compressor after rebuilding the compressor discharge check valve and unloader device; performed on March 24, 2004.
- b. Findings

No findings of significance were identified.

- 1R22 <u>Surveillance Testing</u>
- a. <u>Inspection Scope</u> (71111.22 5 samples)

The inspectors observed portions of the surveillance tests listed below and reviewed the test procedures to assess whether: 1) the test pre-conditioned any of the components; 2) the effect of the testing was adequately addressed in the control room; 3) the scheduling and conduct of the tests were consistent with plant conditions; 4) the acceptance criteria demonstrated system operability consistent with design requirements and the licensing basis; 5) the test equipment range and accuracy were adequate for the application, and the test equipment was properly calibrated; 6) the test was performed in the proper sequence in accordance with the test procedure; and, 7) the affected system was properly restored to the correct configuration following the test.

- 3PT-M079B, "32 EDG Functional Test," performed on January 21, 2004.
- 3PT-C01, "Total Leakage Rate Monitoring Tabulation," performed from January 28 February 3, 2004.
- 3PT-Q134A, "31 RHR Pump Functional Test (RHR Cooling Not in Service)," performed on March 3, 2004.
- 3PT-Q120A, "31 ABFP (Motor Driven) Surveillance and IST," performed on March 12, 2004.
- 3PT-2Y014, "Appendix "R" DG Rated Load and Overspeed Test," performed on March 12, 2004.

b. Findings

No findings of significance were identified.

1R23 Temporary Modifications

a. <u>Inspection Scope</u> (71111.23 - 1 sample)

The inspectors reviewed the engineering documentation for Temporary Alteration (TA) No. TA-03-3-061, "Extension for the 31 RCP Motor Lower Bearing Oil Reservoir." The modification involved installation of an extended flexible oil fill line from the RCP motor's lower bearing reservoir to the upper elevation of the vapor containment, to allow periodic oil addition to the reservoir from a lower radiation dose rate area. The TA was necessary because oil was apparently leaking from mechanical joints in piping associated with the reservoir. The leakage is collected in the installed leak collection system.

The inspectors reviewed the design package for the TA WO IP3-03-18623 to ensure that: 1) the TA was appropriately evaluated by the licensee; 2) the TA did not adversely impact the function or operation of the system/component modified; and, 3) the TA was properly installed in accordance with appropriate administrative controls. On February 25, 2004, the inspectors entered the vapor containment with a maintenance crew to observe the addition of oil to the 31 RCP (CR-IP3-2004-00628 and WO IP3-04-12246) using the TA. The inspector evaluated the as-installed alteration to verify the fill line was properly restrained, and did not represent an interference or hazard to other equipment inside containment.

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness

1EP4 Emergency Action Level and Emergency Plan Changes

a. <u>Inspection Scope</u> (71114.04 - 1 sample)

An in-office inspection that reviewed recent changes to the Emergency Plan and Emergency Plan Implementing Procedures was conducted on March 5-12, 2004. A thorough review was conducted for documents related to the risk significant planning standards (RSPS) and a general review was completed for non-RSPS documents. Numerous implementing procedures have been voided for the individual units because they have been incorporated into newer procedures under the combined emergency preparedness program. The review verified the changes satisfied the standards of 10 CFR 50.54(q), 10 CFR 50.47(b), the requirements of 10 CFR 50 Appendix E, the intent of NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," and that the changes did not decrease the effectiveness of the Emergency Plan. These changes are subject to future NRC inspections to ensure that as a result of these changes the Emergency Plan continues to meet NRC regulations.

b. <u>Findings</u>

No findings of significance were identified.

1EP6 Drill Evaluation

a. <u>Inspection Scope</u> (71114.06 - 1 sample)

The inspectors observed an emergency preparedness drill conducted on February 4, 2004. The drill consisted of a simulated inter-system loss-of-coolant accident with an offsite release and a plant sabotage event. The drill also included accountability for all onsite personnel. The inspectors observed the drill and conducted reviews from the participating facilities on site, including the IP3 Plant Simulator, the Technical Support Center (TSC), and the Emergency Operations Facility (EOF). The inspectors focused the reviews on the identification of weaknesses and deficiencies in the classification, notification, and protective action recommendations performed by the licensee during the drill. The inspectors attended the licensee's critique of the drill, held on February 5, 2004, and compared the identified weaknesses and deficiencies to those identified by the licensee to ensure that problem areas were properly identified.

