

August 3, 2005

Mr. Fred 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 STATION UNIT 2 - NRC PROBLEM
IDENTIFICATION AND RESOLUTION INSPECTION REPORT 05000247/2005008

Dear Mr. Dacimo:

On June 30, 2005, the NRC completed a team inspection at your Indian Point Nuclear Generating Station Unit 2 (IP2). The enclosed inspection report presents the results of that inspection, which were discussed with you on June 30, 2005.

This inspection was an examination of activities conducted under your license as they relate to the identification and resolution of problems, and compliance with the Commission's rules and regulations and the conditions of your operating license. Within these areas, the inspection involved examination of selected procedures and representative records, observations of activities, and interviews with personnel.

On the basis of the sample selected for review, the team concluded that in general, problems were properly identified, evaluated, and corrected. The team identified one finding of very low safety significance (Green).

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

If you have any questions, please contact me at (610) 337-5046.

Sincerely,

/RA/

Marvin D. Sykes, Chief
Engineering Branch 1
Division of Reactor Safety

Docket No. 50-247
License No. DPR-26

Mr. Fred Dacimo

2

Enclosure: Inspection Report 05000247/2005008
w/Attachment: Supplemental Information

cc w/encl:

G. J. Taylor, Chief Executive Officer, Entergy Operations, Inc.
M. R. Kansler, President - Entergy Nuclear Operations, Inc.
J. T. Herron, Senior Vice President and Chief Operations Officer
C. Schwarz, Vice President, Operations Support
P. Rubin, General Manager - Plant Operations
O. Limpas, Vice President, Engineering
J. McCann, Director, Licensing
C. D. Faison, Manager, Licensing, Entergy Nuclear Operations, Inc.
M. J. Colomb, Director of Oversight, Entergy Nuclear Operations, Inc
J. Comiotes, Director, Nuclear Safety Assurance
P. Conroy, Manager, Licensing, Entergy Nuclear Operations, Inc.
T. C. McCullough, Assistant General Counsel, Entergy Nuclear Operations, Inc.
P. R. Smith, President, New York State Energy, Research and Development Authority
P. Eddy, Electric Division, New York State Department of Public Service
C. Donaldson, Esquire, Assistant Attorney General, New York Department of Law
Mayor, Village of Buchanan
J. G. Testa, Mayor, City of Peekskill
R. Albanese, Four County Coordinator
S. Lousteau, Treasury Department, Entergy Services, Inc.
Chairman, Standing Committee on Energy, NYS Assembly
Chairman, Standing Committee on Environmental Conservation, NYS Assembly
Chairman, Committee on Corporations, Authorities, and Commissions
M. Slobodien, Director, Emergency Planning
B. Brandenburg, Assistant General Counsel
Assemblywoman Sandra Galef, NYS Assembly
County Clerk, Westchester County Legislature
A. Spano, Westchester County Executive
R. Bondi, Putnam County Executive
C. Vanderhoef, Rockland County Executive
E. A. Diana, Orange County Executive
T. Judson, Central NY Citizens Awareness Network
M. Elie, Citizens Awareness Network
D. Lochbaum, Nuclear Safety Engineer, Union of Concerned Scientists
Public Citizen's Critical Mass Energy Project
M. Mariotte, Nuclear Information & Resources Service
F. Zalzman, Pace Law School, Energy Project
L. Puglisi, Supervisor, Town of Cortlandt
Congresswoman Sue W. Kelly
Congresswoman Nita Lowey
Senator Hillary Rodham Clinton
Senator Charles Schumer
J. Riccio, Greenpeace
A. Matthiessen, Executive Director, Riverkeeper, Inc.
M. Kaplowitz, Chairman of County Environment & Health Committee
A. Reynolds, Environmental Advocates

Mr. Fred Dacimo

3

cc w/encl: (Cont'd)

M. Jacobs, Director, Longview School

D. Katz, Executive Director, Citizens Awareness Network

P. Leventhal, The Nuclear Control Institute

K. Coplan, Pace Environmental Litigation Clinic

W. DiProfio, PWR SRC Consultant

D. C. Poole, PWR SRC Consultant

W. Russell, PWR SRC Consultant

W. Little, Associate Attorney, NYSDEC

R. Christman, Supt. Operations Training

L. Cortopassi, Manager Training and Development

Mr. Fred Dacimo

4

Distribution w/encl: (VIA E-MAIL)

