

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

January 16, 2025

Delson Erb Vice President, Operational Support Tennessee Valley Authority 1101 Market Street, LP 4A-C Chattanooga, TN 37402-2801

SUBJECT: WATTS BAR NUCLEAR PLANT – 95001 SUPPLEMENTAL INSPECTION REPORT 05000391/2024040 AND FOLLOW-UP ASSESSMENT LETTER

Dear Delson Erb:

On December 12, 2024, the U.S. Nuclear Regulatory Commission (NRC) completed a supplemental inspection at Watts Bar Unit 2 using inspection procedure (IP) 95001, "Supplemental Inspection Response to Action Matrix Column 2 (Regulatory Response) Inputs," and discussed the results of this inspection and the implementation of the station's corrective actions with you and other members of your staff.

The NRC performed this inspection to review the station's actions in response to a White performance indicator (PI) for Unplanned Scrams per 7000 Critical Hours, which was reported on April 22, 2024. Because this performance indicator returned to the Green performance band in the second quarter of 2024, the NRC opened a parallel White PI finding, for tracking purposes only, by letter dated August 28, 2024 (ADAMS ML242040A092) which was to remain open until satisfactory completion of the appropriate supplemental inspection. On November 12, 2024, NRC was informed of the station's readiness for the supplemental inspection (ADAMS ML24317A220).

The NRC determined that your staff's evaluation identified the cause of the White performance indicator. Specifically, station leaders have been narrowly focused and overconfident resulting in less intrusiveness to fully understand issues, resolve performance gaps, and action sustainability leading to repeat issues.

The inspectors concluded the corrective actions to preclude repetition of the root and contributing causes of the performance issue were effective and adequately prioritized considering safety significance and regulatory compliance. In addition, the inspectors determined evaluations were documented at a sufficient level of detail, included relevant operating experience, and identified the root causes, contributing causes, extent of conditions, and extent of causes of the performance issue. Based on the results of the inspection, the inspectors concluded the objectives of IP 95001 were met.

The NRC determined that completed or planned corrective actions were sufficient to address the performance issue that led to the White performance indicator previously described. Therefore, the performance issue will be closed and no longer considered as an Action Matrix input as of the date of the exit meeting. Based on the guidance in Inspection Manual Chapter 0305, "Operating Reactor Assessment Program," and the results of this D. Erb

inspection, the White PI (and associated parallel White finding) will no longer count as an Action Matrix input and Watts Bar Unit 2 will transition from the Regulatory Response Column (Column 2) of the NRC's Action Matrix to the Licensee Response Column (Column 1) as of December 12, 2024.

No findings or violations of more than minor significance were identified during this inspection.

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 McKown, Louis on 01/16/25

Louis J. McKown, II, Chief Projects Branch 5 **Division of Operating Reactor Safety**

Docket No. 05000391 License No. NPF-96

Enclosure: As stated

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U.S. NUCLEAR REGULATORY COMMISSION Inspection Report

Docket Number:	05000391
License Number:	NPF-96
Report Number:	05000391/2024040
Enterprise Identifier:	I-2024-040-0006
Licensee:	Tennessee Valley Authority
Facility:	Watts Bar Nuclear Plant
Location:	Spring City, Tennessee
Inspection Dates:	December 9, 2024 to December 12, 2024
Inspectors:	D. Jung, Resident Inspector P. Meier, Senior Resident Inspector A. Rosebrook, Senior Reactor Analyst (Team Lead)
Approved By:	Louis J. McKown, II, Chief Projects Branch 5 Division of Operating Reactor Safety

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) reviewed the licensee's corrective actions to address a White performance indicator by performing a supplemental inspection at Watts Bar Unit 2 using inspection procedure (IP) 95001, "Supplemental Inspection Response to Action Matrix Column 2 Inputs," 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

No findings or violations of more than minor significance were identified.

Additional Tracking Items

Туре	Issue Number	Title	Report Section	Status
FIN	05000391/2024005-01	Parallel White Finding for White Performance Indicator	95001	Closed

INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the 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.

OTHER ACTIVITIES – TEMPORARY INSTRUCTIONS, INFREQUENT AND ABNORMAL

<u>95001 - Supplemental Inspection Response to Action Matrix Column 2 (Regulatory Response)</u> Inputs

The inspectors reviewed and selectively challenged aspects of the licensee's problem identification, causal analysis, and corrective actions in response to a White performance indicator (PI) for Unplanned Scrams per 7000 Critical Hours, which was reported on April 22, 2024. From December 9 – 12, 2024, the inspectors conducted an onsite review to verify all aspects of IP 95001 were met.