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Occupational Radiation Safety (OS)

2OS1 Access Control to Radiologically Significant Areas

a. <u>Inspection Scope</u> (71121.01 - 1 sample)

The inspector reviewed radiological work activities and practices and procedural implementation during tours and observations of the facilities to verify that the licensee was properly implementing physical, engineering, and administrative controls for access to high radiation areas and other radiologically controlled areas. Implementation of the access control program was reviewed against the criteria contained in 10 CFR 20, site Technical Specifications, and the licensee's procedures.

On March 10, 2004, the inspector observed a pre-job brief and potential airborne radioactivity controls, as conducted by a radiation protection technician, involving the removal and replacement of recirculation isolation valve CH-407 on the 31 charging pump. The performance of this radiological work activity was reviewed with respect to radiation work permit (RWP) requirements and verbal directions provided by the radiation protection technician. During the tour on March 10, the inspector observed work activities in the primary auxiliary, maintenance and outage, and fuel storage

buildings at IP3. During the walkdown, the inspector observed and verified the appropriateness of the posting, labeling, and barricading of radioactive material, radiation, contamination, high radiation, and locked high radiation areas. The inspector reviewed work activities by both radiation workers and radiation protection technicians for compliance with the RWP requirements, radiological protection procedures, and 10 CFR 20 requirements.

b. Findings

No findings of significance were identified.

- 2OS2 ALARA Planning and Controls
- a. <u>Inspection Scope</u> (71121.02 1 sample)

The inspector reviewed the effectiveness of Entergy's program to maintain occupational radiation exposure as low as is reasonably achievable (ALARA).

During the course of this inspection, the inspector reviewed recent Electrical Power Research Institute (EPRI) standard radiation measurement program radiological source term data trends for both IP2 and IP3. Based on reactor coolant system piping dose rate data review, both IP2 and 3 were low when compared to the national PWR median radiological source-term value.

The 2003 exposure performance and 2004 exposure estimates for all three units was reviewed. Collective exposure performance for IP2 and IP3 were the lowest exposures to date for IP2 non-outage (9.3 person-rem) and IP3 outage year (96.1 person rem) exposures. Exposure estimates for 2004 are higher and reflect higher maintenance activities during the IP2 outage (IP2 outage year: 180.8 person-rem; IP3 non-outage: 8.883 person-rem).

The inspector also reviewed the Indian Point ALARA Committee Meeting minutes for November 20, 2003, December 16, 2003, and February 12, 2004. The review was against criteria contained in 10 CFR 20.1101, "Radiation protection programs," 10 CFR 20.1701, "Use of process or other engineering controls," and site procedures.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES (OA)

4OA1 Performance Indicator Verification

a. <u>Inspection Scope</u> (71151 - 5 samples)

The inspectors reviewed the licensee's data submitted to the NRC for the performance indicators (PIs) listed below, and performed an independent verification that the source data was consistent with plant records. The inspectors reviewed the licensee's collecting and reporting process for PI data as described in procedure SAO-114, "Preparation of NRC and WANO Performance Indicators." The purpose of these reviews was to determine whether the methods for reporting PI data were consistent with the guidance contained in Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment Performance Indicator Guidelines," Revisions 1 and 2. The inspection included a review of the indicator definitions, data reporting elements, calculation methods, definition of terms, and clarifying notes for the performance indicators. Plant records and data were sampled and compared to the reported data.