S. Collins, RA
 M. Dapas, DRA
 S. Lee, RI OEDO
 R. Laufer, NRR
 J. Boska, PM, NRR
 B. McDermott, DRP
 D. Jackson, DRP
 C. Long, DRP
 P. Habighorst, DRP, Senior Resident Inspector - Indian Point 2
 M. Cox, DRP, Resident Inspector - Indian Point 2
 R. Martin, DRP, Resident OA
 Region I Docket Room (w/concurrences)
 ROPreports@nrc.gov
 A. Blough, DRS
 M. Skyes, DRS
 G. Meyer, DRS

DOCUMENT NAME: C:\MyFiles\Copies\A IP-2 PIR 05-08.wpd

SISP Review Complete: MDS (Reviewer's Initials)

After declaring this document "An Official Agency Record" it **will** be released to the Public.

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	RI/DRS	RI/DRS/SRA	RI/DRP	RI/DRS		
NAME	GMeyer (GWM)	WSchmidt (WLS)	BMcDermott (BJM)	MSykes (MDS)		
DATE	08/01/05	08/02/05	08/03/05	08/03/05		

OFFICIAL RECORD COPY

U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No: 50-247

License No: DPR-26

Report No: 05000247/2005008

Licensee: Entergy Nuclear Northeast

Facility: Indian Point Nuclear Generating Unit 2

Location: 295 Broadway, Suite 3
Buchanan, NY 10511-0308

Dates: June 13-30, 2005

Inspectors: G. Meyer, DRS, Senior Reactor Inspector (Team Leader)
M. Cox, DRP, Senior Resident Inspector
A. Passarelli, DRS, Reactor Inspector
J. Richmond, DRS, Reactor Inspector
A. Rosebrook, DRS, Reactor Inspector

Approved by: Marvin D. Sykes, Chief
Engineering Branch 1
Division of Reactor Safety

Enclosure

SUMMARY OF FINDINGS

IR 05000247/2005008; 06/13/2005 - 06/30/2005; Indian Point Nuclear Generating Station Unit 2; biennial baseline inspection of the identification and resolution of problems; problem identification and resolution.

This team inspection was performed by four regional inspectors and a resident inspector. One finding of very low safety significance (Green) was identified during this inspection. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process (SDP)." Findings for which the SDP does not apply may be "Green" or be assigned a severity level after NRC management review. 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.

Identification and Resolution of Problems

The team determined that Entergy was generally effective at identifying problems and placing them in the corrective action program (CAP). Once entered into the system, these items were screened and prioritized in a timely manner using established criteria, and they were properly evaluated commensurate with their safety significance. Overall, the evaluations reasonably identified the causes of the problem, assessed the extent of condition, and developed appropriate corrective actions. Corrective actions were typically effective, but the team found that in one case, the subject of a previous NRC NCV, emergency preparedness equipment was not being maintained properly; this resulted in a finding. The team found that Entergy's self-assessments and audits were self-critical and consistent with the team's observations.

A. NRC Identified and Self-Revealing Findings

Cornerstone: Emergency Preparedness

- **Green.** The team identified that testing of the Technical Support Center (TSC) diesel generator had been inadequate and not in accordance with the Technical Requirements Manual (TRM). Following the September 2003 installation of a temporary TSC diesel generator, Entergy inappropriately deleted the annual generator load test and inadvertently monitored the wrong battery for the in-service diesel, both TRM-specified activities. On June 22, 2005, Entergy performed the battery check and a load test; in the as-found condition the in-service TSC diesel performed acceptably and was determined to be operable. The team determined that this represented an NRC-identified finding of very low safety significance (Green). This finding was associated with the cross-cutting areas of problem identification and resolution (PI&R) and human performance.

This finding was more than minor, because it is associated with the facilities and equipment attribute of the Emergency Preparedness Cornerstone and potentially affected the cornerstone objective of ensuring the capability to implement adequate measures to protect the public health and safety in the event of a radiological emergency. The finding was determined to be of very low safety significance based on the equipment being operable when the inspections and testing were performed. (Section 4OA2.c)

B. Licensee-Identified Violations

None.

Report Details

4. OTHER ACTIVITIES (OA)

4OA2 Problem Identification and Resolution

a. Effectiveness of Problem Identification

(1) Inspection Scope

The team reviewed the procedures describing the corrective action program (CAP) at Entergy's Indian Point Nuclear Generating Unit 2. Entergy identifies problems by initiating condition reports (CRs) for conditions adverse to quality, plant equipment deficiencies, industrial or radiological safety concerns, or other significant issues. Condition reports are subsequently screened for operability, categorized by significance level (A through D), and assigned to personnel for evaluation and resolution.

