UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
2100 RENAISSANCE BLVD., Suite 100
KING OF PRUSSIA, PA 19406-2713

October 27, 2017

Mr. Anthony Vitale
Site Vice President
Entergy Nuclear Operations, Inc.
Indian Point Energy Center
450 Broadway, General Services Building
P.O. Box 249
Buchanan, NY 10511-0249

SUBJECT: INDIAN POINT NUCLEAR GENERATING – PROBLEM IDENTIFICATION AND RESOLUTION INSPECTION REPORT 05000247/2017008 AND 05000286/2017008

Dear Mr. Vitale:

On October 5, 2017, the U.S. Nuclear Regulatory Commission (NRC) completed a problem identification and resolution inspection at Indian Point Nuclear Generating (Indian Point), Units 2 and 3. The NRC inspection team discussed the results of this inspection with you and other members of your staff. The results of this inspection are documented in the enclosed report.

The NRC inspection team reviewed the station's corrective action program and the station's implementation of the program to evaluate its effectiveness in identifying, prioritizing, evaluating, and correcting problems, and to confirm that the station was complying with NRC regulations and licensee standards for corrective action programs. Based on the samples reviewed, the team determined that your staff's performance in each of these areas adequately supported nuclear safety.

The team also evaluated the station's processes for use of industry and NRC operating experience information and the effectiveness of the station's audits and self-assessments. Based on the samples reviewed, the team determined that your staff's performance in each of these areas adequately supported nuclear safety.

Finally, the team reviewed the station's programs to establish and maintain a safety-conscious work environment, and interviewed station personnel to evaluate the effectiveness of these programs. Based on the team's observations and the results of these interviews, the team found no evidence of challenges to your organization's safety-conscious work environment. Your employees appeared willing to raise nuclear safety concerns through at least one of the several means available.

In all of the areas reviewed, the NRC inspectors did not identify any findings or violations of more than minor significance.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at http://www.nrc.gov/reading-rm/adams.html and the NRC Public Document Room in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

/RA/

Jonathan E. Greives, Acting Chief
Reactor Projects Branch 2
Division of Reactor Projects

Docket Nos. 50-247 and 50-286
License Nos. DPR-26 and DPR-64

Enclosure:
Inspection Report 05000247/2017008
and 05000286/2017008 w/Attachment:
Supplementary Information

cc w/encl: Distribution via ListServ

SUBJECT: INDIAN POINT NUCLEAR GENERATING – PROBLEM IDENTIFICATION AND RESOLUTION INSPECTION REPORT 05000247/2017008 AND 05000286/2017008 dated October 27, 2017

DISTRIBUTION: (via email)
DDorman, RA
DLew, DRA
RLorson, DRP
DPelton, DRP
JYerokun, DRS
BWelling, DRS
JGreives, DRP
TSetzer, DRP
MHenrion, DRP
BHaagensen, DRP, SRI
ASiwy, DRP, RI
MRossi, DRP, RI
DHochmuth, DRP, AA
JBowen, RI OEDO
RidsNrrPMIndianPoint Resource
RidsNrrDorlLpl1 Resource
ROPReports Resources

DOCUMENT NAME: G:\DRP\BRANCH TSAB\Inspection Reports\IP PI&R 2017\IP PI&R 2017008 final.docx
ADAMS ACCESSION NUMBER: **ML17303A739**

☑ SUNSI Review		☑ Non-Sensitive ☐ Sensitive		☑ Publicly Available ☐ Non-Publicly Available	
OFFICE	RI/DRP	RI/DRP	RI/DRP		
NAME	TSetzer via email	ADeFrancisco	JGreives		
DATE	10/26/17	10/25/17	10/27/17		

OFFICIAL RECORD COPY

U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket Nos.	50-247 and 50-286
License Nos.	DPR-26 and DPR-64
Report Nos.	05000247/2017008 and 05000286/2017008
Licensee:	Entergy Nuclear Northeast (Entergy)
Facility:	Indian Point Nuclear Generating, Units 2 and 3
Location:	450 Broadway, General Services Building Buchanan, NY 10511-0249
Dates:	September 18 – 22, 2017 October 2 – 5, 2017
Team Leader:	Thomas Setzer, PE, Senior Project Engineer
Inspectors:	Mark Draxton, Project Engineer Chris Safouri, Project Engineer Andrew Siwy, Resident Inspector
Approved by:	Jonathan E. Greives, Acting Chief Reactor Projects Branch 2 Division of Reactor Projects

SUMMARY

IR 05000247/2017008 and 05000286/2017008; 09/18/2017 – 10/05/2017; Indian Point Nuclear Generating; Biennial Baseline Inspection of Problem Identification and Resolution.