Reactor Safety Cornerstone

- Unplanned Scrams per 7,000 Critical Hours (January 2003 March 2004)
- Scrams with a Loss of Normal Heat Removal (January 2003 March 2004)
- Unplanned Transients per 7,000 Critical Hours (January 2003 March 2004)
- Safety System Unavailability Auxiliary Feedwater System (January December 2003)
- Safety System Unavailability Emergency AC Power System (January -December 2003)

The inspectors reviewed operator log entries, daily morning reports (including the daily CR descriptions), the monthly operating reports, and PI data sheets to determine whether the licensee adequately identified the number of scrams and unplanned power changes greater than 20 percent the occurred during the previous four quarters. This number was compared to the number reported for the PI during the current quarter. The inspectors also verified the accuracy of the number of critical hours reported and the licensee's basis for crediting normal heat removal capability for each of the reported reactor scrams. In addition, the inspectors also interviewed licensee personnel responsible for the PI data collection, evaluation, and distribution.

b. Findings

No findings of significance were identified.

4OA2. Problem Identification and Resolution

1. <u>Daily Review</u> (71152)

As required by Inspection Procedure 71152, "Identification and Resolution of Problems," and in order to help identify repetitive failures or specific human performance issues for follow-up, the inspectors screened all items entered into the licensee's corrective action program. This review was accomplished by reviewing hard copies of each condition report.

2. <u>PI&R Annual Sample Reviews</u>

a. <u>Inspection Scope</u> (71152 - 1 sample)

The inspectors evaluated the licensee's corrective actions to ensure that they were appropriately focused to correct the identified problems. The procedures were reviewed to verify that appropriate changes had been made to properly implement the prescribed corrective actions. The inspectors also evaluated the changes for technical adequacy.

The inspectors selected an instance where the site Quality Assurance (QA) organization had identified a repeat occurrence of purchase orders for safety-related materials and services that did not provide sufficient technical information to satisfy the requirements of American National Standards Institute (ANSI) N45.2.13, "Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants" (CR-IP3-2003-02042, and -02043). The procurement packages were not always appropriately reviewed by the Procurement Engineering Group (PEG) prior to the purchase order being issued.

To follow-up on this issue, the inspectors selected eleven recent purchase order packages for safety-related material and twelve supporting Technical Evaluations to assess the effectiveness of the licensee's corrective actions. The documents reviewed are listed in the supplemental information attached to this report.

b. Findings

No findings of significance were identified.

- 3. Cornerstone: Emergency Preparedness
- a. <u>Inspection Scope</u> (71152 1 sample)

The inspectors reviewed a sample of open CRs, WOs, engineering requests, and procedure change requests to determine the extent and significance of the backlog of work items related to the emergency preparedness (EP) facilities, equipment, procedures, and personnel. The inspectors also reviewed a sample of these items from the last two years including: completed Condition Reports (CRs) for adequacy, consistent with the safety and risk significance, including causal analysis and operability/functionality; EP departmental self-assessments, and Quality Assurance audits and surveillances of EP activities; and completed surveillance tests for the last

two years for accuracy and identification and resolution of problems and/or results not consistent with the acceptance criteria included in the surveillance test and/or the requirements of 10CFR50.47. The inspectors interviewed personnel from the EP organization and personnel supporting the emergency response organization. The inspectors toured all the Indian Point emergency response facilities including: both operations support centers (IP2 and IP3); both technical support centers; the emergency operations facility; the alternate emergency operations facility; and the joint news center. The documents reviewed are listed in the supplemental information attached to this report.

b. Findings

No findings of significance were identified. However, the inspectors identified that the licensee was unable to easily determine the extent of the backlog of open issues related to activities affecting the EP function. For example, the CR system did not contain keywords that supported an overall search for EP; instead, the licensee did a word search of the open CRs using such phrases as EOF (emergency operations facility), TSC (technical support center), and PRM (process radiation monitor). During the inspection, the licensee determined that additional keywords should be added to the CR system allowing for searches by function, in addition to searching by system. The inspectors noted that the station had recently created the new position of EP System Engineer. This individual is responsible for coordinating the review of activities related to the EP function, such as reviewing completed surveillance tests and condition reports.

