UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
245 PEACHTREE CENTER AVENUE N.E., SUITE 1200
ATLANTA, GEORGIA 30303-1200

June 30, 2022

Mr. Steven M. Snider
Site Vice President, Oconee Nuclear Station
Duke Energy Carolinas, LLC
Oconee Nuclear Station
7800 Rochester Highway
Seneca, SC 29672-0752

SUBJECT: OCONEE NUCLEAR STATION – TRIENNIAL FIRE PROTECTION INSPECTION REPORT 05000269/2022010 AND 05000270/2022010 AND 05000287/2022010

Dear Mr. Snider:

On May 19, 2022, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Oconee Nuclear Station. On June 30, 2022, the NRC inspectors 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.

Two findings of very low safety significance (Green) are documented in this report. Two of these findings involved violations of NRC requirements. We are treating these violations as non-cited violations (NCVs) consistent with Section 2.3.2 of the Enforcement Policy.

If you contest the violations or the significance or severity of the violations documented in this inspection report, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region II; the Director, Office of Enforcement; and the NRC Resident Inspector at Oconee Nuclear Station.

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 at the NRC Public Document Room in accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

Signed by McCoy, Gerald
on 06/30/22

Gerald J. McCoy, Chief
Engineering Br 2
Division of Reactor Safety

Docket Nos. 05000269 and 05000270 and 05000287
License Nos. DPR-38 and DPR-47 and DPR-55

Enclosure:
As stated

cc w/ encl: Distribution via LISTSERV

SUBJECT: OCONEE NUCLEAR STATION – TRIENNIAL FIRE PROTECTION INSPECTION REPORT 05000269/2022010 AND 05000270/2022010 AND 05000287/2022010

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NAME	J. Montgomery	P. Braaten	D. Terry-Ward	L. Jones	A. Rosebrook	G. McCoy
DATE	06/24/2022	06/23/2022	06/27/2022	06/27/2022	06/22/2022	06/30/2022

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U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report

Docket Numbers:	05000269, 05000270 and 05000287
License Numbers:	DPR-38, DPR-47 and DPR-55
Report Numbers:	05000269/2022010, 05000270/2022010 and 05000287/2022010
Enterprise Identifier:	I-2022-010-0041
Licensee:	Duke Energy Carolinas, LLC
Facility:	Oconee Nuclear Station
Location:	Seneca, SC
Inspection Dates:	March 21, 2022 to April 08, 2022
Inspectors:	P. Braaten, Senior Reactor Inspector L. Jones, Senior Reactor Inspector J. Montgomery, Senior Reactor Inspector D. Terry-Ward, Construction Inspector
Approved By:	Gerald J. McCoy, Chief Engineering Br 2 Division of Reactor Safety

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting a triennial fire protection inspection at Oconee Nuclear Station, in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to https://www.nrc.gov/reactors/operating/oversight.html for more information.

List of Findings and Violations

Inadequate Design Change Results In Inadequate Defense-In-Depth Recovery Action			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000269,05000270,05000287/2022010-01 Open/Closed	None (NPP)	71111.21N.05
The inspectors identified a Green finding and associated non-cited violation (NCV) of Oconee Nuclear Station Units 1, 2 and 3 Renewed Facility Operating License Condition 3.D for the licensee's failure to verify the adequacy of the design change of the Nuclear Safety Capability Assessment (NSCA). Specifically, fire protection engineers failed to ensure that a defense-in-depth (DID) recovery action added to the NSCA would stop a high-pressure injection (HPI) pump that had spuriously started.			

Failure to Develop Accurate Safe Shutdown Equipment List Leads to Inaccurate Probabilistic Risk Assessment			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000269,05000270,05000287/2022010-02 Open/Closed	None (NPP)	71111.21N.05
The inspectors identified a Green finding and associated NCV for the licensee's failure to develop a comprehensive list of systems and equipment and their interrelationships to be analyzed for a fire event. Specifically, the site's safe shutdown equipment list (SSEL) contained in the NSCA, which informed the site's Fire probabilistic risk assessment (PRA) equipment selection calculation did not account for the fact that the HPI pumps were required to be off to reach and maintain hot standby.			

Additional Tracking Items

None.

INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

REACTOR SAFETY

71111.21N.05 - Fire Protection Team Inspection (FPTI)

Structures, Systems, and Components (SSCs) Credited for Fire Prevention, Detection, Suppression, or Post-Fire Safe Shutdown Review (IP Section 03.01) (4 Samples)

The inspectors verified that components and/or systems will function as required to support the credited functions stated for each sample.

(1) Unit 3 Cable Room Suppression System (FA AB/FZ 101)
(2) Unit 3 Turbine Driven Emergency Feedwater Pump Suppression System (FA TB/FZ 004)
(3) Unit 2 High-Pressure Injection System
(4) Protected Service Water System

Fire Protection Program Administrative Controls (IP Section 03.02) (1 Sample)

The inspectors verified that the selected control or process is implemented in accordance with the licensee's current licensing basis. If applicable, ensure that the licensee's FPP contains adequate procedures to implement the selected administrative control. Verify that the selected administrative control meets the requirements of all committed industry standards.

(1) NFPA 805 Monitoring Program

Fire Protection Program Changes/Modifications (IP Section 03.03) (2 Samples)

The inspectors verified the following:
a. Changes to the approved FPP do not constitute an adverse effect on the ability to safely shutdown.
b. The adequacy of the design modification, if applicable.
c. Assumptions and performance capability stated in the SSA have not been degraded through changes or modifications.
d. The FPP documents, such as the Updated Final Safety Analysis Report, fire protection report, FHA, and SSA were updated consistent with the FPP or design change.
e. Post-fire SSD operating procedures, such as abnormal operating procedures, affected by the modification were updated.

(1) ONS-2021-011 – Plant Impact Review associated with EC 414403, Install additional letdown isolation system for X-HP-5
(2) ONS-2021-015 - Plant Impact Review associated with multiple ECs for a Unit 1 SSC Control Console Mod

INSPECTION RESULTS

<table>
<tr><td colspan="4">Inadequate Design Change Results In Inadequate Defense-In-Depth Recovery Action</td></tr>
<tr><td>Cornerstone</td><td>Significance</td><td>Cross-Cutting Aspect</td><td>Report Section</td></tr>
<tr><td>Mitigating Systems</td><td>Green
NCV 05000269,05000270,05000287/2022010-01
Open/Closed</td><td>None (NPP)</td><td>71111.21N.05</td></tr>
<tr><td colspan="4">The inspectors identified a Green finding and associated non-cited violation (NCV) of Oconee Nuclear Station Units 1, 2 and 3 Renewed Facility Operating License Condition 3.D for the licensee’s failure to verify the adequacy of the design change of the Nuclear Safety Capability Assessment (NSCA). Specifically, fire protection engineers failed to ensure that a defense-in-depth (DID) recovery action added to the NSCA would stop a high-pressure injection (HPI) pump that had spuriously started.</td></tr>
<tr><td colspan="4">Description: While reviewing the licensee’s safe shutdown analysis, OSC-9669, “Oconee Nuclear Safety Capability Assessment for Units 1, 2, and 3,” the team identified that the required state of the HPI pumps is 'off' when shutting down utilizing the safe shutdown facility (SSF). The analysis also identified that for fires in the Auxiliary Building, there are potential fire impacts to cables associated with the high-pressure injection pumps.

These fire impacts were identified as variances from deterministic requirements (VFDR) and were required to be addressed in order to meet the sites performance criteria. VFDR-AB-016 identified that the 2A HPI pump may be subject to a fire-induced spurious start. The site dispositioned the variance by stating that the site met the risk requirements and credited a recovery action in order to maintain defense-in-depth.

The credited recovery action was added to the safe shutdown analysis via EC 403491 in December 2016. The purpose of this EC was to update applicable design and licensing basis documents to complete documentation alignment to NFPA 805. The DID recovery action credited was to remove the 7kV/4kV control power fuses. This action was implemented in procedure AP/2/A/1700/050, “Challenging Plant Fires.” This procedure and action directed operators to remove only the control power fuses for all three HPI pumps.

By removing control power fuses, the pump would lose its capability to be controlled remotely, but the current state of the pump would be unchanged. This action, therefore, prevented any subsequent fire-induced spurious operation, but the action would not alter the state and mitigate a fire-induced spurious start that had already occurred. Therefore, the team determined that this action was not effective in mitigating the consequences of a fire induced spurious operation.

