UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

July 20, 2015

Mr. Kelvin Henderson
Site Vice President
Duke Energy Corporation
Catawba Nuclear Station
4800 Concord Road
York, SC 29745-9635

SUBJECT: CATAWBA NUCLEAR STATION – NRC INTEGRATED INSPECTION REPORT 05000413/2015002, 05000414/2015002

Dear Mr. Henderson:

On June 30, 2015, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Catawba Nuclear Station Units 1 and 2. On July 6, 2015, the NRC inspectors discussed the results of this inspection with you and other members of your staff. Inspectors documented the results of this inspection in the enclosed inspection report.

The NRC inspectors did not identify any findings or violations of more than minor significance.

In accordance with Title 10 of the Code of Federal Regulations 2.390, "Public Inspections, Exemptions, Requests for Withholding," 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 or from the Publicly Available Records (PARS) component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/
Frank Ehrhardt, Chief
Reactor Projects Branch 1
Division of Reactor Projects

Docket Nos.: 50-413, 50-414
License Nos.: NPF-35, NPF-52

Enclosure: Integrated Inspection Report 05000413/2015002, 05000414/2015002
w/Attachment: Supplemental Information

cc w/encl: Distribution via ListServ

July 20, 2015

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X PUBLICLY AVAILABLE ☐ NON-PUBLICLY AVAILABLE ☐ SENSITIVE X NON-SENSITIVE

ADAMS: ☐ Yes ACCESSION NUMBER:_____ X SUNSI REVIEW COMPLETE ☐ FORM 665 ATTACHED

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DATE	7/16/2015	7/16/2015	7/15/2015	7/20/2015		
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Letter to K. Henderson from Frank Ehrhardt dated July 20, 2015

SUBJECT: CATAWBA NUCLEAR STATION - NRC INTEGRATED INSPECTION REPORT 05000413/2015002, 05000414/2015002

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U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos.:	50-413, 50-414
License Nos.:	NPF-35, NPF-52
Report Nos.:	05000413/2015002, 05000414/2015002
Licensee:	Duke Energy Carolinas, LLC
Facility:	Catawba Nuclear Station, Units 1 and 2
Location:	York, SC 29745
Dates:	April 1, 2015 through June 30, 2015
Inspectors:	A. Hutto, Senior Resident Inspector L. Pressley, Resident Inspector M. Riley, Acting Project Engineer
Approved by:	Frank Ehrhardt, Chief Reactor Projects Branch 1 Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000413/2015-002, 05000414/2015-002; 3/1/2015 – 6/30/2015; CATAWBA NUCLEAR STATION, UNITS 1 AND 2; INTEGRATED INSPECTION REPORT

The report covered a three-month period of inspection by the resident inspectors and one regional inspector. The significance of inspection findings are indicated by their color (i.e., greater than Green, or Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, “Significance Determination Process” (SDP) dated April 29, 2015. Cross-cutting aspects are determined using IMC 0310, “Aspects Within the Cross-Cutting Areas” dated December 4, 2014. All violations of NRC requirements are dispositioned in accordance with the NRC’s Enforcement Policy dated February 4, 2015. The NRC’s program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, “Reactor Oversight Process” Revision 5.

REPORT DETAILS

Summary of Plant Status

Unit 1 operated at or near 100 percent rated thermal power (RTP) for the entire inspection period.

Unit 2 begin the inspection period in Mode 4 following 2EOC20 outage activities. The unit achieved 100 percent RTP on April, 8 2015 and remained at or near 100 percent RTP for the remainder of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R01 Adverse Weather Protection

a. Inspection Scope

Adverse Weather Preparation: The inspectors reviewed the licensee's preparations for adverse weather associated with hot ambient temperatures including a review of procedures and work orders implemented by the licensee to ensure plant equipment is adequately protected during the hot weather season. The inspectors also performed field walkdowns to assess the material condition and operation of ventilation and cooling equipment as well as other preparations made to protect plant equipment from high seasonal temperatures. In addition, the inspectors reviewed the licensee's corrective action program to assess the licensee's ability to identify and resolve deficient conditions associated with hot weather protection equipment prior to seasonal high temperatures. Documents reviewed are listed in the Attachment.