The team reviewed items selected across the seven cornerstones of safety in the NRC's Reactor Oversight Program to determine if problems were being properly identified, characterized, and entered into the CAP for evaluation and resolution. The team selected items from the maintenance, operations, engineering, emergency planning, security, radiological control, and oversight programs to ensure that Entergy was appropriately considering problems identified in each. The team considered risk insights from Entergy's probabilistic risk assessment (PRA) to focus the sample selection and system walkdowns on risk-significant components. The team used this information to select a risk-informed sample of CRs that had been issued since the last NRC PI&R inspection, which was completed in December 2003.

The team reviewed a sample of Entergy's audits and self-assessments, including an audit of the CAP. This review was performed to determine if problems identified through these evaluations were entered into the CAP, and whether the corrective actions were properly completed to resolve the deficiencies. The effectiveness of the audits and self-assessments was evaluated by comparing audit and self-assessment results against self-revealing and NRC-identified findings.

Based on a review of NRC and Entergy risk analyses, the team selected four high risk-significance systems (component cooling water (CCW), essential service water (SW), 480 VAC, and 125 VDC) to focus the review of corrective action processes. For the selected risk-significant systems, the team reviewed a sample of applicable system health reports, work requests, engineering documents, plant log entries, and results from surveillance tests and maintenance tasks. For these selected systems, the team also interviewed cognizant station personnel and completed system walkdowns to assess material condition and system performance.

In addition, the team interviewed plant staff and management to determine their understanding of and involvement with the CAP. The specific documents reviewed and referenced during the inspection are listed in the attachment to this report.

Enclosure

(2) Observations and Findings

No findings of significance were identified.

The team concluded that the station was generally effective at problem identification. Entergy staff generally had adequate knowledge of the CAP, and identified problems and entered them into the program at an appropriate threshold. There were few deficiencies identified by the team that had not been previously identified by Entergy. Station staff promptly initiated CRs, as appropriate, in response to deficiencies or issues raised by the inspection team.

The team found that self-assessments and audits were self-critical and generally consistent with the team's observations, and that identified issues were appropriately addressed in the CAP.

b. Prioritization and Evaluation of Issues

(1) Inspection Scope

The team reviewed the CRs listed in the attachment to this report to assess whether Entergy adequately prioritized and evaluated problems. The team selected the CRs in areas to cover the seven cornerstones of safety in the NRC's Reactor Oversight Program. The team also considered risk insights from Entergy's PRA to focus the inspection sample in general with emphasis on the four selected risk-significant systems. The reviews included the appropriateness of the assigned significance level, the timeliness of problem resolution, and the scope and depth of the causal analysis. For significant conditions adverse to quality, the team reviewed Entergy's assessment of the extent of condition and the determination of corrective actions to preclude recurrence. A portion of the items chosen for review was expanded to five years. The team observed Condition Review Group (CRG) meetings, in which Entergy managers reviewed incoming CRs and evaluated preliminary corrective action assignments, analyses, and plans.

In addition, the team reviewed Entergy's evaluation of industry operating experience information for applicability to IP2. For applicable CRs, the team reviewed Entergy's assessment of equipment operability and reportability requirements.

(2) Observations and Findings

No findings of significance were identified.

The team concluded that Entergy generally screened and evaluated problems at the correct significance level. The staff was generally effective at classifying and performing operability evaluations and reportability determinations for discrepant conditions. Additionally, the team determined that the CRG was effective in reviewing and prioritizing CRs, and evaluating causal analyses at a plant management level.

The team reviewed numerous root cause evaluations and found that the evaluations were generally adequate. In most cases, the evaluations were thorough and corrective actions would be reasonably expected to prevent recurrence.