Corrective Actions: NCR 02421758</td></tr>
<tr><td colspan="4">Performance Assessment:</td></tr>
</table>

Performance Deficiency: The failure to verify the adequacy of the design change of the NSCA was a performance deficiency.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Protection Against External Factors attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the failure to verify the adequacy of the design of NSCA reduced the defense-in-depth aspect of the fire protection program as described in Section 1.2 of NFPA 805.

Significance: The inspectors assessed the significance of the finding using Appendix F, "Fire Protection and Post - Fire Safe Shutdown SDP." Using IMC 0609, Appendix F, Attachment 1, the inspectors determined the issue was of very low safety significance (Green) because the finding did not adversely affect the ability to reach and maintain hot shutdown/hot standby conditions using the credited safe shutdown success path (Question 1.4.7-C)

Cross-Cutting Aspect: Not Present Performance. No cross-cutting aspect was assigned to this finding because the inspectors determined the finding did not reflect present licensee performance.

Enforcement:

Violation: Oconee Nuclear Station Units 1, 2 and 3 Renewed Facility Operating License Condition 3.D required the licensee to implement and maintain in effect all provisions of the approved FPP that complied with 10 CFR 50.48(c), "National Fire Protection Association Standard NFPA 805," as specified in the revised licensee's amendment request dated April 14, 2010. Section 4.7.3 of the revised license amendment request stated that the site maintained the Fire Protection Quality Assurance program that was in place prior to transition to NFPA 805. This QA Program is documented in Fleet Fire Protection Program Manual PD-FP-ALL-1500. Section 5.6.3 of PD-AP-ALL-1500 stated that design activities shall be accomplished in accordance with procedures that ensure the applicable design requirements are included and that appropriate reviews are conducted.

Contrary to the above, since December 7, 2016, the design activity was not accomplished in accordance with procedures that ensured the applicable design requirements were included and that appropriate reviews are conducted. Specifically, the design review by the fire protection engineers failed to ensure that the DID recovery action added to the NSCA would mitigate an HPI pump that was running.

Enforcement Action: This violation is being treated as a non-cited violation, consistent with Section 2.3.2 of the Enforcement Policy.

Failure to Develop Accurate Safe Shutdown Equipment List Leads to Inaccurate Probabilistic Risk Assessment			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000269,05000270,05000287/2022010-02 Open/Closed	None (NPP)	71111.21N.05

The inspectors identified a Green finding and associated NCV for the licensee's failure to develop a comprehensive list of systems and equipment and their interrelationships to be analyzed for a fire event. Specifically, the site's safe shutdown equipment list (SSEL) contained in the NSCA, which informed the site's Fire probabilistic risk assessment (PRA) equipment selection calculation did not account for the fact that the HPI pumps were required to be off to reach and maintain hot standby.

Description: The licensee's NSCA for a postulated fire in the Auxiliary Building (to include the main control room) credits the use of the SSF as a dedicated shutdown strategy. The SSF utilizes the Reactor Coolant Makeup (RCMU) Pump to provide reactor coolant system (RCS) seal cooling to achieve and maintain Mode 3. Because of the low flowrate of the RCMU pump, the success of the SSF requires the HPI pumps to be off, to not go solid in the RCS.

For NFPA 805, the licensee's credited safe and stable state is Mode 4. This is because the SSF cannot maintain the plant at Mode 3 indefinitely. Therefore, after 72 hours, the licensee credits re-establishing control via the main control room to bring the plant to Mode 4. This involves starting a HPI pump. For a fire in the AB, the NSCA identifies VFDR-AB-016 which states, in part, "fire damage to cables may prevent tripping the HPI pump or result in spurious pump start. This is notable because the normal operational alignment of the plant would have a HPI pump running.

The methodology for the inclusion of equipment and basic events in the fire PRA is documented in OSC-8978, Rev. 6, "ONS Fire PRA - Equipment Selection Report". This report reflects that equipment from the post fire SSEL from Revision 4 of the NSCA. The SSEL from Rev. 4 of the NSCA does not reflect the need for the HPI pumps to be 'off' in order to reach and maintain Mode 3—it only reflects the need for the HPI pumps to be 'on' in order to reach and maintain Mode 4. As a result, the PRA equipment selection calculation does not contain basic events for all applicable failure modes for each HPI.