Evaluation of Summer Readiness of Offsite and Alternate AC Power Systems: The inspectors reviewed the licensee's procedures and measures designed to monitor and maintain availability and reliability of both the offsite AC power system (grid) and the onsite alternate AC power systems prior to the onset of summer weather conditions and the resulting higher load demand on the grid. This included the review of the licensee's station, nuclear division, and power delivery group procedures defining the coordination of activities that could impact the on-site and offsite AC power systems and the communication protocols established between the power delivery group and Catawba to verify that the appropriate information is exchanged when issues arise that could impact the AC power systems. Documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

1R04 Equipment Alignment

a. Inspection Scope

Partial Walkdowns: The inspectors performed three partial system walkdowns during the activities listed below to assess the operability of redundant or diverse trains and components when safety-related equipment was inoperable. The inspectors performed walkdowns to identify any discrepancies that could impact the function of the system and, therefore, potentially increased risk. The inspectors reviewed applicable operating procedures and walked down system components, selected breakers, valves, and support equipment to determine if they were in the correct position to support system operation. The inspectors reviewed protected equipment sheets, maintenance plans, and system drawings to determine if the licensee had properly identified and resolved equipment alignment problems that could cause initiating events or impact the capability of mitigating systems or barriers and entered them into the corrective action program. Documents reviewed are listed in the Attachment.

- Unit 1 B train of auxiliary feedwater (CA) while the A train was out of service for preventive maintenance
- diesel generator (DG) 2A with 2B out of service for preventive maintenance and inspections
- DG 1A with 1B out of service for preventive maintenance and inspections

Complete System Walkdown: The inspectors conducted a detailed walkdown/review of the Unit 2 safety injection system. The inspectors used licensee procedures and licensing and design documents to verify that the system (i.e., pump, valve, and electrical) alignment was correct; valves and pumps for the system did not exhibit leakage that would impact their function; major portions of the system and components were correctly labeled; hangers and supports were correctly installed and functional; and essential support systems were operational. In addition, pending design and equipment issues were reviewed to determine if the identified deficiencies significantly impacted the system's functions. Items included in this review were: the operator workaround list; the temporary modification list; and outstanding maintenance work requests/work orders. A review of open problem investigation program reports (PIPs) was also performed to verify that the licensee had appropriately characterized and prioritized safety-related equipment problems for resolution in the corrective action program. Documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

1R05 Fire Protection

a. Inspection Scope

Fire Protection Walkdowns: The inspectors walked down accessible portions of the five plant areas listed below to assess the licensee's control of transient combustible material and ignition sources, fire detection and suppression capabilities, fire barriers, and any related compensatory measures. The inspectors observed the fire protection suppression and detection equipment to determine whether any conditions or deficiencies existed which could impair the operability of that equipment. The inspectors selected the areas based on a review of the licensee's safe shutdown analysis probabilistic risk assessment and sensitivity studies for fire-related core damage accident sequences. Documents reviewed are listed in the Attachment.

- Unit 1 mechanical penetration room 577' level (fire area 18)
- Unit 1 ETA switchgear room (fire area 15)
- Unit 2 ETA switchgear room (fire area 14)
- control room ventilation room A train (fire area 22)
- auxiliary building 543 level common area

b. Findings

No findings were identified.

1R06 Flood Protection Measures

a. Inspection Scope

Internal Flooding: The inspectors reviewed the updated final safety analysis report (UFSAR), individual plant examination, and flood analysis documentation associated with internal plant areas to determine the effect of potential flooding. The inspectors reviewed the licensee's internal flood protection features for the auxiliary building 543' and 522' elevations including curbs, floor drains and sump pumps credited to protect safety related equipment on these elevations. The internal areas were selected and walked down based on the flood analysis calculations. Through observation and design review, the inspectors verified that curbs were intact, floor drains were unobstructed, and that material condition of safety related sump pumps and sump level instrumentation were good, and that the equipment was operable. The inspectors reviewed corrective action program documents to verify that the licensee was identifying issues and resolving them. Documents reviewed are listed in the Attachment.