Nonetheless, in one instance the evaluation of a procedure change associated with a corrective action was inaccurate and represented a minor violation. During a review of corrective actions associated with CR #IP2-2004-3804, the team identified an error in a corrective action. Under this CR the EDG manual operations procedure, 2-SOP-27.3.1.2, was being updated with a precaution and limitation statement to ensure that each EDG would be declared inoperable if either air start motor was taken out of service until it was verified that the EDG could come up to speed and voltage in the required time on the remaining air start motor. The team noted that starting logic differences on 22 EDG would make it inoperable if either air start motor was out of service, regardless of the determined speed and voltage when started on the remaining air start motor. The inspectors determined this was a violation of 10 CFR Appendix B Criterion VI, Document Control, because the procedure change review was not comprehensive enough to identify the error. The inspectors determined this issue to be minor, because the change had not resulted in an actual condition in which 22 EDG had been inappropriately declared operable with only one air start motor available. Entergy placed this issue in their corrective actions program as CR# IP2-2005-02513 and revised the procedure to clarify that 22 EDG would be inoperable if either air start motor was removed from service.

c. Effectiveness of Corrective Actions

(1) Inspection Scope

The team reviewed the corrective actions associated with selected CRs to determine whether the actions addressed the identified causes of the problems. The team reviewed CRs for repetitive problems to determine whether previous corrective actions were effective. The team also reviewed Entergy's timeliness in implementing corrective actions and their effectiveness in precluding recurrence of significant conditions adverse to quality. Furthermore, the team assessed the backlog of corrective actions to determine if any, individually or collectively, represented an increased risk due to delays in implementation. The team also reviewed NCVs issued since the last inspection of Entergy's CAP to determine if issues placed in the program had been properly evaluated and corrected. The team also attended the June 16 and 28 Corrective Action Review Boards meetings.

(2) Observations and Findings

Overall, the team concluded that Entergy generally developed and implemented corrective actions that were appropriate and effective. Based on the sample reviewed, the team determined that corrective actions were generally completed in a timely manner. However, the team identified a finding regarding corrective actions for a previous NRC finding were not effective. Also, the team identified two minor violations for untimely corrective actions.

.1 TSC Diesel Testing and Monitoring

Introduction: The team identified that testing and monitoring of the Technical Support Center (TSC) diesel generator had been inadequate and not in accordance with the Technical Requirements Manual (TRM). Following the September 2003 installation of a temporary TSC diesel generator, Entergy inappropriately deleted the annual generator load test and inadvertently monitored the wrong battery for the in-service diesel, both TRM-specified activities. On June 22, 2005, Entergy performed the battery check and a load test; in the as-found condition the in-service TSC diesel performed acceptably and was determined to be operable. The team determined that this represented an NRC-identified finding of very low safety significance (Green). This finding was associated with the cross-cutting areas of problem identification and resolution (PI&R) and human performance.

Description: During the August 2003 loss of offsite power event, the TSC diesel did not provide emergency backup power to the TSC. In September 2003, IP2 performed temporary alteration TA-03-2-190 (the TA), which installed a temporary diesel generator in place of the inoperable (permanent) TSC diesel, until the issues with the permanent diesel could be resolved. A Green finding was issued, because the conditions which caused the diesel's problems had previously been identified by IP2, but had not been resolved in a timely manner (NRC Inspection Report 50-247/2003-013).

The team reviewed Entergy's corrective actions for the 2003 TSC diesel failure. The temporary diesel was still installed to perform the function of the inoperable permanent diesel. Engineering evaluations had initially determined that the diesel generator was overloaded, but subsequent analyses found that the problems were caused by an inadequate voltage regulator. Engineering design changes were in-progress to modify the voltage regulator. Also, planned corrective actions included revising PT-M67, "TSC Diesel Test," to change the annual generator load test to be at 100% of rated load.

In January 2004 temporary procedure change (TPC) 04-0019 to PT-M67 deleted the steps that would have performed the load test on the temporary diesel. The team identified that as a result, no load test of the in-service diesel generator had been performed from September 2003 (initial installation load test) until June 2005. TRM 3.8.C.3 specified that an annual load test be performed on the TSC diesel generator.

The team also identified that the TRM-specified monthly inspection of the TSC diesel battery had not been performed on the in-service batteries from May 2004 to June 2005. Specifically, a procedure change (TPC-04-0101) to PT-M67, intended to clarify which battery should be inspected, had resulted in the permanent battery (out of service) being the one inspected. As a result, the in-service diesel battery was not inspected from May 2004 until June 2005. In June 2005, Entergy inspected the battery and determined that in its as-found condition the battery was operable. Nonetheless, because of excessive corrosion on the battery terminals, Entergy replaced the battery.

The team identified the following errors and missed opportunities regarding the above problems.