Corrective Actions: NCR 02423868, NCR 02422326

Performance Assessment:

Performance Deficiency: The licensee's failure to develop a comprehensive list of systems and equipment and their interrelationships to be analyzed for a fire event was a performance deficiency.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Protection Against External Factors attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the failure to develop a comprehensive list of systems and equipment led to inaccurate plant fire risk assessments because the effect of a running HPI pump on the success criteria of reaching and maintaining Mode 3 from the SSF was not considered as a part of the risk analysis.

Significance: The inspectors assessed the significance of the finding using Appendix F, "Fire Protection and Post - Fire Safe Shutdown SDP." Using IMC 0609, Appendix F, Attachment 1, the inspectors determined the issue was associated with the post-fire safe shutdown finding category, and could not screen the issue using the 3 questions in Step 1.4.7. Using Step 1.5, inspectors determined that the plant had a fire PRA capable of adequately evaluating the risk associated with the finding, the licensee's risk-based evaluation for this fire finding indicate a

delta-CDF of less than 1E-6, and the evaluation result was accepted by a regional Senior Reactor Analyst (SRA).

The SRA independently assessed the adequacy and results of the licensee's fire PRA using the guidance in Appendix K, "Maintenance Risk Assessment and Risk Management SDP." Using IMC 0609, Appendix K, the SRA calculated the incremental core damage probability deficit (ICDPD) and the incremental large early release probability (ILERPD) deficit due to the performance deficiency and entered this value into figure 1 of IMC 0609 Appendix K, treating the issue as an inadequate risk assessment. The total calculated risk deficit was 3.24E-8. As a result, both Appendix F questions 1.5.1 A and B were answered YES, which screened the finding to Green.

Cross-Cutting Aspect: Not Present Performance. No cross-cutting aspect was assigned to this finding because the inspectors determined the finding did not reflect present licensee performance.

Enforcement:

Violation: Oconee Nuclear Station Units 1, 2 and 3 Renewed Facility Operating License Condition 3.D required the licensee to implement and maintain in effect all provisions of the approved FPP that complied with 10 CFR 50.48(c), "National Fire Protection Association Standard NFPA 805," as specified in the NRC safety evaluation report (SER) dated December 29, 2010. NFPA 805 Section 2.4.2.1 stated, in part, that a comprehensive list of systems and equipment and their interrelationships to be analyzed for a fire event shall be developed.

Contrary to the above, since December 29, 2010, the licensee failed to develop a comprehensive list of systems and equipment and their interrelationships to be analyzed for a fire event. Specifically, the site's SSEL contained in the NSCA, which informed the site's Fire PRA equipment selection calculation did not account for the fact that the HPI pumps were required to be off to reach and maintain hot standby.

Enforcement Action: This violation is being treated as a non-cited violation, consistent with Section 2.3.2 of the Enforcement Policy.

EXIT MEETINGS AND DEBRIEFS

The inspectors verified no proprietary information was retained or documented in this report.

- On June 30, 2022, the inspectors presented the triennial fire protection inspection results to Steven M. Snider and other members of the licensee staff.
- On April 7, 2022, the inspectors presented the initial FPTI inspection results to Steven Snider and other members of the licensee staff.
- On May 19, 2022, the inspectors presented the updated FPTI inspection results to Steven Snider and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.21N.05	Calculations	32-9252765-002	Calculation OSC-10319, Rev. 15, pages X-455 of 540	06/23/2016
		OSC-10055	PSW 125 VDC Relay setting, protective device coordination and hydrogen generation	Rev. 001
		OSC-10319	Oconee Units 1, 2, 3 NFPA 805 Coordination Study	Rev. 44
		OSC-10952 (AREVA 32-9192968-001)	U2, EC91857 NFPA 805 Breaker and Fuse Coordination Study	Rev. 1
		OSC-10974	ONS RIS 2005-07 Alternate Compensatory Measure Calculation	Rev. 6
		OSC-11082	Protective Device Settings for MCC MXAWC2, MXAWC3, MXAWC4 and MXAWC2	Rev. 5
		OSC-11549	ONS Fire PRA FRE Input Calculation	Rev. 3
		OSC-11914	ONS Fire PRA – Circuit Failure Analysis	Rev. 0
		OSC-8978	ONS Fire PRA – Equipment Selection Report	Rev. 6
		OSC-9314	NFPA 805 Transition Risk-Informed Performance-Based Fire Risk Evaluation	Rev. 6
		OSC-9375	ONS Fire PRA – Fire Scenario Report	Rev. 9
		OSC-9376	ONS Fire PRA – Cable Selection Report	Rev. 5
		OSC-9377	ONS Fire PRA – Model Development Report	Rev. 5
		OSC-9659	Oconee Nuclear Safety Capability Assessment for Units 1, 2, and 3	Rev. 11
		OSC-9831	Protective Relay Settings Associated with PSW Switchgear	Rev. 11
		OSC-9887	NFPA 805 Monitoring Program Scoping	Rev. 5
	Corrective Action Documents	AR 01865817	An evaluation is needed to determine if a breaker coordination study is required for PSW Milestone 3	04/23/2014
		AR 02040023	AREVA Calculation Error for AWC EC 115193	06/22/2016
	Corrective Action Documents Resulting from Inspection	02420818	2022 FPTI: Fire Detector Appears to be Painted	
		02421758	Generate updated PCS Action list	
		02422029	2022 FPTI: EC Record Illegible in Fusion	
		02422261	2022 FPTI – WOT instructions do not match design documents	03/31/2022