1. <u>Objective: Ensure that the root and contributing causes of individual and collective White</u> performance issues are understood. (1 Sample)

Under this objective, the inspectors reviewed the cause evaluations the licensee conducted for the four individual inputs into the White PI for Unplanned Scrams per 7000 Critical Hours and the roll up evaluation for the overall PI having exceeded the Green to White threshold. The review consisted of an evaluation of the following: the licensee's identification of the issues, when and how long the issues existed, prior opportunities for identification, documentation of significant plant-specific consequences and compliance concerns, use of systematic methodology to identify causes with a sufficient level of supporting detail, consideration of prior occurrences, identification of extent of condition and extent of cause, and identification of any potential programmatic weaknesses in performance.

NRC Assessment: The team concluded that this objective was met. The inspectors determined that the licensee appropriately evaluated and documented problem identification, including adequate considerations of identification credit, how long the condition had existed, missed opportunities for self-identification, and risk insights. Although weaknesses were identified in the "Operating Experience" area, the licensee did self-identify these weaknesses, captured them as a contributing cause and developed and put in place corrective actions to address the identified weakness.

- a. <u>Identification:</u> The four unplanned scrams for Unit 2 were appropriately categorized by the licensee as self-revealing events. The four scrams are listed sequentially by date below:
 - i. An unanticipated actuation of the main transformer differential protective circuitry caused a turbine trip and subsequent reactor trip on June 27, 2023. The

unit was returned to rated thermal power on June 29, 2023. (Event 1: CR 1864894)

- A malfunction of the #2 main feedwater regulated valve (MFRV) caused the MFRV to close which resulted in an automatic reactor trip on August 4, 2023. The unit was returned to rated thermal power on August 6, 2023. (Event 2: CR 1872637)
- iii. Another unanticipated actuation of the main transformer differential protective circuitry caused a turbine trip and subsequent reactor trip on January 27, 2024. The unit was returned to rated thermal power on January 31, 2024. (Event 3: CR 1906093)
- iv. A human performance error unexpectedly actuated the feedwater isolation system which caused a low steam generator water level resulting in an automatic reactor trip on March 5, 2024. The unit was returned to rated thermal power on March 7, 2024. (Event 4: CR 1914685)
- b. <u>Exposure Time</u>: For the four events, the licensee appropriately addressed the exposure time for each issue.
 - Events 1 & 3: Following the unplanned scram on January 27, 2024, associated with the second main transformer differential issue, the licensee determined the failure mechanisms were the same for events 1 and 3. Hence, moving forward in this 95001 report, events 1 & 3 are evaluated together. In addition to events 1 & 3, the licensee recognized another Unit 2 unplanned scram on June 22, 2018, was related to the same cause. However, the June 22, 2018, scram did not contribute to the "White" performance indicator because it was not within the time frame for consideration. Because of the similarities between the three main transformer differential cause scrams, the licensee performed a root cause evaluation (RCE) to review all three. The RCE concluded that less than adequate troubleshooting failed to identify the failure mechanism, vibration induced wear damage to the cable insulation which led to a ground in the main transform differential protective circuitry. The exposure period of this performance issue existed from June 22, 2018, through January 27, 2024.
 - Event 2: The design vulnerability which caused event #2 was present since the control system was installed in 2011. However, this vulnerability was not observable or identifiable until the time of the event as there is no record of a similar failure.
 - Event 4: This event was self-revealing due to human performance and the time of event was the exposure time.
- c. <u>Identification Opportunities:</u> In general, the licensee appropriately considered prior occurrences and identification opportunities.
 - Events 1 & 3: There were two opportunities for identification before the last Unit 2 main transformer differential unplanned scram on January 27, 2024. Those opportunities were on June 22, 2018, and June 27, 2023. The licensee identified these occurrences and evaluated accordingly in RCE 1906093. In addition to the unplanned scrams, the licensee identified the occurrences of intermittent control room alarms during the time between main transformer differential unplanned scrams that were precursors.