Enclosure

- The corrective actions for the August 2003 TSC diesel generator failure were ineffective, in that a full load test was determined to be a corrective action, but the action item (CA 06 on CR 2003-5475) was closed on the basis of the existing less-than-full load test, which was then subsequently deleted. Further, a later effectiveness review of this CR did not identify the improper closeout or the lack of a load test.
- There appeared to be a mindset regarding the load testing of the temporary diesel generator which enabled the deletion of test to be justified. The temporary diesel did not have an installed means of paralleling it with an energized bus. Nonetheless, neither did the Unit 3 TSC diesel generator, which was being load tested, and a load test was later performed on the Unit 2 TSC diesel generator.
- The review and approval of the load test's deletion was inadequate, including a 10 CFR 50.59 review, in that it did not address the existing TRM specification to load test the diesel.
- Following the December 2003 implementation of the Improved Technical Specifications (ITS) and TRM, NRC inspectors identified surveillance requirements which were not being met. To address this, Entergy performed an extensive procedure review as part of an Apparent Cause Evaluation (CR 2004-5226). While TRM 3.8.C on the TSC diesel was reviewed, the lack of an annual load test of the diesel was not identified.
- CR 2003-7389 identified the TA was implemented prior to the TRM being issued in December 2003. Nonetheless, the CR incorrectly concluded the TRM only applied to the permanent (out-of-service) diesel and that the TA controlled the testing of the temporary (in-service) diesel.

Analysis: This finding involved a performance deficiency, because the multiple human errors and corrective action shortcomings noted above resulted in TRM-specified surveillance activities not being performed on the in-service TSC diesel generator.

This finding was more than minor, because it adversely affected the surveillance and testing aspect of the facilities and equipment attribute in the Emergency Preparedness Cornerstone and potentially affected the cornerstone objective of ensuring that the licensee is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. Non-Risk Significant Emergency Planning Standard 10 CFR 50.47(b)(8), that adequate facilities and equipment are maintained to support emergency response, also addresses this area.

This finding was determined to have very low safety significance (Green), because NRC MC 0609 Appendix B, "Emergency Preparedness Significance Determination Process," Section 4.8, "Failure to Comply with Planning Standard 10 CFR 50.47(b)(8)," stated that an example of a green finding included "Changes have been made to the OSC, TSC, or EOF that do not comply with the Plan, but the facilities remain functional." Although battery inspections and an annual diesel load test were not performed during an

extended period, the as-found condition of the equipment was determined to be operable when the inspections and testing were performed. Entergy entered this finding into their corrective action program as CR 2005-2432 and 2005-2557.

A contributing cause of the finding was related to the human performance cross-cutting area based on the personnel errors noted above in the procedure change, procedure review, and corrective action closeout processes. Also, a contributing cause of the finding was related to the problem identification and resolution (PI&R) cross-cutting area based on ineffective corrective actions and reviews noted above.

Enforcement: No violation of regulatory requirements occurred. **(FIN 05000247/2005008-01)**

.2 RPS Resistor

The team reviewed the corrective actions associated with a previously identified Green non-cited violation (NCV 50-247/04-02-02) and found that the corrective actions were untimely. Entergy had installed a resistor into a reactor protection system (RPS) circuit that did not conform to the specifications prescribed by the vendor without any engineering evaluation to determine potential impacts of this change. The manufacturer of the controller had specified a precision 200 ohm, 2 watt resistor on the input of a lead/lag controller in the OTDT (overtemperature delta temperature) instrument loop. During the controller replacement, Entergy installed a 200 ohm, ½ watt resistor. Entergy had entered this in their corrective actions program under CR IP2-2004-00731. An initial operability assessment concluded that this was not an immediate operability concern.

A corrective action associated with the CR # IP2-2004-00731 stated that the three remaining replacement controllers would be sent back to the manufacturer to be properly configured so that the input resistor was no longer necessary. Once returned, the controller with the improperly sized resistor would be replaced. Work Order #IP2-04-14965 was written to replace the controller and the corrective action was closed to the work order. The inspectors noted that the work order for the controller replacement was still in planning 17 months after the issue was identified and no additional engineering evaluation had been performed to ensure that long term operability of the controller would not be impacted.

The inspectors determined that this represented a violation of 10 CFR 50, Appendix B, Criterion XVI, Corrective Actions, due to untimely corrective actions; however, it was determined to be minor, because the resistor did not significantly impact system reliability over the time period and a review of surveillance testing showed no degradation in controller accuracy.