- 4. Radiation Safety Corrective Action Review
- a. <u>Inspection Scope</u> (71121)

The inspector selected 23 corrective action condition reports associated with the radiation protection program. The inspector verified that problems identified by these condition reports were properly characterized in the licensee's event reporting system, and that applicable causes and corrective actions were identified commensurate with the safety significance of the radiological occurrences.

b. Findings

No findings of significance were identified.

- 4OA3 Event Follow-up
- a. <u>Inspection Scope</u> (71153)

Licensee Event Report Review

(Closed) LER 2003-004-00: "Plant in a Condition Prohibited by Technical Specifications due to Late Recognition of Inoperable Battery as a Result of Improper Documentation," submitted on October 1, 2003. The details of this event and inspector observations were previously documented in inspection report 50-286/03-08, Section 1R14. This LER satisfied the requirements of 10 CFR 50.73. This LER is closed.

(Closed) LER 2003-005-00: "Automatic Reactor Trip due to Reactor Coolant Pump Trip on Under-Frequency Caused by a Degraded Off-Site Grid," submitted on October 14, 2003. The details of this event and inspector observations were previously documented in inspection report 50-286/03-08, Section 1R14. This LER satisfied the requirements of 10 CFR 50.73. This LER is closed.

b. Findings

No findings of significance were identified.

- 40A5 Other Activities
- 1. <u>Labor Dispute Preparations</u>
- a. Inspection Scope (92709)

The inspectors reviewed the licensee's activities to prepare for a potential work disruption after the contract for the labor union at IP3 (Utility Workers Union of America) was due to expire on January 17, 2004. The inspectors reviewed the licensee's staffing plans for operations, maintenance, security, emergency preparedness, and other important operations support departments; the projected work schedules; and communications with offsite law enforcement agencies.

b. Findings

No findings of significance were identified.

- 2. Spent Fuel Material Control and Accounting
- a. Inspection Scope (2515/TI-154)

The inspectors performed Temporary Instruction 2515/TI-154, "Spent Fuel Material Control and Accounting at Nuclear Power Plants." Phase I and Phase II of the inspection were completed during this inspection period. The appropriate documentation for this review was provided separately to NRC management, as required.

b. Findings

No findings of significance were identified.

40A6 Meetings

Exit Meeting Summary

On April 14, 2004, the inspectors presented the inspection results to Mr. C. Schwarz and other Entergy staff members, who acknowledged the inspection results presented. The inspectors asked the licensee what materials examined during the inspection should be considered proprietary. No proprietary information is presented in this report.

ATTACHMENT: SUPPLEMENTAL INFORMATION

A-1

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

W. Axelson	Support Supervisor
J. Boccio	I&C Superintendent
J. Comiotes	Director, Nuclear Safety Assurance
P. Conroy	Manager, Licensing
F. Dacimo	Site Vice President
M. Dampf	Health Physics Manager
G. Dean	Assistant Operations Manager - Training
J. DeRoy	General Manager of Engineering
R. DeCensi	Technical Support Manager
M. Donagan	Unit 1 Project Specialist
P. Donahue	Senior Environmental Specialist
R. Deschamps	Sr. HP/Chemistry Specialist
J. Donnelly	Corrective Actions and Assessment Manager
K. Finucan	Senior Emergency Planner
F. Inzirillo	Emergency Planning Manager
T.R. Jones	Acting Licensing Manager
M. Kerns	Site Chemistry Superintendent
R. LaVera	ALARA/Planning Supervisor
L. Lee	Systems Engineering Supervisor, Support Systems
J. LePere	Waste Services Engineer
D. Mayer	Unit 1 Project Manager
R. Milici	Senior Electrical Engineer
E. O'Donnell	IP3 Assistant Operations Manager
R. Penny	Manager, Engineering Programs
J. Perrotta	Quality Assurance Manager
J. Peters	Unit 2 Plant Chemist
S. Petrosi	Design Engineering Manager
F. Phillips	Emergency Preparedness Staff
P. Rubin	Manager, Site Planning and Outage Services
C. Schwarz	General Manager, Plant Operations
A. Vitale	Operations Manager, IP3
J. Ventosa	Site Operations Manager
R. Walpole	Labor Relations Response Coordinator
C. Wend	Radiation Protection Manager
W. Zolotas	Radiation Protection Technician

A-2

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Closed:

LER 2003-004-00	Plant in a Condition Prohibited by Technical Specifications due to Late Recognition of Inoperable Battery as a Result of Improper
	Documentation.