This NRC team inspection was performed by three regional inspectors and one resident inspector. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 6.

Problem Identification and Resolution

The inspectors concluded that Entergy was effective in identifying, evaluating, and resolving problems. Entergy personnel identified problems, entered them into the corrective action program (CAP) at a low threshold, and in general, prioritized issues commensurate with their safety significance. Entergy appropriately screened issues for operability and reportability, and performed causal analyses that appropriately considered extent of condition, generic issues, and previous occurrences. The inspectors also determined that Entergy implemented corrective actions to address the problems identified in the CAP in a timely manner.

The inspectors concluded that Entergy adequately identified, reviewed, and applied relevant industry operating experience to Indian Point operations. In addition, based on those items selected for review, the inspectors determined that Entergy's self-assessments and audits were thorough.

Based on the interviews the inspectors conducted over the course of the inspection, observations of plant activities, and reviews of individual CAP and employee concerns program issues, the inspectors did not identify any indications that site personnel were unwilling to raise safety issues nor did they identify any conditions that could have had a negative impact on the site's safety conscious work environment.

No findings were identified.

REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA2 Problem Identification and Resolution (71152B)

This inspection constitutes one biennial sample of problem identification and resolution as defined by Inspection Procedure 71152. All documents reviewed during this inspection are listed in the Attachment to this report.

.1 Assessment of Corrective Action Program Effectiveness

a. Inspection Scope

The inspectors reviewed the procedures that described Entergy's CAP at Indian Point. To assess the effectiveness of the CAP, the inspectors reviewed performance in three primary areas: problem identification, prioritization and evaluation of issues, and corrective action implementation. The inspectors compared performance in these areas to the requirements and standards contained in Title 10 of the *Code of Federal Regulations* Part 50, Appendix B, Criterion XVI, "Corrective Action," and Entergy procedure EN-LI-102, "Corrective Action Program." For each of these areas, the inspectors considered risk insights from the station's risk analysis and reviewed CAP condition reports selected across the seven cornerstones of safety in the NRC's Reactor Oversight Process. The inspectors selected items from the following functional areas for review: engineering, operations, maintenance, emergency preparedness, radiation protection, fire protection, chemistry, physical security, maintenance rule, and oversight programs.

(1) Effectiveness of Problem Identification

In addition to the items described above, the inspectors reviewed system health reports, a sample of completed corrective and preventative maintenance work orders, completed surveillance test procedures, operator logs, and periodic trend reports. The inspectors also completed field walkdowns of various systems in both Units 2 and 3, which included the auxiliary feedwater, service water, circulating water, emergency diesel generator, charging, and safety injection systems. Additionally, the inspectors reviewed a sample of CAP condition reports written to document issues identified through internal self-assessments, audits, emergency preparedness drills, and the operating experience program. The inspectors completed this review to verify that Entergy entered conditions adverse to quality into their CAP as appropriate.

(2) Effectiveness of Prioritization and Evaluation of Issues

The inspectors reviewed the evaluation and prioritization of a sample of CAP condition reports issued since the last NRC biennial problem identification and resolution inspection completed in January 2016. The inspectors also reviewed CAP condition reports that were assigned lower levels of significance that did not include formal cause evaluations to ensure that they were properly classified. The inspectors' review included the appropriateness of the assigned significance, the scope and depth of the causal analysis, and the timeliness of resolution.

The inspectors assessed whether the evaluations identified likely causes for the issues and developed appropriate corrective actions to address the identified causes. Further, the inspectors reviewed equipment operability determinations, reportability assessments, licensee event reports, and extent-of-condition reviews for selected problems to verify these processes adequately addressed equipment operability, reporting of issues to the NRC, and the extent of the issues. Finally, the inspectors attended multiple condition report pre-screening meetings and Plant Review Group (PRG) meetings.

