

Indian Point Event Reports to the NRC for 2015

The following are required reports to the NRC whenever an incident of any kind occurs. They were compiled from a search of event reports available on the NRC website.

1. Jan. 8 - TECHNICAL SPECIFICATION REQUIRED SHUTDOWN DUE TO LOSS OF BOTH CHANNELS OF REFUELING WATER STORAGE TANK INSTRUMENTATION:

At 0400 [EST], Indian Point Unit 3 entered LCO 3.5.4 Condition C due to both Refueling Water Storage Tank (RWST) Low Low Level Alarm channels failing. The failure was a result of freezing in the instrument lines. LCO 3.5.4 Condition C requires at least one channel of RWST Low Low Level Alarm be restored to Operable within 1 hour. At 0500, Unit 3 entered Condition D due to the required action and completion time of Condition C not being met. This requires the unit be placed in Mode 3 in 6 hours and Mode 4 in 12 hours. This failure also has resulted in a loss of safety function. Operators rely upon the RWST Low Low Level Alarms during an accident to alert them of the need to transfer injection from the RWST as a source of water to the containment sump. At 0700, Indian Point Unit 3 commenced a shutdown to be in compliance with the requirements of LCO 3.5.4 Condition D. Investigation and repair efforts were immediately put in place to correct the failure and return the function to operable. At 1000, one Channel of RWST Low Low Level Alarm was returned to operable. LCO 3.5.4 Conditions C & D were exited. The shutdown was stopped and safety function was restored. Unit 3 remains in a 7-day shutdown [LCO action statement] for one RWST Low Low Level Alarm Channel inoperable as per LCO 3.5.4 Condition B. Unit 2 is unaffected and remains at 100% power.

The State of New York and the NRC Resident Inspector were notified.

2. Mar. 11 - NON-LICENSED SUPERVISORY EMPLOYEE TESTED POSITIVE FOR ALCOHOL:

A non-licensed employee supervisor had a confirmed positive for alcohol during a random fitness-for-duty test. The employee's access to the plant has been terminated.

The NRC Resident Inspector was notified and the NY Public Service Commission will be notified.

3. Mar. 30 - REPORT TO NEW YORK PUBLIC SERVICE COMMISSION REGARDING MAIN GENERATOR VOLTAGE REGULATOR:

The licensee reported that there was an unscheduled removal of service of the Unit 3 Main Generator automatic voltage regulator. This is required to be reported per IP-SNM-LI-108, Event Notification and Reporting. This does not significantly affect the unit operation. The investigation into the loss of automatic voltage regulation is under investigation.

The licensee notified the New York Public Service Commission and the New York Independent System Operator.

The licensee will be notifying the NRC Resident Inspector.

4. **May 7 - OFFSITE NOTIFICATION DUE TO SHUTDOWN FOR AN UNISOLABLE STEAM LEAK:**

At 0700 on 5/7/15, Indian Point Unit 3 commenced a shutdown due to the inability to isolate a steam leak on a feedwater instrument line. Offsite power is available. Indian Point Unit 2 is unaffected and remains in Mode 1 at 100% power.

The NRC Resident Inspector, the NYISO (New York Independent System Operator), and NY Public State Commission have been notified.

5. **May 8 -TECHNICAL SPECIFICATION SHUTDOWN DUE TO REACTOR COOLANT PUMP TRIP:**

This notification is being made as required by 10 CFR 50.72(b)(2)(i) due to a Farley Nuclear Plant Unit 1 shutdown required by Technical Specifications. At 0509 CDT on 5/7/2015, 1B Reactor Coolant Pump (RCP) tripped during transfer of 1B 4160V bus to 1B unit auxiliary transformer. Technical Specification LCO 3.4.4 Condition A was entered for loss of a Reactor Coolant System (RCS) loop. Unit 1 reactor was shut down per operating procedures and entered Mode 3 at 0740 CDT.

The NRC Resident Inspector has been notified.