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		02422326	2022 FPTI: Concern with Fire PRA modeling of HPI Pump	
		02422877	2022 FPTI: Inconsistent labeling of breakers in Calcs & ECs	
		02423084	2022 FPTI - OSC-10319 Revision Methodology	
		02423114	2022 FPTI - ArcPlus Revision Methodology	
		02423868	2022 FPTI - Update Fire PRA Equipment Selection Calculation	
	Drawings	O -1705-A	One Line Diagram, 240/120VAC Station Aux. Circuits Comp., ICS & REG Supply	Rev. 86
		O -1711-B	Connection Diagram, Unit Control Board 2UB1	Rev. 87
		O -1711-D	Connection Diagram, Unit Control Board 2UB1	Rev. 57
		O -1721-A	Connection Diagram Valves, High Pressure Injection & Purification System	Rev. 42
		O -1721-A-001	Connection Diagram, High Pressure Injection & Purification System	Rev. 3
		O -1721-A-002	Connection Diagram, High Pressure Injection Termination Cab., 2HPICA0090	Rev. 0
		O -1757-C	Connection Diagram, Even Channels, Engineered Safeguards Terminals, Cabinet 2ESTC2	Rev. 45
		O -1757-H-001	Connection Diagram, Engineered Safeguards, Cabinet 2PPSCA0018	Rev. 0
		O -1909	Auxiliary Building, Electrical Equipment Layout Plan sections. & Details below EL. 809’ + 3”- Cols. 76 to 85	Rev. 43
		O -1913	Auxiliary Building, Electrical Equipment Layout, Penetration Room, Plan Below El. 838’ + 0”	Rev. 43
		O -305 A	General Arrangement, Auxiliary Building – Units 1 & 2, Plan at EL. 809 + 3	Rev. 40A
		O-0906	Auxiliary Building, Electrical Equipment Layout Plan, below EL. 771’ + 0 “	Rev. 44
		O-0908-G	Auxiliary Building, Electrical Equipment Layout, Plan below EL. 796” + 6”, Columns 70-76, PSW Cable tray	Rev. 9
		O-1422-X-029	Instrument Detail, Letdown Isolation Valve Control, 2HP-5	Rev. 16
		O-1422-X-47	Instrument Detail, RCP Seal Return, Isolation 2HP-21	Rev. 7
		O-1703-D	One Line Diagram, Station Auxiliary Circuits 600V/208V	Rev. 65