- Event 2: Since the vulnerability did not present itself during factory acceptance testing or post installation testing and symptoms were not observed during the time the system was in service, there was no reasonable identification opportunity.
- Event 4: Similar event occurred on November 28, 2022, which required licensee procedure 0-TI-12.10, "Sensitive Plant Equipment," to be reviewed and a walkdown performed. The review of the procedure did not identify switch 2-HS-3-945A as sensitive equipment.
- d. <u>Risk and Compliance:</u> The RCEs documented the qualitative consequences of each event and the performance issue with respect to nuclear, radiological, safety culture, and industrial consequences. Based on their review, the inspectors concluded the RCEs demonstrated an understanding of significant plant consequences and compliance concerns associated with each event and the performance issue.
 - Events 1 & 3: There were no safety consequences because of the unplanned scrams. The events were not complicated. Mitigating equipment operated as designed and operators responded appropriately. The performance issues did not result in the loss of safety-related equipment or the ability to safely and automatically trip the reactor based on the unexpected actuation of the main transformer differential protective circuitry.
 - Event 2: There were no safety consequences because of the unplanned scram. The events were not complicated. Mitigating equipment operated as designed and operators responded appropriately. Therefore, there were no adverse safety consequences related to the event.
 - Event 4: There were no safety consequences because of the unplanned scram. The events were not complicated. Mitigating equipment operated as designed and operators responded appropriately. Therefore, there were no adverse safety consequences related to the event.
 - Rollup inspection: As a result of the four events, the site-specific transient initiating event frequency for Watts Bar Unit 2 would be greater than the industry. A Bayesian Update was performed using industry data as a prior and updated for the four scrams in 8,029 critical hours of operation. With the revised transient initiating event frequency, the baseline plant risk increased by 4.54 E-7.
- e. <u>Methodology</u>: For the RCEs, the licensee employed systematic, evidenced-based methodologies including, Barrier Analysis, Why Staircase, Organizational and Programmatic Affects, Safety Culture Analysis, and Event and Causal Factors Charting to gather data, identify the problem, and determine the root cause and contributing causes of the White performance issue.
 - Events 1 & 3: The RCE identified a direct cause and two root causes that led to the Unit 2 main transformer differential protective circuitry actuation unplanned scrams. The direct cause was less than adequate intrusiveness in addressing generation risk component performance associated with troubleshooting and preventive maintenance. This allowed vibration induced wear damage to current transformer circuitry to go undetected and uncorrected prior to causing a reactor trip. Root cause #1 was leadership's failure to set and reinforce a strong sense of self-awareness in personnel behaviors for intrusiveness in ownership of

generation risk component performance. Root cause #2 was a cable design change introduced a new failure mechanism without mitigation to protect against damage with all allowable types of conduits.

- Event 2: The RCE identified the following:
 - Direct Cause (DC): Steam Generator 2 MFRV spuriously closed to 4.5% and could not be manually opened from the Main Control Room.
 - Root Cause (RC-01): A vulnerability in the design of the steam generator (SG) level distributed control system (DCS) prevented automatic and manual control of SG FW inlet flow. The exact nature if this vulnerability is indeterminant because the condition could not be replicated.
 - Contributing Cause (CC-01): There were no contributing causes observed in this analysis.
- Event 4: Determined that Operations failed to identify the declining human performance tool standards within the organization which allowed operators to not recognize the risk present on the work travel path near 2-HS-3-945A switch.
- Rollup:
 - Rollup Root Cause: Station Leaders have been narrowly focused and overconfident resulting in less intrusiveness to fully understand issues, resolve performance gaps, and action sustainability leading to repeat issues.
 - Rollup CC-01: Corrective actions have not been completed with quality resulting in conditions going unresolved or not completed as intended.
 - Rollup CC-02: Operating experience has not been leveraged in design and evaluation of equipment issues to correct and identify failure mechanisms.
 - Rollup CC-03: A vulnerability in the design of the SG level DCS prevented automatic and manual control of SG FW inlet flow.
- f. Level of Detail: The inspectors determined the cause evaluations, in aggregate, were performed commensurate with the safety significance and complexity of the performance issue and were of sufficient detail to identify the root and contributing causes, extent of conditions, and extent of causes. The cause evaluation teams utilized a formal cause analysis process to identify the problems and determine corrective actions. The cause evaluations were performed by individuals in the licensee's organization with varying levels of experience and backgrounds. Note: Since the performance indicator inputs did not involve significant conditions averse to quality a root cause evaluation was not required in every case; however, some of the cause evaluations were elevated to a Level 1 root cause by licensee procedure and or management discretion.
- g. <u>Operating Experience</u>: The inspectors determined that the licensee appropriately considered prior occurrences and operating experience.
 - Events 1 & 3: The licensee identified the same Unit 2 main transformer differential unplanned scram occurred in June 2018.
 - Event 2: Internal and external operating experience was evaluated from a variety of sources, including the INPO database, condition reports, internal subject matter experts, users groups, and other industry peers. There are many events that pertain to feedwater regulating valves and several with respect to DCS systems. Of those reviewed, none met the conditions experienced as a part of this root cause analysis.
 - Event 4: The licensee identified several other mispositioning events with less significance.