6. **May 11 - UNUSUAL EVENT DECLARED DUE TO MAIN TRANSFORMER FIRE:**

At 1750 EDT [05/09/15,] Indian Point Unit 3 experienced a fire on the 31 Main Transformer resulting in a unit trip. An Unusual Event was declared at 1801 EDT. The onsite fire brigade was mobilized. Offsite fire fighting assistance was requested. The fire was reported extinguished at 1815 EDT. The reactor was shutdown by an automatic trip. Plant response to the trip was as expected with no complications. The 31 and 33 Auxiliary Feed Pumps are operating and feeding the steam generators. Accountability is being performed. The plant is stable in mode 3, all control rods fully inserted, with normal offsite electrical power, and decay heat is being released to the main condenser. There was no impact on Unit 2 which continues to operate at 100% power. The licensee has notified the NRC Resident Inspector and state and local authorities. Notified DHS SWO, FEMA OPS Center, DHS NICC Watch Officer, and Nuclear SSA via email.

* * * UPDATE FROM LUKE HEDGES TO JOHN SHOEMAKER AT 2037 ON 5/9/15 * * *

Oil from 31 Main Transformer has spilled into the discharge canal and has made its way into the river. Plant personnel are sandbagging drains and release paths. IPEC [Indian Point Energy Center] has contacted its environmental contractor, who is expected onsite at 2100 EDT to assist with cleanup. The National Response Center was notified at 1945 EDT and issued notification number 1116011. A message was left with the Westchester County Department of Health at 1953 EDT. The NY State DEC [Department of Environment Conservation] was contacted at 1955 EDT and issued notification number 1501459. The licensee has notified the NRC Resident Inspector. Indian Point Unit 3 remains in an Unusual Event at this time. Notified R1DO (Schroeder).

* * * UPDATE FROM LUKE HEDGES TO JOHN SHOEMAKER AT 2141 ON 5/9/15 * * *

Indian Point Unit 3 exited the Unusual Event at 2103 EDT. The basis for exiting the Unusual Event is that the fire is out and field operators report they have been successful in cooling the transformer.

The licensee has notified the NRC Resident Inspector and state and local authorities.

Notified R1DO (Schroeder), R1RA (Lew), NRR (Dean), NRR EO (Morris), NRR EO (Howe), and IRD (Grant). Notified DHS SWO, FEMA OPS Center, DHS NICC Watch Officer, and Nuclear SSA via email.

7. Jun. 1 - INTERIM PART 21 REPORT - INABILITY TO COMPLETE EVALUATION REGARDING CRACKING IN KCR-13 STANDBY BATTERY JARS:

The following was received via email:

The purpose of this letter is to provide the NRC a report in general conformity to the requirements of 10 CFR Part 21.21(a)(2). On March 4, 2015, C&D Technologies, Inc. (C&D) was informed by Entergy Nuclear Northeast that a KCR-13 battery installed at the Indian Point Nuclear Energy Center had developed a crack in the polycarbonate jar material. This is the second KCR-13 at this site that has experienced a crack in the jar material [see EN 49667]. The jar is a safety related component with the primary function of containing electrolyte. The battery has not been returned to C&D for analysis, and analysis of the previous issue was inconclusive. C&D is submitting this interim report to the NRC and notifying C&D's customers that use C&D KCR-13 batteries, of this Interim report, and is initiating an action plan to evaluate the reported potential defect and determine whether it could pose a substantial safety hazard for any US licensee using such batteries. KCR-13 Batteries manufactured in 2005, battery manufacturing date is on the label. Note: C&D has not completed its evaluation of the reported potential defect and whether it could pose a substantial safety hazard at any US licensee using such batteries. The cracked jar has not been fully evaluated and may or may not indicate a potential defect which could create a substantial safety hazard. KCR -13 batteries used at Nuclear Plants in 1E applications made in 2005: Utility/Plant Name/Battery Model/Quantity of Batteries Entergy/Indian Point /KCR-13 NUC/72 Xcel Energy/Monticello/KCR-13 NUC/62 Concurrent Actions underway to complete the evaluation:

a) On receipt of the battery from Indian Point, C&D will perform a failure analysis with the intent of determining the root cause of the cracking issue. Maximum time 30 days from receipt of the battery.

In conjunction with the licensees identified in Section VI,

b)C&D will recommend maintenance assessment of all KCR-13 batteries at these locations to determine their status and specifically, the presence of any evidence of potential defects via visual examination. For any cells exhibiting the presence of potential defect, C&D shall further recommend that they be returned for analysis. Estimated completion date of analysis is thirty (30) days from the receipt of the returned batteries.