Underground Cables: The inspectors entered conduit manhole (refueling water storage tank conduit) CMH-21 to verify that the cables were not submerged, that the cables were not damaged or degraded, and that the sump pumps were functioning properly. Documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

1R11 Licensed Operator Requalification (LOR) Program and Licensed Operator Performance

.1 Quarterly Resident Inspector LOR Activity Review

a. Inspection Scope

The inspectors observed active simulator exam ASE-52 to assess the performance of licensed operators during a license operator requalification simulator training session. The exercise included a failed atmospheric steam dump, a pump failure and turbine runback, a reactor trip with required emergency boration and a small break loss of coolant accident (LOCA) that transitions into a large break LOCA. The inspectors assessed overall crew performance, clarity and formality of communications, use of procedures, alarm response, control board manipulations, group dynamics and supervisory oversight. The inspectors observed the post-exercise critique to determine whether the licensee identified deficiencies and discrepancies that occurred during the simulator training. Documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

.2 Quarterly Resident Inspector Licensed Operator Performance Review

a. Inspection Scope

The inspectors observed operators in the main control room and assessed their performance during a response to a Unit 2 reactor coolant drain tank high pressure alarm, a 2A reactor coolant pump low standpipe level alarm, and performance of a Unit 1 reactor coolant dilution for reactivity management. The inspectors assessed the following:

- operator compliance and use of procedures.
- control board manipulations.
- communication between crew members.
- use and interpretation of plant instruments, indications and alarms.
- use of human error prevention techniques.
- documentation of activities, including initials and sign-offs in procedures.
- supervision of activities, including risk and reactivity management.

Documents reviewed are listed in the Attachment.

1R12 Maintenance Effectiveness

a. Inspection Scope

The inspectors reviewed the two activities listed below for items such as: (1) appropriate work practices; (2) identifying and addressing common cause failures; (3) scoping in accordance with 10 CFR 50.65(b) of the maintenance rule; (4) characterizing reliability issues for performance; (5) trending key parameters for condition monitoring; (6) charging unavailability for performance; (7) classification and reclassification in accordance with 10 CFR 50.65(a)(1) or (a)(2); and (8) appropriateness of performance criteria for structures, systems, and components (SSCs)/functions classified as (a)(2) and/or appropriateness and adequacy of goals and corrective actions for SSCs/functions classified as (a)(1). For each item selected, the inspectors performed a detailed review of the problem history and surrounding circumstances, evaluated the extent of condition reviews as required, and reviewed the generic implications of the equipment and/or work practice problem. Documents reviewed are listed in the Attachment.

- PIP C-15-3249, Standby makeup pump #1, 1NV-866 relief valve lifted below setpoint
- PIP C-15-1817, During blackout/LOCA section of 2A emergency safety function (ESF) testing, valves 2CA-56 and 2CA-60 did not reposition

b. Findings

No findings were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control

a. Inspection Scope

The inspectors reviewed the following six activities to determine if the appropriate risk assessments were performed prior to removing equipment for work. When emergent work was performed, the inspectors reviewed the risk assessment to determine that the plant risk was promptly reassessed and managed. The inspectors reviewed the use of the licensee's risk assessment tool and risk categories in accordance with Nuclear System Directive (NSD) 415, "Operational Risk Management" (Modes 1-3), to verify there was appropriate guidance to comply with 10 CFR 50.65(a)(4). Documents reviewed are listed in the Attachment.

- yellow risk condition with 1A CA pump out of service (OOS) for maintenance
- yellow risk condition with 2B DG OOS for maintenance and inspections
- yellow risk condition with 1B DG OOS for mid-cycle maintenance and inspections
- yellow risk condition with 2A1 component cooling water (KC) pump OOS for maintenance
- yellow risk condition with 1A DG OOS for maintenance in conjunction with yellow grid risk condition
- emergent orange risk condition due to failure of 2RN-351

b. Findings

No findings were identified.

1R15 Operability Determinations and Functionality Assessments

a. Inspection Scope

The inspectors evaluated the technical adequacy of the five operability evaluations or functionality assessments listed below to determine if technical specification (TS) operability was properly justified and the subject components and systems remained available such that no unrecognized increase in risk occurred. The inspectors reviewed the operability determinations to verify that they were made as specified by NSD 203, "Operability." The inspectors reviewed the UFSAR to determine that the systems and components remained available to perform their intended function. Documents reviewed are listed in the Attachment.

- PIP C-15-1817, 2A ESF testing identified valves that did not reposition as required
- PIP C-15-3518, Standby nuclear service water pond (SNSWP) intake structure
- PIP C-15-4031, Nuclear service water (RN) system long and short leg discharge sinkholes
- PIP C-15-4458, Common cause evaluation associated with 1A DG frequency issue
- Nuclear Condition Report (NCR) 1931592, Neutron absorber retainer damage in Magnastor cask 81

b. Findings

No findings were identified.