LER 2003-005-00 Automatic Reactor Trip due to Reactor Coolant Pump Trip on Under-Frequency Caused by a Degraded Off-Site Grid.

Opened and Closed

NCV 2004-002-01 Inadequate implementation of fire protection procedures.

LIST OF DOCUMENTS REVIEWED

Section 1R01: Adverse Weather Protection

ProceduresOD-37Seasonal Weather Preparation

Section 1R04: Equipment Alignment

Procedures	
3PT-Q120B	32 ABFP (Turbine Driven) Surveillance and IST
COL-RW-002	Service Water System
SOP-CC-001B	Component Cooling System Operation

<u>Clearances</u> 3C13-3-AFW-32 ABFP 3C13-3-EDG-32 EDG 12 YR PM 3C13-3-CCW-31 CCW HX MMEC

<u>Drawings</u> 9321-F-20193 Flow Diagram Boiler Feedwater

Work Request Tags WRT IP3-03-03661 WRT IP3-02-20706

Section 1R05: Fire Protection

Fire Pre-Plans	
PFP-4	General Floor Plan - Containment Building
PFP-10	General Floor Plan - Primary Auxiliary Building
PFP-28	Control Room-Control Building
PFP-29	Diesel Generators 21, 32 and 33
PFP-30	Lower Electrical Tunnel
PFP-31	Lower Electrical Penetration Area
PFP-32	Upper Electrical Tunnel
PFP-33	Upper Electrical Penetration Area
PFP-36	General Floor Plan - Turbine Building
PFP-37	6.9KV Switchgear Area - Turbine Building
PFP-38	H2 Seal Oil Unit - Turbine Building
PFP-47	AFW Pump Room-Auxiliary Feedwater Building
Procedures	
FP-9	Control of Combustibles
ENN-DC-161	Transient Combustibles Program
SOP-V-5	Electrical Penetration Tunnels Ventilation System
3PT-SA13	Fire Protection System Smoke Detector Test
3PT-A42	Heat Detector Actuation Test for Fire Door FDR-30-CB
3PT-A013	Electrical Tunnel Heat Detector and Pre-action Water Spray System
	Operability Test

Condition Reports

CR-IP3-2004-00500 CR-IP3-2004-00668

Calculations IP3-CALC-FP-02795 IP3-ANAL-FP-02143

Section 1R06: Flood Protection

Individual Plant Examination for Internal Events (IPE), Appendix C, Internal Flood

Section 1R07: Heat Sink Performance

Work Orders WO IP3-02-20502 WO IP3-99-04461-01

<u>Miscellaneous</u> Integrated Technologies Report PR-32-118, dated January 5, 2004 Integrated Technologies Report PR-32-71, dated December 6, 2001

Section 1R11: Licensed Operator Requalification

Condition Reports CR IP3-04-00273 CR IP3-04-00331

<u>Miscellaneous</u> Remedial Training Plan, January 26, 2004 Simulator Guide LRQ-SES-60

Section 1R12: Maintenance Effectiveness

Condition Reports CR-IP3-2004-00561 CR-IP3-2004-00562 CR-IP3-2004-00568 CR-IP3-2004-00570 CR-IP3-2004-00604 CR-IP3-2004-00646

Miscellaneous Action Plan ISDE-APL-04-001

Procedures FAN-007-VSS

Inspection/Maintenance of Fan Cooler Unit Dampers

Work Orders IP3-03-23322 IP3-03-13352 IP3-04-09079

Condition Reports CR-IP3-2004-00556

Drawings

9321-F-27263	Flow Diagram Penetration and Liner Weld Joint Channel Pressurization
	System
9321-F-20353	Flow Diagram Station Air
9321-F-20363	Flow Diagram Instrument Air