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			L/C 2X5 & MCC 2XI, 2XL & 2XD	
		O-1703-E	One Line Diagram, Station Auxiliary Circuits, 600V/208V/ L/C 2X6 & MCC 2XJ, 2XN & 2XP	Rev. 59
		O-1705	Oneline Diagram, 120VAC & 125VDC Station Aux. Circuits Instrumentation Vital Buses	Rev. 89
		O-1721	Connection Diagram, Miscellaneous Equipment, High Pressure Injection & Purification System	Rev. 27
		O-1752-A-29	Interconnection Diagram, Motor Control Center No. 2XL, Units No. 1 thru 5	Rev. 18
		O-1752-A-36	Interconnection Diagram, Motor Control Center No. 2XN, Units No. 1 thru 5	Rev. 24
		O-1752-A-67	Interconnection Diagram, 600V SSF Control Center No. 2XSF Units F05A thru F06D	Rev. 4
		O-1752-A-68	Interconnection Diagram, 208V SSF Motor Control Center No. 2XSFA Units F01A thru F02A	Rev. 6
		O-1766-C	Connection Diagram, Misc. Term Cab. 2MTC2	Rev. 38
		O-1767-A-060	Connection Diagram, Reactor Building Penetrations, Type D6 Penetrations, Penetration No. WA3	Rev. 14
		O-1767-A-062	Connection Diagram, Reactor Building Penetrations, Type M Penetrations, Penetration No. WA11	Rev. 3
		O-1790-P	Connection Diagram, Computer Cabinet 2G7, Right Side wall	Rev. 34
		O-1909-A-001	Auxiliary Building, Electrical Equipment Layout Plan below EL. 809’ + 3”	Rev. 2
		O-6701	One Line Diagram, Station Auxiliary Circuits, 600V PSW MCC 1XPSW	Rev. 6
		O-6702	Auxiliary Building, One Line Diagram, Station Auxiliary Circuits 600V PSW MCC 2XPSWA & 2XPSWB	Rev. 8
		O-6703	Auxiliary Building, One Line Diagram, Station Auxiliary Circuits 600V PSW MCC 3XPSW	Rev. 5
		O-6721-A	Connection Diagram, Valves PSW & High Injection System	Rev. 0
		O-6721-B	Connection Diagram, Valves PSW & High Injection System	Rev. 1

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		O-6721-C	Connection Diagram, Valves PSW & High Injection System	Rev. 1
		O-6752-A	Interconnection Diagram, Motor Control Center No. 1XPSW Units No. 1, 2, 3, 4 & 5	Rev. 4
		O-6752-B	Interconnection Diagram, Motor Control Center No. 2XPSWA & 2XPSWB, Units 1F, 2F, 3F, 4F & 5F	Rev. 6
		O-6752-C	Interconnection Diagram, Motor Control Center 3XPSWA, Units F1, F2 and F3	Rev. 6
		O-6799-B	Connection Diagram, Terminal Cab. 2PSWCA0001, Protected Service Water	Rev. 6
		O-907	Auxiliary Building, Electrical Equipment Layout Plan, below EL. 783' + 9'- Column line 70 to 76	Rev. 52
		OEE-242-1	Elementary Diagram, Component Cooling, VLV., 2CC-8, 2CC VA0008	Rev. 9
		OEE-251	Elementary Diagram, Letdown Cooler "A" outlet valve, SSF 2-HP-3 (FS/2/51/3) 2HP VA0003	Rev. 7
		OEE-251-03	Elementary Diagram, Letdown ISOL. Valve 2HP-5, 2 HP VA0005	Rev. 16
		OEE-251-0A	Elementary Diagram, Letdown Cooler A Outlet Valve, SSF 2-HP-3 (FS/2/51/3) 2HP VA0003	Rev. 5
		OEE-251-10	Elementary Diagram, HP Injection Pump, Discha. Crossov. Valve FS/2/51/55	Rev. 3
		OEE-251-2	Elementary Diagram, R.C. Pump Seal Return Valve, SSF 2-HP-20 (FS/2/51/39) 2HP VA0020	Rev. 9
		OEE-251-8	Elementary Diagram, RC Pump Seal Return Isol. Vlv. 2-HP-21, 2HP VA0021	Rev. 11
		OEE-251-9	Elementary Diagram, Feed and Bleed Controls, Valves 2/51/21 (2HP-V10) (2HP-14) and 2/51/14 (2HP-V18)(2HP-16)	Rev. 13
		OEE-265-01	Elementary Diagram, Protected Service Water, STM GEN 3A and 3B Flow Isolation MOV 3PSW-6	Rev. 2
		OEE-265-02	Elementary Diagram, Protected Service Water, Steam Generator 2A Flow, Control MOV 2PSW-22	Rev. 3
		OEE-265-03	Elementary Diagram, Protected Service Water, Steam	Rev. 3