(3) Effectiveness of Corrective Actions

The inspectors reviewed Entergy's completed corrective actions through documentation review and, in some cases, field walkdowns to determine whether the actions addressed the identified causes of the problems. The inspectors also reviewed CAP condition reports for adverse trends and repetitive problems to determine whether corrective actions were effective in addressing the broader issues. The inspectors reviewed Entergy's timeliness in implementing corrective actions and effectiveness in precluding recurrence for significant conditions adverse to quality. The inspectors also reviewed a sample of CAP condition reports associated with selected non-cited violations and findings to verify that Entergy personnel properly evaluated and resolved these issues. In addition, the inspectors expanded the corrective action review to five years to evaluate Entergy's actions related to the boric acid corrosion control program.

b. Assessment

(1) Effectiveness of Problem Identification

Based on the selected samples, plant walkdowns, and interviews of site personnel in multiple functional areas, the inspectors determined that Entergy identified problems and entered them into the CAP at a low threshold. Entergy staff at Indian Point initiated approximately 19,000 CAP condition reports between January 2016 and September 2017. The inspectors observed supervisors at the PRG meetings appropriately questioning and challenging CAP condition reports to ensure clarification of the issues. Based on the samples reviewed, the inspectors determined that Entergy trended equipment and programmatic issues, and appropriately identified problems in CAP condition reports. The inspectors verified that conditions adverse to quality identified through this review were entered into the CAP as appropriate. Additionally, inspectors concluded that personnel were identifying trends at low levels.

(2) Effectiveness of Prioritization and Evaluation of Issues

Based on the samples selected, the inspectors determined that, in general, Entergy appropriately prioritized and evaluated issues commensurate with the safety significance of the identified problem. Entergy screened CAP condition reports for operability and reportability, categorized the CAP condition reports by significance, and assigned actions to the appropriate department for evaluation and resolution. The issue report screening process considered human performance issues, radiological safety concerns, repetitiveness, adverse trends, and potential impact on the safety-conscious work environment.

Based on the sample of CAP condition reports reviewed, the inspectors noted that the guidance provided by Entergy CAP implementing procedures appeared sufficient to

ensure consistency in categorization of issues. Operability and reportability determinations were performed when conditions warranted and the evaluations supported the conclusion. Causal analyses appropriately considered the extent of condition or problem, generic issues, and previous occurrences of the issue.

The inspectors identified two instances in which a condition report was not prioritized in accordance with the guidance in Entergy procedure EN-LI-102. Specifically, one condition report (IP3-2016-01694) associated with the 32 residual heat removal pump pressure indicator (PI-635) was improperly coded as a "non-CAQ" instead of an "adverse quality CR". Additionally, another condition report (IP3-2017-02417) associated with a Unit 3 nitrogen supply regulator valve was closed by PRG as a "CAT D to work order" when it was required to be processed as a "CAT C - evaluate". The inspectors determined that the prioritization of these two condition reports did not meet the guidance described in procedure EN-LI-102 and therefore was a performance deficiency. However, because these issues were ultimately corrected, were isolated cases, and did not indicate a programmatic weakness to properly prioritize condition reports, the inspectors determined that the issue was of minor significance and not subject to enforcement action in accordance with the NRC's Enforcement Policy. Entergy documented the issues in condition reports IP3-2017-04613 and IP3-2017-04622.

The inspectors identified one instance in which Entergy did not evaluate foreign material that was left in a plant system. The inspectors reviewed condition report IP3-2017-01791, which described an engineering review of the preliminary report of eddy current testing for the 32 containment recirculation fan cooling coil. This report determined that one tube recorded in 2011 as having been plugged no longer had a plug installed. Additionally, four tubes that in 2011 were recorded as having a damaged tube plug collar did not have any collar installed. Entergy concluded these parts were missing and must have been lost in the system. The inspectors noted that Entergy procedure EN-MA-118, "Foreign Material Exclusion," Section 5.8 and Attachment 9.10, "Dropped and Unrecovered Process Flow Chart," requires an evaluation be done for potential impacts to the system when foreign material is determined to be irretrievable. In this case, the condition report was closed with no documented evaluation of the missing parts.

The inspectors determined that the failure to perform an evaluation on the missing tube plug and collars did not meet the guidance in Entergy procedure EN-MA-118, and therefore was a performance deficiency. However, because the loose parts were later determined by Entergy to not have any adverse impacts upon the cooling coil or any downstream components, the inspectors determined that the issue was of minor significance and not subject to enforcement action in accordance with the NRC's Enforcement Policy. Entergy documented the issue in condition report IP3-2017-04497. The tubes were eddy current tested and were found with no tube damage and were not required to be re-plugged. Additionally, all the cooling coil tubes were flushed clean with water to verify the missing parts had not caused any blockage.

(3) Effectiveness of Corrective Actions

Based on the selected samples, the inspectors concluded that corrective actions for identified deficiencies were timely and adequately implemented. For significant conditions adverse to quality, Entergy identified actions to prevent recurrence. The

inspectors concluded that corrective actions to address the sample of NRC non-cited violations and findings since the last problem identification and resolution inspection were timely and effective.

c. Findings

No findings were identified.