Section 1R13: Maintenance Risk Assessment and Emergent Work Control

Procedures 3-SOP-EL-002

Instrument Bus and Plant Computer Static Inverter Operation

Work Orders and Tags WO IP3-04-09321 WRT IP3-04-09235 WO I3-02770961

Condition Reports CR-IP3-2004-00508 CR-IP3-2002-02178 CR-IP3-2004-00778

Section 1R14: Operator Performance During Non-Routine Evolutions

Procedures ONOP-RPC-1 Instrument Failures

Condition Reports CR-IP3-2004-00072

Work Orders WO IP3-04-04566 WO IP3-04-09231

Section 1R15: Operability Evaluations

Work Order Tags WRT IP3-03-03517 WRT IP3-04-04842

Condition Reports CR-IP3-2004-00116 CR-IP3-2004-00203 CR-IP3-2004-00214 CR-IP3-2004-00315 CR-IP3-2004-00550 CR-IP3-2004-00551 CR-IP3-2004-04928

<u>Miscellaneous</u> Letter from Westinghouse Electric Corporation to the NRC dated June 1, 1992 Operating Experience 04-03

Section 1R16: Operator Workarounds

Procedures	
SPO-SD-01,	Work Control Process

A-6

Section 1R19: Post-Maintenance Testing

<u>Condition Reports</u> CR-IP3-2004-00214 CR-IP3-2004-00909

Procedures

3-PT-M079A31 EDG Functional Test3-PT-Q110C33 ABFP (Motor Driven) Surveillance and IST

Work Orders WO IP3-04-13034 WO IP3-04-09188 WO IP3-04-04671 WO IP3-03-03928 WO IP3-03-17932 WO I3-010341300 WO IP3-04-04512

Section 1R22: Surveillance Testing

Procedures3-PT-M079B32 EDG Functional Test3-PT-C01Total Leakage Rate Monitoring Tabulation3-PT-Q134A,31 RHR Pump Functional Test3-PT-Q120A31 ABFP (Motor Driven) Surveillance and IST3-PT-2Y014Appendix R Diesel Generator Rated Load and Overspeed Test

Section 1R23: Temporary Modifications

Engineering Request IP3-03-18574

Procedures ENN-DC-136 SOP-RCS-1

<u>Condition Reports</u> CR-IP3-2003-03942 CR-IP3-2004-00628

Work Orders IP3-03-18623 IP3-04-12246

Temporary Alteration Change Notices TA-03-3-061-001 TA-03-3-061-002

Section 1EP4: Emergency Action Level and Emergency Plan Changes

Indian Point Energy Center Emergency Plan, Rev 04-01 IP-2003, Control Room Watch Chemist, Rev 7 IP-EP-120, Emergency Classification, Rev 0 IP-EP-130, Emergency Notification and Mobilization, Rev 1 IP-EP-212, Unit 2 Control Room, Rev 0 & 1 IP-EP-213, Unit 3 Control Room, Rev 0 & 1 IP-EP-222, Unit 2 Technical Support Center, Rev 0 & 1 IP-EP-223, Unit 3 Technical Support Center, Rev 0 & 1 IP-EP-232, Unit 2 Operational Support Center, Rev 0 IP-EP-233, Unit 3 Operational Support Center, Rev 0 IP-EP-240, Security, Rev 0 IP-EP-250, Emergency Operations Facility, Rev 1 & 2 IP-EP-251, Alternate Emergency Operations Facility, Rev 2 IP-EP-310. Dose Assessment. Rev 2 & 3 IP-EP-320, Radiological Field Monitoring, Rev 0 & 1 IP-EP-330, Airborne Sample Analysis, Rev 0 IP-EP-350, Emergency Contamination Control, Rev 0 IP-EP-360, Core Damage Assessment, Rev 0 IP-EP-410, Protective Action Recommendations, Rev 3 IP-EP-430, Personnel Accountability, Rev 1 IP-EP-510, Meteorological, Radiological & Plant Data Acquisition System, Rev 2 IP-EP-520, Modular Emergency Assessment & Notification System (MEANS), Rev 2 IP-EP-630, On-Site Medical Emergency, Rev 1