1R18 Plant Modifications

a. Inspection Scope

The inspectors reviewed the following plant modification to verify the adequacy of the modification package, and to evaluate the modification for adverse effects on system availability, reliability and functional capability. Documents reviewed are listed in the Attachment.

- Engineering Change Number 0000112386, Unit 2: Add cable backbone for flex power distribution

b. Findings

No findings were identified.

1R19 Post Maintenance Testing

a. Inspection Scope

The inspectors reviewed the six post-maintenance tests listed below to determine if procedures and test activities ensured system operability and functional capability. The inspectors reviewed the licensee's test procedures to determine if the procedures adequately tested the safety function(s) that may have been affected by the maintenance activities, that the acceptance criteria in the procedures were consistent with information in the applicable licensing basis and/or design basis documents, and that the procedures had been properly reviewed and approved. The inspectors also witnessed the tests and/or reviewed the test data to determine if test results adequately demonstrated restoration of the affected safety function(s). Documents reviewed are listed in the Attachment.

- 1A CA pump functional testing following preventive maintenance (PM)
- 1A safety injection pump (NI) performance test following PMs
- control room area outside air pressure filter performance test following "A" train filter replacement
- DG 2B operability test following PMs and inspections
- DG 1B operability test following PMs, reparative maintenance and inspections
- DG 1A operability test following maintenance and frequency issues identified during run-up

b. Findings

No findings were identified.

1R20 Refueling and Other Outage Activities

a. Inspection Scope

For the Unit 2 refueling outage completed on April 8, 2015, the inspectors evaluated the following outage activity to ensure that the licensee adhered to operating license, TS, and applicable operations procedural requirements:

- power escalation

b. Findings

No findings were identified.

1R22 Surveillance Testing

a. Inspection Scope

For the four tests listed below, the inspectors witnessed testing and/or reviewed the test data to determine if the SSCs involved in these tests satisfied the requirements described in the TSs, the UFSAR, and applicable licensee procedures, and that the tests demonstrated that the SSCs were capable of performing their intended safety functions.

Surveillance Tests:
- PT/1/A/4200/009 A, "Auxiliary Safeguards Test Cabinet Periodic Test", Enclosure 13.23, "Safety Injection (K602, K648, K649,) - Train A"
- PT/2/A/4350/002 A, "DG 2A Operability Test"

In-Service Tests:
- PT/0/A/4400/022 B, "Nuclear Service Water Pump Train B Performance Test"

RCS Leakage
- PT/2/A/4150/001 D, "Reactor Coolant (NC) System Leakage Calculation"

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification

a. Inspection Scope

The inspectors sampled licensee data to confirm the accuracy of reported PI data for the six indicators during periods listed below. To determine the accuracy of the reported PI elements, the reviewed data was assessed against PI definitions and guidance contained in Nuclear Energy Institute 99-02, "Regulatory Assessment Indicator Guideline," Rev. 7. Documents reviewed are listed in the Attachment.

Cornerstone: Mitigating Systems
- Emergency AC Power, Unit 1 & 2
- High Pressure Safety Injection, Unit 1 & 2
- Auxiliary Feedwater, Unit 1 & 2

The inspectors reviewed the licensee's procedures and methods for compiling and reporting the PIs including the reactor oversight program mitigating systems performance indicator basis document for Catawba. The inspectors reviewed the raw data for the PIs listed above for the period of April 1, 2014, through March 31, 2015. The inspectors also independently screened TS action item logs, selected control room logs, work orders and surveillance procedures, and maintenance rule failure determinations to determine if unavailability/unreliability hours were properly reported. The inspectors compared the licensee's raw data against the graphical representations and specific values contained on the NRC's public web page for 2015. The inspectors also reviewed the past history of PIPs for systems affecting the mitigating systems PIs listed above for any that might have affected the reported values. Documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

4OA2 Problem Identification and Resolution

.1 Daily Review

As required by Inspection Procedure 71152, "Problem Identification and Resolution," and in order to help identify repetitive equipment failures or specific human performance issues for follow-up, the inspectors performed screening of items entered into the licensee's corrective action program. This was accomplished by reviewing copies of PIPs, attending selected daily site direction and PIP screening meetings, and accessing the licensee's computerized database.