.2 Assessment of the Use of Operating Experience

a. Inspection Scope

The inspectors reviewed a sample of CAP condition reports associated with review of industry operating experience to determine whether Entergy appropriately evaluated the operating experience information for applicability to Indian Point and had taken appropriate actions, when warranted. The inspectors also reviewed evaluations of operating experience documents associated with a sample of NRC generic communications to ensure that Entergy adequately considered the underlying problems associated with the issues for resolution via their CAP.

Assessment

The inspectors determined that Entergy appropriately considered industry operating experience information for applicability, and used the information for corrective and preventive actions to identify and prevent similar issues when appropriate. The inspectors determined that operating experience was appropriately applied and lessons learned were communicated and incorporated into plant operations and procedures when applicable.

b. Findings

No findings were identified.

.3 Assessment of Self-Assessments and Audits

a. Inspection Scope

The inspectors reviewed a sample of audits, including the most recent audit of the CAP, departmental self-assessments, and assessments performed by independent organizations. The inspectors performed these reviews to determine if Entergy entered problems identified through these assessments into the CAP, when appropriate, and whether Entergy initiated corrective actions to address identified deficiencies.

Assessment

The inspectors concluded that self-assessments, audits, and other internal Entergy assessments were generally critical, thorough, and effective in identifying issues. The inspectors observed that Entergy personnel knowledgeable in the subject completed these audits and self-assessments in a methodical manner. Entergy completed these

audits and self-assessments to a sufficient depth to identify issues which were then entered into the CAP for evaluation. In general, the station implemented corrective actions associated with the identified issues commensurate with their safety significance.

b. Findings

No findings were identified.

.4 Assessment of Safety-Conscious Work Environment

a. Inspection Scope

During interviews with station personnel, the inspectors assessed the safety-conscious work environment at Indian Point. Specifically, the inspectors interviewed personnel to determine whether they were hesitant to raise safety concerns to their management and/or the NRC. The inspectors also interviewed the station Employee Concerns Program coordinator to determine what actions are implemented to ensure employees were aware of the program and its availability with regards to raising safety concerns. The inspectors reviewed the Employee Concerns Program files to ensure that Entergy entered issues into the CAP when appropriate.

Assessment

During interviews, Indian Point staff expressed a willingness to use the CAP to identify plant issues and deficiencies and stated that they were willing to raise safety issues. The inspectors noted that no one interviewed stated that they personally experienced or were aware of a situation in which an individual had been retaliated against for raising a safety issue. All persons interviewed demonstrated an adequate knowledge of the CAP and the Employee Concerns Program. Based on these limited interviews, the inspectors concluded that there was no evidence of an unacceptable safety-conscious work environment and no significant challenges to the free flow of information.

b. Findings

No findings were identified.

4OA6 Meetings, Including Exit

On October 5, 2017, the inspectors presented the inspection results to Mr. A. Vitale, Site Vice President, and other members of the Indian Point staff. The inspectors verified that no proprietary information was retained by the inspectors or documented in this report.

ATTACHMENT: SUPPLEMENTARY INFORMATION

SUPPLEMENTARY INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel
A. Vitale, Site Vice President
V. Andreozzi, Manager, Systems and Components
J. Breban, Security Supervisor
C. Bristol, Maintenance
J. Bubniak, Senior Engineer
M. Burney, Engineering
D. Candela, Engineer
G. Carbone, Radiation Protection Specialist
N. Chase, Unit Two Control Room Operator
J. D'Antono, Engineer
L. Eagens, Chemistry Departmental Performance Improvement Coordinator
J. Ferrick, Director of Engineering
J. Fogarty, Performance Improvement Specialist
E. Graven, Engineer 1, Boric Acid Corrosion Control Program Lead
T. Iavicoli, Sr Radiation Protection Specialist and Departmental Performance Improvement Coordinator
T.R. Jones, Licensing
J. Kirkpatrick, General Manager of Plant Operations
M. Lewis, Senior Manager, Operations
L. Lubrano, Senior Lead Engineer
D. Main, Operations Departmental Performance Improvement Coordinator
N. Malazzo, Engineer 2, Boric Acid Corrosion Control Program Lead
B. McCarthy, Director, Regulatory Assurance and Performance Improvement Director
T. O'Connor, Senior Engineer
E. Portanova, Engineer
T. Thivierge, Security Supervisor
S. Torres, Sr Operational Specialist
M. Troy, Engineering Programs Supervisor
M. Tumicki, Performance Improvement
R. Walpole, Manager, Regulatory Assurance