.3 Degraded Seismic Structural Supports in Strainer Room

During a service water system walkdown, the team observed extensive corrosion on seismic structural supports in the strainer room. Some structural supports for conduit and junction boxes had corroded to the extent that they were completely rusted through and no longer touched the floor. In follow-up to those field observations, the inspectors identified numerous closed CRs, which dated back to 1997, that repetitively identified similar conditions in the strainer room. In each case, the CR had closed out the corrective actions to work orders. However, the work orders were still open and the degraded conditions remained uncorrected. The inspectors reviewed a sampling of operability determinations, and pipe stress and structural calculations, and discussed the current conditions with IP2 structural engineering. The inspectors noted that modification PRJ-04-2-055 was scoped to accomplish the previous open work orders, as well as perform additional restoration for the strainer room, and was scheduled to begin work later in 2005.

Although an adequate basis of operability for the degraded conditions appeared to exist, the inspectors concluded that IP2's actions to correct these conditions adverse to quality were untimely. The inspectors determined that the observed field conditions constituted a minor violation of 10 CFR 50 Appendix B, Criterion XVI, Corrective Action, which requires that conditions adverse to quality be promptly identified and corrected. This issue was considered minor, because the affected equipment remained operable.

d. Assessment of Safety Conscious Work Environment

(1) Inspection Scope

The team interviewed various plant personnel to develop a general perspective of the safety-conscious work environment (SCWE), including whether employees were reluctant to raise safety concerns. Additionally, the team reviewed Entergy's Employee Concerns Program (ECP) to evaluate if employees were aware of the program and had used it to raise concerns.

(2) Observations and Findings

No findings of significance were identified.

The team determined that individuals were aware of the importance of nuclear safety, stated a willingness to raise safety issues, had not experienced retaliation in any prior issues raised, and had an adequate knowledge of the CAP and ECP. Based on these limited interviews, the team concluded that there was no evidence of an unacceptable SCWE.

4OA6 Meetings, including Exit

The team presented the inspection results to Mr. Fred Dacimo and members of the Entergy staff on June 30, 2005. No proprietary information was retained by the team.

ATTACHMENT: SUPPLEMENTAL INFORMATION

Enclosure

ATTACHMENT

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

J. Balletta, Supervisor, I&C Procedure Group
T. Barry, Manager, Security
T. Beasley, System Engineer - Service Water
J. Comiotes, Director, Nuclear Safety Assurance
P. Conroy, Manager, Licensing
F. Dacimo, Site Vice President
J. Donnelly, Manager, Corrective Action & Assessment
G. Dahl, Licensing Engineer
M. Garofalo, Supervisor - Quality Assurance
J. Herrera, System Engineer - 125 VDC
C. Ingrassia, System Engineer - 480 VAC
C. Johnson, Security Specialist
M. Kempski, System Engineering
C. Leach, Director, Engineering
N. Nilsen, Supervisor, Maintenance Support
J. O'Driscoll, System Engineer - Component Cooling Water
J. Perrotta, Manager, Quality Assurance
S. Petrosi, Manager, Design Engineering
J. Raffaele, Supervisor, Electrical Design Engineering
P. Rubin, General Manager, Plant Operations
B. Taggart, Employee Concerns Coordinator

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed

05000247/2005008-01 FIN TSC Diesel Testing and Monitoring (Section 4OA2.c)