.2 Semiannual Trend Review

a. Inspection Scope

The inspectors reviewed issues entered in the licensee's corrective action program and associated documents to identify trends that could indicate the existence of a more significant safety issue. The inspectors focused their review on repetitive equipment issues and human performance trends, but also considered the results of inspector daily problem identification program report screenings, licensee trending efforts, and licensee human performance results. The review nominally considered the 6-month period of January 2015 through June 2015, although some examples extended beyond those dates when the scope of the trend warranted. The inspectors compared their results with the licensee's analysis of trends. Additionally, the inspectors reviewed the adequacy of corrective actions associated with a sample of the issues identified in the licensee's trend reports. The inspectors also reviewed corrective action documents that were processed by the licensee to identify potential adverse trends in the condition of structures, systems, and/or components as evidenced by acceptance of long-standing non-conforming or degraded conditions.

b. Findings

No findings were identified.

4OA5 Other Activities

Independent Spent Fuel Storage Installation Radiological Controls

a. Inspection Scope

The inspectors reviewed the licensee's procedures and observed operations associated with storing spent fuel in the independent spent fuel storage installation in accordance with Inspection Procedure 60855.1. The inspectors observed selected licensee activities related to the loading of cask number 78, to verify that they performed these activities in a safe manner and in compliance with approved procedures. Documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

4OA6 Meetings, Including Exit

Exit Meeting Summary

On July 6, 2015, the resident inspectors presented the inspection results to Mr. Kelvin Henderson and other members of licensee management. 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
T. Arlow, Emergency Planning Manager
D. Cantrell, Chemistry Manager
C. Fletcher, Regulatory Affairs Manager
B. Foster, Operations Manager
K. Henderson, Site Vice-President
T. Jenkins, Maintenance Manager
C. Kamilaris, Organizational Effectiveness Director
B. Leonard, Training Manager
K. Phillips, Work Management Manager
P. Simbrat, Regulatory Affairs Specialist
T. Simril, Plant Manager
J. Smith, Radiation Protection Manager
W. Suslick, Director, Nuclear Engineering
S. West, Director, Nuclear Plant Security

LIST OF DOCUMENTS REVIEWED

Section 1R01: Adverse Weather Protection

OP/0/B/6700/015, "Weather Related Activities"
PT/0/B/4700/039, "Hot Weather Protection"
AP/1(2)/A/5500/037, "Generator Voltage and Electric Grid Disturbances"
CNC-1381.06-00-0062, "Degraded Grid Voltage Alarm Setpoints for Real Time Contingency Analysis Initiation"
Duke Energy Nuclear Switchyard Interface Agreement
Duke Energy response to GL 2006-02 dated March 30, 2006
Catawba Action Register for Hot Weather Protection
Catawba UFSAR Section 8.2, "Offsite Power System"
Duke Energy Nuclear Switchyard Interface Agreement
NSD 417, "Nuclear Facilities/Generation Status Communications"
NSD 415, "Operational Risk Management (Modes 1-3) per 10 CFR 50.65(a)(4)"
AP/1/A/5500/037, "Generator Voltage and Electric Grid Disturbances"
AP/2/A/5500/037, "Generator Voltage and Electric Grid Disturbances"
PT/1/A/4350/002 C, "Available Power Source Operability Check"
PT/2/A/4350/002 C, "Available Power Source Operability Test"

Section 1R04: Equipment Alignment

CN-2562-01.02, "Flow Diagram of Unit 2 Safety Injection"
OP/2/A/6200/006, "Safety Injection System", Enclosure 4.3, "Valve Checklist"
PIP C-14-5660, Outboard seal trough for 2B NI pump is blocked with dried boron
PIP C-15-02320, Small amount of tightly fixed debris in NI pipe
Unit 2 NI System Health Report
WO 01843175-01, NI Pump 2B; I/R Oil Leak from Bearing Oil Cooler
OP/2/A/6350/002, "Diesel Generator Operation"; Enclosure 4.6, "D/G 2A Checklist for ES Actuation"
OP/1/A/6350/002, "Diesel Generator Operation"; Enclosure 4.6, "D/G 1B Checklist for ES Actuation"

Section 1R05Q: Fire Protection

AR 01903412, Organizational Effectiveness Review: Fleet Fire Protection
AR 01900605, Fire Brigade Leaders qualified prior to the issuance of AD-E
AD-EG-ALL-1520, "Transient Combustible Control"
Fire Strategy Fire Area 18, Unit 1 mechanical penetration room 577' Level
Fire Strategy Fire Area 15, Unit 1 ETA switchgear room
Fire Strategy Fire Area 14, Unit 2 ETA switchgear room
Fire Strategy Fire Area 22, contro room ventilation room 'A' train
Fire Strategy Fire Area 4, auxiliary building 543' level rooms 200 - 248
Station Badge Access Transaction Report
Station Fire Impairment Log