LIST OF ITEMS OPENED, CLOSED, DISCUSSED, AND UPDATED

Opened and Closed

None

LIST OF DOCUMENTS REVIEWED

Section 4OA2: Problem Identification and Resolution

Audits and Self-Assessments

Indian Point Employee Concerns Program Self-Assessment Report February 2015
Quality Assurance Audit Report QA-3-2015-IP-1, "Corrective Action Program"
Pre-NRC PI&R Assessment, dated September 14, 2017, Revision 1

CAP Condition reports *(* indicates that issue report was generated as a result of this inspection*

HQN-2017-01364	IP2-2016-00120	IP2-2016-02783	IP2-2016-05242
HQN-2017-01488	IP2-2016-00134	IP2-2016-02855	IP2-2016-05278
IP2-2010-02460	IP2-2016-00206	IP2-2016-02903	IP2-2016-05318
IP2-2015-03307	IP2-2016-00235	IP2-2016-02908	IP2-2016-05371
IP2-2015-04493	IP2-2016-00249	IP2-2016-03180	IP2-2016-05374
IP2-2015-04504	IP2-2016-00267	IP2-2016-03185	IP2-2016-05481
IP2-2015-04759	IP2-2016-00268	IP2-2016-03203	IP2-2016-05497
IP2-2015-04921	IP2-2016-00276	IP2-2016-03319	IP2-2016-05518
IP2-2015-04938	IP2-2016-00335	IP2-2016-03323	IP2-2016-05592
IP2-2015-04941	IP2-2016-00343	IP2-2016-03349	IP2-2016-05611
IP2-2015-04952	IP2-2016-00386	IP2-2016-03399	IP2-2016-05645
IP2-2015-04953	IP2-2016-00402	IP2-2016-03489	IP2-2016-05675
IP2-2015-04971	IP2-2016-00406	IP2-2016-03586	IP2-2016-05694
IP2-2015-05000	IP2-2016-00492	IP2-2016-03610	IP2-2016-05730
IP2-2015-05011	IP2-2016-00505	IP2-2016-03792	IP2-2016-05813
IP2-2015-05049	IP2-2016-00517	IP2-2016-03959	IP2-2016-05834
IP2-2015-05053	IP2-2016-00565	IP2-2016-03960	IP2-2016-05890
IP2-2015-05156	IP2-2016-00578	IP2-2016-03963	IP2-2016-05988
IP2-2015-05162	IP2-2016-00608	IP2-2016-04181	IP2-2016-06018
IP2-2015-05236	IP2-2016-00616	IP2-2016-04183	IP2-2016-06171
IP2-2015-05287	IP2-2016-00657	IP2-2016-04196	IP2-2016-06550
IP2-2015-05292	IP2-2016-01051	IP2-2016-04197	IP2-2016-06668
IP2-2015-05345	IP2-2016-01107	IP2-2016-04245	IP2-2016-06682
IP2-2015-05458	IP2-2016-01122	IP2-2016-04297	IP2-2016-06934
IP2-2015-05459	IP2-2016-01204	IP2-2016-04320	IP2-2016-07100
IP2-2015-05506	IP2-2016-01236	IP2-2016-04567	IP2-2016-07187
IP2-2015-05616	IP2-2016-01236	IP2-2016-04576	IP2-2016-07271
IP2-2015-05694	IP2-2016-01260	IP2-2016-04668	IP2-2016-07288
IP2-2015-05699	IP2-2016-01328	IP2-2016-04670	IP2-2017-00132
IP2-2015-05706	IP2-2016-01755	IP2-2016-04700	IP2-2017-00250
IP2-2015-05735	IP2-2016-02058	IP2-2016-04734	IP2-2017-00277
IP2-2015-05740	IP2-2016-02247	IP2-2016-04879	IP2-2017-00399
IP2-2015-05743	IP2-2016-02423	IP2-2016-04882	IP2-2017-00489
IP2-2015-05745	IP2-2016-02432	IP2-2016-04961	IP2-2017-00538
IP2-2015-05751	IP2-2016-02482	IP2-2016-04961	IP2-2017-00565
IP2-2015-05773	IP2-2016-02609	IP2-2016-04969	IP2-2017-00651
IP2-2016-00067	IP2-2016-02638	IP2-2016-05017	IP2-2017-00737
IP2-2016-00085	IP2-2016-02692	IP2-2016-05108	IP2-2017-00799
IP2-2016-00090	IP2-2016-02757	IP2-2016-05190	IP2-2017-00859