U.S. Licensees using batteries possibility containing the alleged defect have been notified of the filing of this interim report with recommendations that they examine their batteries for any signs of problems. NOTE: A similar notification and advice was provided in December 2013 with the previous battery. C&D did not receive any reports of similar problems from other product users. If you have any questions or wish to discuss this matter or this report, please contact:

Robert Malley
VP Operational Excellence
bmalley@cdtechno.com
(215) 619-7830

The similar notification and advice provided in December 2013 is EN 49667.

8. Aug. 18 - RESIDUAL HEAT REMOVAL HEAT EXCHANGER OUTLET VALVES UNANALYZED CONDITION:

At 1331 hours [EDT] on August 18, 2015 with the plant in mode 1, IP2 entered TS [Technical Specification] 3.0.3 upon determination by the Shift Manager that MOV-746 and 747 at the outlet of the Residual Heat Removal (RHR) Heat Exchangers may not (fully) open on an SI [Safety Injection] signal if there was a degraded grid voltage (where the voltage at the 480V Safeguards Buses is below the minimum drop-out value of 415V and above the loss-of-voltage value of 206.6V). The MOV 746 and 747 valves are normally closed so the SI signal with degraded voltage present could cause the fuses to fail. The time when the fuses would fail and the extent to which the MOVs open has not yet been analyzed. Immediate corrective actions was taken to replace the fuses with fuses that would not fail. The RHR trains were restored to an operable condition at 1419 and 1431 hours. This event is potentially reportable under 10 CFR 50.72(b)(3)(ii) and 10 CFR 50.72(b)(3)(v) since the condition has not yet been fully analyzed but has been corrected. The plant remained at 100% power during the time of this event.

All technical specification requirements were followed.

The licensee will notify the NRC Resident Inspector and the State.

9. Dec. 5 - MANUAL REACTOR TRIP INITIATED DUE TO MULTIPLE DROPPED CONTROL RODS:

At 1731 [EST] on December 5, 2015, Indian Point Unit 2 Control Room operators initiated a Manual Reactor Trip due to indications of multiple dropped Control Rods. The initiating event was a smoldering Motor Control Center (MCC) cubicle in the Turbine Building that supplies power to the Rod Control System. The unit is stable in Mode 3 with heat sink provided by Auxiliary Feedwater and decay heat removal is via the steam dumps to the condenser. Offsite Power remains in service.

The smoldering MCC cubicle had power removed from it when 24 MCC breaker tripped on overcurrent. The affected cubicle has ceased smoldering and is being monitored by on-site Fire Brigade trained personnel. The trip of 24 MCC removed power to 22 Battery Charger, 22 DC Bus remained powered from the 22 Battery without interruption, and 22 Battery Charger was subsequently repowered."

The cause of the smoldering MCC is being investigated and a post reactor trip evaluation is being conducted by the licensee. There was no impact on Unit 3, which continues to operate at 100% power.

The licensee has notified the NRC Resident Inspector and appropriate State and Local authorities.

10. Dec. 14 - AUTOMATIC REACTOR TRIP DUE TO MAIN GENERATOR LOCKOUT:

At 1906 [EST] on 12/14/2015, Indian Point Unit 3 received a Main Generator Lockout trip signal, and the reactor automatically tripped. Site personnel reported seeing arcing on a 345kV output transmission line tower. At the time of the trip, there was moderate rain and fog in the area. The site fire brigade leader investigated the reports of arcing and found no evidence of fire; fire brigade response was not required. All automatic systems functioned as designed and all control rods inserted automatically. Auxiliary Feedwater Pumps started automatically due to expected low steam generator levels following a reactor trip from 100% power. Unit 3 is being maintained in Mode 3 with decay heat removal via steam dumps to the condenser. Offsite power remains available and in service from 138kV to the 480V safeguards buses. The cause of the Main Generator Lockout signal is being investigated. Unit 2 was not impacted and continues to operate at 100% power.

The NRC Resident Inspector has been notified.

After the trip, operators observed high vibrations on the 33 reactor coolant pump which eventually returned to normal range.

The licensee will be notifying the New York Public Service Commission and their local Independent System Operator. A press release will be issued by the Communications Department.