Section 1R06: Flood Protection Measures

UFSAR Section 3.6.1, "Postulated Piping Failures in Fluid Systems Inside and Outside Containment"
CNS-1465.00-00-0020, "Design Basis Specification for Flooding from Internal Sources"
CNS-1565.WL-00-0001, "Design Basis Specification for the Liquid Waste (WL) System"
Drawing CN-1938-06, "Electrical Equipment Layout Outdoor Area"

Section 1R11: Licensed Operator Requalification

ASE 52, Active Simulator Exam
EP/1/A/5000/E-0, "Reactor Trip or Safety Injection"
OP/1/A/6100/003, "Controlling Procedure for Unit Operation"

Section 1R12: Maintenance Effectiveness

AD-EG-ALL-1210, "Maintenance Rule Program"
EDM-210, "Engineering Responsibilities for Maintenance Rule"
C-15-3249, SMUP #1 relief valve lifted below setpoint

Section 1R13: Maintenance Risk Assessments and Emergent Work Control

Tagout ID 15-00950, 1A CA OOS for R&R 15-00950
Protection scheme for 1A CA OOS for R&R 15-00432
Complex Activity Plan for 1B D/G Mid-Cycle Work
Tagout ID 15-01042, 1B D/G and 1B RN OOS
Tagout ID 15-01063, 2A1 KC Pump OOS per 15-00893
NSD 417, "Generation Risk Management Process"

Section 1R15: Operability Evaluations

PIP C-15-1817, 2A ESF testing, valves 2CA-56/60 did not reposition to their open position
ACE PIP C-15-1817
PIP C-15-3518, SNSWP intake structure
UFSAR, Chapter 9.2, "Water Systems"
PIP C-15-4031, Sink Holes identified on banks on the SNSWP
PIP C-15-4104, Wet Soil discovered in response to C-15-4031
DWG's associated with W/O 02205491, produced by vendor
PIP C-15-4458, Upon Starting 1A D/G frequency 62.5
PIP C-15-4455, Power Driven Pot Issues
TSAIL C1-15-01368, Common Cause Evaluation

Section 1R18: Plant Modifications

NSD 209, "10 CFR 50.59 Process"
EDM-601, "Engineering Change Manual"
EC 0000112386, Unit 2: Add cable backbone for flex power distribution
DWG CN-2752-01.02-01, "600 Volt Emergency AC Power Distribution"
EC 0000111299
EC 0000112779 Installation on Unit 1

Section 1R19: Post-Maintenance Testing

OP/1/A/6250/002, "Auxiliary Feedwater System", Enclosure 4.4, "Manual Operation of the Motor Driven Auxiliary Feedwater Pumps When Aligned for Standby Readiness"
PT/1/A/4200/005 A, "Safety Injection Pump 1A Performance Test"
PT/0/A/4450/001 B, "Control Room Area Outside Air Pressure Filter Trains Performance Test"
PT/2/A/4350/002 B, "DG 2B Operability Test"
PT/1/A/4350/002 B, "DG 1B Operability Test"
PT/1/A/4350/002 A, "DG 1A Operability Test"
PIP C-15-4458, Upon Starting 1A DG frequency 62.5

Section 1R22: Surveillance Testing

PT/2/A/4150/001 D, "NC System Leakage Calculation"
PIP C-15-3567, U2 NC Leakage reached Action Level Two
PT/0/A/4400/022 B, "Nuclear Service Water Pump Train B Performance Test"
PT/2/A/4350/002 A, "DG 2A Operability Test"

Section 4OA1: Performance Indicator Verification

NSD 225, "NRC Performance Indicators"
NEI 99-02, "Regulatory Assessment Performance Indicator Guideline"
Catawba Master File CN: 854.02-1, "MSPI Emergency AC Power"
Catawba Master File CN: 854.02-4, "MSPI Safety Injection"
Catawba Master File CN: 854.02-3, "MSPI Heat Removal"

Section 4OA5: Other Activities

MP/1/A/7650/281, "Unit 1 Loading Spent Fuel into MAGNASTOR Cask"
MP/1/A/7650/281 A, "Unit 1 MAGNASTOR Contingencies"