IP2-2017-00920
IP2-2017-00928
IP2-2017-00946
IP2-2017-01094
IP2-2017-01116
IP2-2017-01143
IP2-2017-01183
IP2-2017-01243
IP2-2017-01311
IP2-2017-01483
IP2-2017-01485
IP2-2017-01784
IP2-2017-02078
IP2-2017-02130
IP2-2017-02152
IP2-2017-02187
IP2-2017-02193
IP2-2017-02214
IP2-2017-02218
IP2-2017-02219
IP2-2017-02227
IP2-2017-02232
IP2-2017-02317
IP2-2017-02342
IP2-2017-02369
IP2-2017-02403
IP2-2017-02432
IP2-2017-02553
IP2-2017-02569
IP2-2017-02583
IP2-2017-02636
IP2-2017-02694
IP2-2017-02867
IP2-2017-02964
IP2-2017-03238
IP2-2017-03265
IP2-2017-03307
IP2-2017-03381*
IP2-2017-03384*
IP2-2017-03397
IP2-2017-03404
IP2-2017-03405
IP2-2017-03443
IP2-2017-03444
IP2-2017-03448
IP2-2017-03463
IP2-2017-03468
IP2-2017-03506*
IP2-2017-03515
IP2-2017-03579
IP2-2017-03681*
IP2-2017-03683*
IP2-2017-07408
IP3-2005-02321
IP3-2007-00120
IP3-2013-02108
IP3-2014-01903
IP3-2015-05397
IP3-2015-05408
IP3-2015-05420
IP3-2015-05434
IP3-2015-05457
IP3-2015-05460
IP3-2015-05475
IP3-2015-05479
IP3-2015-05526
IP3-2015-05583
IP3-2015-05590
IP3-2015-05648
IP3-2015-05703
IP3-2015-05755
IP3-2015-05774
IP3-2015-05810
IP3-2015-05837
IP3-2015-05878
IP3-2015-05952
IP3-2015-05968
IP3-2015-06002
IP3-2016-00028
IP3-2016-00104
IP3-2016-00118
IP3-2016-00201
IP3-2016-00223
IP3-2016-00275
IP3-2016-00328
IP3-2016-00351
IP3-2016-00439
IP3-2016-00486
IP3-2016-00546
IP3-2016-00703
IP3-2016-00738
IP3-2016-00802
IP3-2016-00850
IP3-2016-00924
IP3-2016-00947
IP3-2016-01083
IP3-2016-01108
IP3-2016-01113
IP3-2016-01136
IP3-2016-01251
IP3-2016-01262
IP3-2016-01352
IP3-2016-01370
IP3-2016-01376
IP3-2016-01517
IP3-2016-01574
IP3-2016-01608
IP3-2016-01694
IP3-2016-02300
IP3-2016-02557
IP3-2016-02580
IP3-2016-02710
IP3-2016-02758
IP3-2016-02892
IP3-2016-02896
IP3-2016-02962
IP3-2016-03851
IP3-2016-03887
IP3-2016-04010
IP3-2016-04152
IP3-2017-00215
IP3-2017-00280
IP3-2017-00281
IP3-2017-00383
IP3-2017-00389
IP3-2017-00397
IP3-2017-00409
IP3-2017-00412
IP3-2017-00897
IP3-2017-01151
IP3-2017-01154
IP3-2017-01154
IP3-2017-01371
IP3-2017-01476
IP3-2017-01693
IP3-2017-01699
IP3-2017-01707
IP3-2017-01708
IP3-2017-01717
IP3-2017-01726
IP3-2017-01733
IP3-2017-01762
IP3-2017-01805
IP3-2017-02191
IP3-2017-02246
IP3-2017-02417
IP3-2017-02480
IP3-2017-02514
IP3-2017-02538
IP3-2017-02606
IP3-2017-02621
IP3-2017-03208
IP3-2017-03242
IP3-2017-03339
IP3-2017-03536
IP3-2017-03960
IP3-2017-04335
IP3-2017-04410
IP3-2017-04420*
IP3-2017-04434
IP3-2017-04452
IP3-2017-04452*
IP3-2017-04453
IP3-2017-04453*
IP3-2017-04454
IP3-2017-04454*
IP3-2017-04469*
IP3-2017-04497*
IP3-2017-04536
IP3-2017-04575
IP3-2017-04612*
IP3-2017-04613*
IP3-2017-04619*
IP3-2017-04622*
IP3-2017-04632*
IP3-2017-04632*
IP3-2017-04641*
IP3-2017-04642*
IP3-2017-04642*