LIST OF DOCUMENTS REVIEWED

Procedures

EN-AD-101, Procedure Process
EN-LI-102, revision 1, "Corrective Action Process"
EN-LI-111, Operational Decision-Making Issue (ODMI) Process
EN-LI-118, revision 0, "Root Cause Analysis Process"
EN-OE-100, revision 1, "Operating Experience Program"
ENN-LI-100, revision 5, "Process Applicability Determination"
ENN-LI-101, revision 7, "10CFR50.59 Review Process"
ENN-OP-104, revision 2, "Operability Determinations"
BRK-P-003-A, revision 9, "Westinghouse Model DB075 Breaker Preventive Maintenance"
ELC-403-BUS, revision 0, "Inspection and Cleaning of 480 Volt Bus Duct"
IP-SMM-AD-102, revision 3, "Implementing Procedure Preparation, Review, and Approval"
IP-SMM-LI-113, revision 2, "TS Bases, TRM, and UFSAR Control"
IP-SMM-MA-103, IPEC Troubleshooting and Repair
IP-SMM-MA-118, revision 0, "Foreign Material Exclusion"
MCC-P-001-A, revision 13, "480 Volt Motor Control Center Major Maintenance"
MS-104, revision 2, "Inspection & Cleaning of Bus Bars, Contacts, Wiring & Insulators"
OAP-001, revision 6, "Conduct of Operations"
OAP-007, revision 1, "Containment Entry and Egress"
OAP-035, revision 1, "TS and TRM Adherence and Use"
PC-EM29, revision 6, "Wide Range Gas Effluent Radiation Monitor R-27 Transfer Calibration"
PT-M67 Procedure Change for revision 7 to 8, "TRM References", dated 10-22-2003
PT-M67, revision 8, "Technical Support Center Diesel"
PT-M67, revision 9, "Technical Support Center Diesel"
PT-Q19-A, revision 5, "Technical Support Center East Bank (SAS) Battery Quarterly Test"
PT-Q19-B, revision 6, "Technical Support Center West Bank (PICS) Battery Quarterly Test"
PT-Q42, revision 19, "Wide Range Noble Gas Monitor R-27 Functional Test"
PT-Q42, revision 24, "Wide Range Noble Gas Monitor R-27 Functional Test"
TPC-04-0019, "Conditional TPC for Test on Temporarily Installed TSC Diesel"
TPC-04-0101, "Conditional TPC for Monthly Test on Temporarily Installed TSC Diesel"
2-SOP-27-3-1-2, 22 Emergency Diesel Generator Manual Operation
2-SOP-4.1.2, Component Cooling Water Operation

Drawings:

IP2-SOD-002, Component Cooling Water System
IP2-SOD-014, RCP Seal Package
IP2-SOD-001, Component Cooling Water Containment Supply and Return

Self Assessments and CR Effectiveness Reviews

IPEC Cross-Functional Corporate Assessment, June 22, 2005
Quarterly Trend Report - 1st Quarter 2005
LO-2003-00532, CR 2003-05475 Root Cause Analysis Effectiveness Review
LO-2004-00161, Maintenance Integration
LO-2004-00162, Maintenance Procedures and Work Instructions
LO-2004-00182, Quality Assurance Department

LO-2004-00335, Focused Self-Assessment of Security
LO-2005-00170, Quarterly Integrated Self-Assessment/Trend Report
LO-2005-00171, Quarterly Integrated Self-Assessment/Trend Report

Quality Assurance Audits and Assessments
A03-16I, "Measuring and Test Equipment"

Quality Assurance Surveillances
QS-2004-IP-17, "Motor Operated Valve Controllers at IP2"

NRC Non-Cited Violations and Findings

FIN 2003-013-04
FIN 2003-013-05
NCV 2004-002-02
FIN 2004-003-01
FIN 2004-003-02
FIN 2004-008-01
NCV 2004-006-02
NCV 2004-012-03
NCV 2004-012-06

Miscellaneous Documents

System Health Reports for 125 VDC, 480 VAC, Component Cooling Water, and Service Water
TA-03-2-190-001, "Temporary Alteration to Provide Temporary TSC Diesel Generator"
Repetitive Task PM-NPMEL-3110, "Manhole-24 3-month Inspection, per EDS-262"
Repetitive Task PM-NPMEL-8185, "Manhole-22 12-month Inspection, per EDS-262"
Repetitive Task PM-NPMEL-8197, "Manhole-21 2-month Inspection, per EDS-261"
EDS-261 PM Task/Basis Revision Request, dated 02-22-1991
EDS-262 PM Task/Basis Revision Request, dated 02-14-1992
Entergy Quality Assurance Program Manual
ECP case files 2004-449, 2004-578, 2004-756, 2005-452, and 2005-499
Procedure Feedback Form IP2-4380
Procedure Feedback Form IP2-4382
MSAP -92-000067-FFX, Controller Replacement Modification
Instructor Lesson Plan ICC-ANN-04, 2004 Annual Requal Briefing
Instructor Lesson Plan EM1-TRB-01, Introduction to Systems and Equipment Troubleshooting
Training Review Group Meeting Agenda 12/14/04
LER Accession # 9207020094, Fouling of RHR Train A Heat Exchanger
Entergy Liquid Penetrant Examination Reports for RTD Thermowell welds
Procedure Qualification - Magnaflux Liquid Penetrant Comparator Aluminum Test Block for
Sherwin Incorporated Manufactured cleaner, penetrant, developer

Industry Operating Experience Reviews

CR 2000-07403, "IN 2000-14, Non-Vital Bus Fault Leads to Fire and LOOP"
CR 2001-08029, "OE-11950 & 11420, Inadequate Lubrication due to Automatic Oiler Problems"
CR 2001-12634, "IN 2001-19, Improper Maintenance of Automatic Oil Bubblers"
CR 2001-08414, "Eval of Below Grade Alternate Safe Shutdown Cables for Water Damage"