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			Generator 2A Throttle MOV 2PSW-24	
		OEE-265-04	Elementary Diagram, Protected Service Water, Steam Generator 2B Flow Control, MOV 2PSW-24	Rev. 3
		OEE-265-05	Elementary Diagram, Protected Service Water, Steam Generator 2B Throttle MOV 2PSW-25	Rev. 3
		OEE-265-06	Elementary Diagram, Protected Service Water, HPI Isolation Valve 2HP-139	Rev. 2
		OEE-265-07	Elementary Diagram, Protected Service Water, HPI Flow Throttle Valve 2HP-140	
		OEE-265-13	Elementary Diagram, PSW System/ S/G 2A Supply Control Loop, Valve 2PSW-22	Rev. 2
		OFD-101A-2.1	Flow Diagram of High Pressure Injection System Letdown Section	Rev. 51
		OFD-101A-2.2	Flow Diagram of High Pressure Injection System Storage Section	Rev. 46
		OFD-101A-2.3	Flow Diagram of High Pressure Injection System Charging Section	Rev. 34
		OFD-101A-2.4	Flow Diagram of High Pressure Injection System Charging Section	Rev. 48
		OFD-101A-2.5	Flow Diagram of High Pressure Injection System SSF Portion	Rev. 24
		OFD-131A-1.1	Flow Diagram of Protected Service Water (PSW) System	Rev. 3
		OFD-131A-2.2	Flow Diagram of Protected Service Water (PSW) System, Steam Generator and HPI Pump motor Cooling Service	Rev. 2
	Engineering Changes	EC 091869	OD300958/EC91869 Unit 3 HPI Pump System Power – Pre-Outage	Rev. 11
		EC 091873	OD500922 – PSW Power Feed Installation	Rev. 18
		EC 115193	Correction – Implement MOD to Add Fuses/Breakers to loads on MCC AWC3	Rev. 4
		EC 115193	Correction – Implement MOD to Add Fuses/Breakers to loads on MCC AWC3	Rev. 0
		EC 400063	Unit 3, Make Field Changes associated with 3RC66 to improve the DC Voltage	Rev. 0
		ONS-2021-011		

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		ONS-2021-015		
	Miscellaneous		Oconee Nuclear Station Updated Final Safety Analysis Report	Rev. 28
			Safety Evaluation by the Office of Nuclear Reactor Regulation, Transition to a Risk-Informed Performance Based Fire Protection Program in Accordance with 10 CFR 50.48(c)	December 29, 2010
			Safety Evaluation by the Office of Nuclear Reactor Regulation, Oconee Nuclear Station Standby Shutdown Facility	April 28, 1983
			Oconee Nuclear Station License Amendment Request to Adopt NFPA 805	4/14/2010
			Oconee Selected Licensing Commitments, Section 16.9, Auxiliary Systems	Rev. 1
		51-9249010-004	Oconee Nuclear Safe Capability Assessment for Unit 1, 2, and 3, Appendix B: Safe Shutdown Equipment List (SSEL)	08/15/2016
		Duke-QAPD-001	Quality Assurance Program Description Operating Fleet	Rev. A
		OELBKAWC302A	OELBKAWC302A EDB report, ST 1804 partial equipment key, AWC3-2A	3/30/2022
		OELBKAWC302B	OELBKAWC302A EDB report, ST 1804 partial equipment key, AWC3-2B	3/30/2022
		OSC-9659	Oconee Nuclear Safety Capability Assessment for Units 1, 2 and 3	Rev. 011
		OSS-0254.00-00-1001	(Mech) High Pressure Injection and Purification & Deborating Demineralizer Systems	Rev. 062
		OSS-0254.00-00-1053	Protected Service Water System	Rev. 003
		OSS-0254.00-00-1053	Protected Service Water System	Rev. 3
		OSS-0254.00-00-2017	(Elec) Design Basis Specification for Fire Detection System	Rev. 019
		OSS-0254.00-00-4008	(Mech) Design Basis Specification for Fire Protection	Rev. 47

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		OSS-0254.00-00-4008	Design Basis Specification for Fire Protection	Rev. 47
		OSS-0256.00-00-1002	Design Basis Specification for High Pressure Service Water System	Rev. 47
		PD-FP-ALL-1500	Fleet Fire Protection Program Manual	Rev. 1
		PUL 92-9257585	Product Upgrade list (PUL)	05/19/2016
	Procedures	AD-EL-ALL-1117	Design Analyses and Calculations	Rev. 10
		AD-EL-ALL-1132	Preparation and Control of Design Change Engineering Changes	Rev. 4
		AD-OP-ALL-0105	Operability Determinations	Rev. 6
		SD 3.2.14	Fire Protection Program Compensatory Measure Process	Rev. 4
	Work Orders	20059574	EC115193 Perform Breaker Bench Test for new AWC3 Bkr's	07/12/2016