Procedures
EN-LI-102, Corrective Action Program, Revision 29
EN-LI-104, Self-Assessment and Benchmark Process, Revision 13
EN-LI-118, Cause Evaluation Process, Revision 24

EN-LI-121, Trending and Performance Review Process, Revision 22
2-PT-R013, Safety Injection System, Revision 33
2-PT-V024-DS060, Valve BFD-2-21 IST Data Sheet, Revision 11
2-PT-V024-DS061, Valve BFD-2-22 IST Data Sheet, Revision 11
EN-DC-203, Maintenance Rule Program, Rev 3
EN-DC-204, Maintenance Rule Scope and Basis, Revision 4
EN-DC-206, Maintenance Rule (a)(1) Process, Rev 3
IP-EP-AD40, Equipment Important to Emergency Response, Revision 10
2-PT-M048, 480 Volt Undervoltage Alarm, Revision 32
3-ARP-013, Panel SKF – Bearing Motor, Revision 46
3-PT-Q134A, 31 RHR Pump Functional Test (RHR Cooling Not in Service), Revision 11
3-PT-Q134B, 32 RHR Pump Functional Test (RHR Cooling Not in Service), Revision 16
3-VLV-052-RCS, Pressurizer Power Operated Relief Valve (RC-PCV-455C, RC-PCV-456) Inspection and/or Overhaul, Revision 6
EN-DC-138, Temporary Modifications, Revision 14
EN-MA-118, Foreign Material Exclusion, Revision 10
3-PT-R035A, Service Water Penetrations Leakage Test and Valve Strokes, Revision 15
EN-EC-100, Employee Concerns Program, Revision 10
EN-LI-118, Causal Evaluation Process, Revision 23
CEP-BAC-001, Boric Acid Corrosion Control (BACC) Program Plan, April 3, 2013
EN-DC-143, Engineering Health Reports, Revision 20
EN-LI-102, Corrective Action Program, Revision 29
EN-LI-121, Trending and Performance Review Process, Revision 22
EN-OE-100, Operating Experience Program, Revision 27
EN-OP-104, Operability Determination Process, Revision 11
IP-SMM-HU-100, IPEC Human Performance Expectations, Revision 0
CAP Line Ownership and Engagement Performance Indicator, Period: 2016-11
CAP Line Ownership and Engagement Performance Indicator, Period: 2017-07
CAP Program Effectiveness Performance Indicator, Period: 2016-11
Indian Point 2 - Non-Outage Fluid Leaks, Period: 2017-08
Indian Point 2 - Outage Fluid Leaks, Period: 2017-08
Indian Point 3 - Non-Outage Fluid Leaks, Period: 2017-08
Indian Point 3 - Outage Fluid Leaks, Period: 2017-08
Indian Point Boric Acid Corrosion Control Program Health Report, Period: Q2-2017
Indian Point Boric Acid Corrosion Control Program Health Report, Period: Q4-2016
Indian Point Unit 2 Key Contributors to Plant Risk, Source: IP-RPT-16-00061,
Indian Point Unit 3 Key Contributors to Plant Risk, Source: IP-RPT-16-00035,
IPEC - CAP Line Ownership and Engagement Performance Indicator, November 2016
IPEC - CAP Line Ownership and Engagement Performance Indicator, July 2017
IPEC - CAP Program Effectiveness Performance Indicator, November 2016
IPEC - CAP Program Effectiveness Performance Indicator, July 2017
Program Performance Indicators for Chemistry, August 2017
Program Performance Indicators for Fire Protection,
Program Performance Indicators for Operations, Period: 2017-08
Program Performance Indicators for Radiation Protection, Period: 2017-08
Radiation Protection Performance Improvement Integrated Matrix (PIIM), September 2017
U2 BACCP Tracking Spreadsheet, September 21, 2017
U3 BACCP Tracking Spreadsheet, September 21, 2017

Work Orders

282709	340976	346207	387788
390198	393667	428423	430582
436874	438339	442942	447141
452207	449180	471662	51418184
51420317	51478227	52436394	52473850
52671954	00479885	00446431	00419032
00478296	00465113	00355848	00384962
00478995	00417292	00480816	00470005
00479537	00474757	00460754	