IP-1055, Fire Emergency Response, Rev 16

Section 20S1: Access Control to Radiologically Significant Areas, and Section 20S2: ALARA Planning and Controls:

Condition Reports

CR-IP3-2004-00250, CR-IP3-2004-00504, CR-IP3-2004-00654, CR-IP3-2004-00040, CR-IP3-2003-06358, CR-IP3-2004-00045

Section 4OA2: Problem Identification and Resolution

Program Documents & Procedures:

Emergency Plan for Indian Point Unit NOS. 1 and 2 (4/24/96)

ENN-LI-102, Corrective Action Process, Revision 2

ENN-LI-104, Self-Assessment and Benchmark Process, Revision 3

- Indian Point 3 Emergency Plan, Revision 18 (1988)
- Indian Point Energy Center Emergency Plan, Revision 03-01
- IP-EP-510, Meteorological, Radiological & Plant Data Acquisition System, Revision 2
- IP-EP-AD2, Emergency Planning Controlled Documents, Revision 2
- IP-SMM EP-101, Emergency Plan Program Responsibilities, Revision 0
- IP-SMM-AD-102, IPEC Implementing Procedure Preparation, Review, and Approval, Revision 0

IP-SMM-TQ-110, Emergency Response Training Program, Revision 0

IPEC Emergency Response Training Program Curriculum, Revision 18

Audits, Surveillances & Self-Assessments:

Audit A02-06-I, IP3 Emergency Planning Program (June 2002)

Audit A03-06-I, Emergency Planning, Training, Records and Documents, Quality Assurance, (June 2003)

Self-Assessment, Emergency Response Organization Performance (March 2003)

Self-Assessment, Department Program Performance (February 2003)

Self-Assessment, Performance Evaluation 2002 FEMA Exercise (September 2002)

Self-Assessment, Emergency Planning Inventories (November 2003)

Self-Assessment, TSC & OSC Emergency Locker Position Books (March 2002)

Self-Assessment, Drill Results (February 2003)

Self-Assessment, Drill Results (June 2003)

Self-Assessment, Drill Results (September 2003)

Surveillance SR-03-24, Emergency Planning Exercise (October 2003)

Condition Reports CR-IP3-2003-02042 CR-IP3-2003-02043 CR-IP2-2002-05882 CR-IP3-2002-10626 CR-IP3-2003-01786 CR-IP3-2003-01699 CR-IP3-2002-00787 CR-IP3-2002-01360 CR-IP3-2002-01946 CR-IP3-2002-01947 CR-IP3-2002-02856 CR-IP3-2002-03344 CR-IP3-2002-03360 CR-IP3-2002-03373 CR-IP3-2002-03870 CR-IP3-2002-03871 CR-IP3-2002-03922 CR-IP3-2002-04019 CR-IP3-2002-04244 CR-IP3-2002-04249 CR-IP3-2002-04363 CR-IP3-2002-04385 CR-IP3-2003-00644 CR-IP3-2003-00646 CR-IP3-2003-00685 CR-IP3-2003-00686 CR-IP3-2003-00839 CR-IP3-2003-02965 CR-IP3-2003-05249 CR-IP3-2003-05250 CR-IP3-2003-05251 CR-IP3-2003-05252 CR-IP3-2003-05278 CR-IP3-2003-05279 CR-IP3-2003-05789 CR-IP3-2004-00388 CR-IP3-2004-00486 CR-IP3-2004-00487 CR-IP3-2004-00488

Learning Organization Condition Reports

IP3LO-2002-00103 IP3LO-2003-00087 IP3LO-2003-00087 IP3LO-2003-00088 IP3LO-2003-00090 IP3LO-2003-00091 IP3LO-2003-00318 IP3LO-2003-00442 IP3LO-2003-00472 IP3LO-2003-00519 IP3LO-2003-00528