CR 2002-00520, "IN 2002-04, Wire Degradation at Breaker Cubicle Door Hinges"
CR 2002-03110, "IN 2002-12, Submerged Safety-Related Electrical Cables"
LO-OEN-2004-00354, "IN 2004-19, Backup Power to Emergency Response Facility Problems"
IN 1989-71: Diversion of the Residual Heat Removal Pump Seal Cooling Water Flow During
Recirculation Operating Following a Loss-of-Coolant Accident
IN 1989-54: Potential Overpressurization of the Component Cooling Water System

Design and Licensing Basis Documents

TRM Section 3.8.C and Bases, revision 1, "TSC Diesel Generator and UPS"
TRM Section 5.3, "Administrative Controls - Procedures"
NRC SER for Operating License Amendment 238 (CTS to ITS conversion)
USAR Section 12.7.2, "Emergency Response Facilities"
USAR Section 7.7.2.1, "Operating Control Stations - Operational Information"
Indian Point Energy Center Emergency Response Plan, revision 04-01

Calculations

FFX-00446-00, revision 9, "Operability Review for Service Water Supports & Piping due to
Deficient Supports SWN-54 & 57"
FFX-00741-00, revision 0, "Eval Tubing to PI-5681 Without Support. Qualify Tubing for
Operability and Design"
FFX-00180-01, revision 1, "Qualification of Supports for Emergency Battery, Conduits, and
Lights in Zurn Strainer Room"

Work Orders

02-39391	03-17548	04-11107	04-20581
02-47389	03-22983	04-12848	04-20787
03-03635	03-22984	04-14965	04-22087
03-05259	03-28501	04-15584	04-22088
03-12747	03-28502	04-16896	04-22935
03-12748	04-09175	04-16941	04-34436
03-17547	04-11106	04-16942	

Completed Surveillances:

PT-M67, performed on 04-30-2004 (for TSC Temporary Diesel Batteries)
PT-M67, performed on 04-30-2004 (for TSC Permanent Diesel Batteries)
PT-M67, performed on 02-27-2005
PT-M67, performed on 04-01-2005
PT-M67, performed on 04-24-2005
PT-M67, performed on 05-22-2005
PT-Q42, performed on 02-10-2004
PT-Q42, performed on 04-05-2004
PT-Q42, performed on 06-04-2004
PT-Q42, performed on 07-26-2004

IP2 Condition Reports (all CR-IP2-)

1997-01282	2004-00099	2004-01900	2004-06095	2005-01037
1998-04818	2004-00101	2004-01984	2004-06116	2005-01117
2000-10559	2004-00145	2004-02082	2004-06125	2005-01174
2001-00835	LO-2004-	2004-02111	2004-06147	2005-01175
2001-04150	00161	2004-02334	2004-06170	2005-01179
2002-02139	LO-2004-	2004-02353	2004-06179	2005-01193
2002-05762	00162	2004-02596	2004-06441	2005-01216
2002-10245	2004-00662	2004-02668	LO-2005-	2005-01217
2002-10679	2004-00731	2004-02677	00004	2005-01331
LO-2003-	2004-01052	2004-03042	2005-00152	2005-01469
00130	2004-01178	2004-03138	2005-00567	2005-01502
2003-01821	2004-01328	2004-03943	2005-00601	2005-01513
2003-02449	2004-01338	2004-04031	2005-00742	2005-01591
2003-03200	2004-01384	2004-04291	2005-00781	2005-02432
2003-00396	2004-01484	2004-04793	2005-00868	2005-02447
2003-03364	2004-01663	2004-05277	2005-00913	2005-02461
2003-03367	2004-01710	2004-05326	2005-00937	2005-02557
2003-07287	2004-01772	2004-05657	2005-00959	2005-02641
2003-07321	2004-01781	2004-05927	2005-01000	2005-02667
2003-07349	2004-01820	2004-06033	2005-01002	2005-02691
2003-07389	2004-01862	2004-06097	2005-01011	
2003-07542	2004-01887			

IP3 Condition Reports (all CR- IP3-):

1995-00291
 1995-00294
 1996-01774
 2002-04383
 2005-00765
 2005-01690
 2005-03098

(Note: Inspection did not cover IP3, but some processes and reports are site-wide under IP3.)