Drawings

141701, Unit No. 1 Ext. D/C 1250KVA Substation 102N55 Seal Water Pump Contain. & Annulus Exh. Fan, Revision 12
149050, External Dia. Of Connections for 125V.D.C. Distribution Panels No. 5, 6, 7, and 8, Revision 2
9321-F-27233, (FSAR) Flow Diagram Nitrogen to Nuclear Equipment, Revision 40
9321-F-30361, Southgate Substation 13.8KV Switchgear One Line Diagram, Revision 7
9321-H-20293, Flow Diagram Starting Air to Diesel Generators, Revision 34
Buchanan-694, Broadway-Buchanan Westchester 13.8KV 60 Cycle (Dwg. Controlled by CON ED), Revision 80

Miscellaneous

Unit 2 Appendix R Diesel Generator (a)(1) Evaluation, Revision 0
Unit 2 Appendix R Diesel Generator (a)(1) Action Plan, Revision 0
Vapor Containment System (a)(1) Action Plan, Revision 0
Vapor Containment System Basis Document, Revision 0
Appendix R Diesel Generator Basis Document, Revision 1
Main Feedwater System Basis Document, Revision 0
Main Feedwater System Basis Document, Revision 1
IP3 RPC (a)(1) Action Plan, Rev 7
Feedwater System Basis Document, Revision 2
Security Improvement Integrated Matrix for July 2017
Attachment 9.1, Functional Failure Determination for U2 ARDG
Engineering Change, EC-49592
QA-7-2016-IP-1, Quality Assurance Audit Report Emergency Preparedness
Document Revision Notice, 17-P638, Calc Changes for IP3-CALC-ESS-281, IP3-CALC-RPC-290 & IP3-CALC-RPC-00298 to include Additional Hysteresis Uncertainty per Westinghouse LTR-SCS-17-27 (CR-IP3-2017-2246, CA2)
PM Basis Template, EN – I&C – Pressure Regulator, Revision 2
PM Basis Template, EN – Valve – Pressure Relief – Spring Actuated, Revision 0
LO-IP3LO-2015-00121, Engineering Snapshot Assessment of Pre-ATV Objectives
LO-IP3LO-2016-00027, Maintenance Focused Self-Assessment of Supervisor Effectiveness
IP3-CALC-ESS-00281, Instrument Loop Accuracy/Setpoint Calculation Low Temperature Average (Lo Tavg) Safety Injection (SI) and Steam Line Isolation (SLI) and Hi Temperature Average (Hi Tavg), Revision 3
EC-54433, RCS and SI Filter Cartridge Replacement, Revision 0
EC-65732, Replace App R Diesel Generator Battery Charger, Revision 0
EC-66002, Temporarily Disconnect Control Air to 32 EDG Ventilation Intake Louvers “A” and “C”, Revision 0

EC-68145, Continued Plant Operation with SWT-681, 21 Main Turbine Lube Oil Cooler Outlet Drain Isolation Valve, Removed from the Service Water System, Revision 0
EC-73333, Calc Changes for IP3-CALC-ESS-281, IP3-CALC-RPC-290 & IP3-CALC-RPC-00298 to include Additional Hysteresis Uncertainty per Westinghouse LTR-SCS-17-27 (CR-IP3-2017-2246, CA2), Revision 0
Action Request 16616
Action Request 248548
2015 IPEC RP Self-Assessment & Benchmark Schedule, Revision 7
2016 IPEC RP Self-Assessment & Benchmark Schedule, Revision 6
2017 IPEC RP Self-Assessment & Benchmark Schedule, Revision 2
Indian Point Energy Center (IPEC) Safety Review Committee Meeting 2017-01 Minutes, February 10, 2017
IP3LO-2016-00115
IPEC DPRM/APRM Report, February 2017
IPEC DPRM/APRM Report, June 2017
LO-IP3LO-2014-00149
LO-IP3LO-2015-00063
LO-IP3LO-2016-00046
QA-14/15-2015-IP-1
QA-9-2016-IP-1
Radiation Protection DPRM/APRM Report, September 2017
U2 2016 - Q3-Q4 BACCP Collective Significance Review, December 31, 2017
U2 2017 - Q1-Q2 BACCP Collective Significance Review, June 30, 2017
U3 2016 - Q3-Q4 BACCP Collective Significance Review, December 31, 2016
U3 2017 - Q1-Q2 BACCP Collective Significance Review, June 30, 2017

LIST OF ACRONYMS

CAP	Corrective Action Program
NRC	Nuclear Regulatory Commission
PRG	Plant Review Group