Surveillance Tests

3-PC-OL48, Fuel Storage Building Radiation Monitor Calibration R-5, Revision 1 3-PC-OL49A, Steam Generator Blowdown Radiation Monitor Calibration R-19, Revision 0 3-PC-OL58A, Process Radiation Monitors R-11,12 Calibration, Revision 1 3-PC-R14, Process Radiation Monitor Calibration, Revision 18 3-PC-R36, Channel Calibration of Wide Range Gas Monitor R-27, Revision 15 3-PC-R46A, Containment High Range Radiation Monitor Calibration R-25, Revision 11 3-PC-R58A, Process Radiation Monitors R-11,12 Calibration, Revision 8 3-PT-M032, Seismic Instrumentation Channel Check, Revision 15 3-PT-M36, Functional Test or Radiation Monitor R-14, Revision 14 3-PT-M36A, Process Radiation Monitor R-19, Revision 13 3-PT-M59, Wide Range Plant Vent Gas Monitor R-27, Revision 15 3-PT-Q3B, Fuel Storage Building Radiation Monitor Functional R-5, Revision 18 3-PT-Q56, Channel Functional Test of V.C. Radiation Monitors R-25, 26, Revision 17 3-PT-Q70. Steam Generator Blowdown Radiation Monitor Functional R-19. Revision 20 3-PT-R37A, Triaxial Time-History Accelerograph Calibration, Revision 3 3-PT-R37B, Triaxial Peak Accelerograph Calibration, Revision 2 3-PT-R37C, Triaxial Response Time Spectrum Recorders Calibration, Revision 3 3-PT-SA24, Seismic Instrumentation Functional, Revision 14 3-PT-SA37, Meteorological Tower Semi-Annual Sensor Calibration, Revision 4 (10/14/03) RE-EP-13-06, Wind Direction System Calibration and Substitution Box Test Procedures, Revision 8 (10/16/03)

Purchase Orders 4500528735 4500528189 4500529389 4500528113 4500528250 4500529324 4500529254 4500528935 4500528592 4500528353 4500528263 **Technical Evaluations** 03-001171 03-000736 03-000617 03-000803 03-000915 01-001315 96-008707 97-010832 95-000536 96-006605 95-001632 97-010459 Miscellaneous Documents ANSI N.45.2.13-1976

Work Orders I3-000315000 I3-020131000 I3-920043700 I3-980076700 I3-990265800 IP3-03-04109 IP3-04-11479

A-11

LIST OF ACRONYMS

ABFP AFW ALARA ANSI AOP BTU CAP CCR CCW CFR COL CR ECT EDG EOF EOP EP FCU FP FSAR HRA HX IMC IP2 IP3 IPE IPEC kV NCV NRC OA OD ONOP OS PAB PFP PI PM PMT PRM PWR QA PCP	Auxiliary Boiler Feedwater Pump auxiliary feed water as low as reasonably achievable American National Standards Institute Abnormal Operating Procedure British Thermal Unit Corrective Action Program central control room Component Cooling Water Code of Federal Regulations check-off list condition report Eddy Current Testing emergency Operations Facility Emergency Operating Procedure Emergency Operating Procedure Emergency Preparedness fan cooler unit fire protection Final Safety Analysis Report High Radiation Area Heat Exchanger Inspection Manual Chapter Indian Point 2 Indian Point 3 Individual Plant Examination India Point Energy Center kilo volts Non-cited Violation Nuclear Regulatory Commission Other Activities operability determination off-normal operating procedure Occupational Radiation Safety primary auxiliary building Pre-Fire Plan performance indicator preventive maintenance post-maintenance test Process Radiation Monitor Pressurized water reactor Quality Assurance
QA	Quality Assurance
RCP	reactor coolant pump
RHR	residual heat removal
RSPS	Risk Significant Planning Standard
RWP	Radiation Work Permit
SDP	Significance Determination Process
SG	steam generator

A-12

SOP	system operating procedure
SW	service water
ТА	temporary alteration
TCE	Transient Combustible Evaluation
ТМ	temporary modification
TS	Technical Specifications
TSC	Technical Support Center
WCCPPS	Weld Channel and Containment Penetration Pressurization System
WO	work order
WRT	work request tag