- Rollup: Internal and external operating experience was reviewed. The rollup evaluation determined operating experience has not been leveraged in design and evaluation of equipment issues to correct and identify failure mechanisms particularly for events 1 & 3.
- h. Extent of Condition and Cause: See discussion in Section 2.
- i. <u>Common Cause:</u> From the rollup evaluation, a common cause approach was used across each of the four events to determine common factors that led to or contributed to the repeat scrams. The team identified similar behaviors between three of the four events that resulted in the rollup root cause statement listed below. The field bus module (FBM) event 3 was determined to be specific to an equipment issue with no similar findings to the other three events; therefore, this event is corrected separately (see CC-03). The inspectors determined this was reasonable and consistent with the licensee's corrective action program guidance.

2. <u>Objective: Ensure that the extent of condition and extent of cause of individual and collective</u> White performance issues are identified. (1 Sample)

Under this objective, the inspectors independently assessed the cause evaluations the licensee conducted for the four individual inputs into the White PI for Unplanned Scrams per 7000 Critical Hours and the rollup evaluation for the overall PI having exceeded the Green to White threshold, to assess the licensee's extent of condition and extent of cause.

NRC Assessment: The team concluded that this objective was met. The inspectors' review determined the licensee's evaluations were documented at a sufficient level of detail, included relevant operating experience, and identified the root causes, contributing causes, extent of conditions, and extent of causes of the performance issue. Additionally, the inspectors determined the licensee's cause evaluations appropriately considered the safety culture aspects related to each reactor trip.

Extent of Condition and Cause

The inspectors determined that the licensee appropriately identified the extent of condition and extent of cause.

- Events 1 & 3: The extent of condition identified improvements for more detailed preventive maintenance scope and investigation of cabling with similar insulation.
- Event 2: The extent scope for this event is limited to plant conditions controlled by Foxboro I/A DCS that are highway addressable remote transducer (HART) protocol enabled and that can result in an automatic reactor trip or Main Turbine runback >5% (noteworthy consequential event). The extent of scope is limited to the Foxboro I/A DCS with redundant FBM218 modules because though the exact failure mode of the low-low SG level has not been determined, the failure mode is known to be unique to Foxboro I/A that have redundant FBM218s and are HART enabled. Applying the same-similar methodology determined the extent of condition for this event includes the following conditions controlled by Foxboro DCS FBMs, field control processors, and software:
 - All SG levels with a low-low or HI-HI level
 - SG Low Steam Pressure

- FW Heater level controls
- Event 4: The licensee appropriately reviewed the event of extent of condition and cause. The extent of cause identified that the operator leadership needed to improve their compliance with OPDP-14, Operator Leadership and Fundamentals, and the procedure 0-TI-12.10 needs to be reviewed to ensure all sensitive equipment in included in the procedure. This review identified several sensitive equipment in both Unit 1 and Unit 2 were not marked properly.
- Rollup: The root and contributing causes were evaluated for extension to the same/similar programs, process, and applications.
 - Extent of Cause RC: the root cause was associated with leadership behaviors to fully evaluate equipment issues by being narrowly focused on issues, overconfident that the issues were understood, and that corrective actions have been effective at resolving the issues. The behaviors were extended from troubleshooting and evaluating equipment issues, equipment or organizational declines in performance, and application to risk assessment process oversight such as Management Review Committee, Plant Health Committee, and Plant Operational Restart Committee.
 - Extent of Cause CC-01: This contributing cause was extended from corrective actions (CAs) associated with the events evaluated in their radiologically controlled area, to other consequential equipment failures where additional oversight and challenge is required to ensure corrective actions are completed with quality. CAs in the corrective action to prevent recurrence (CAPR) Set A (A1, A2, A3, and A4) address this cause.
 - Extent of Cause CC-02: This contributing cause was extended to other applications of OE through troubleshooting activities and other risk assessment processes that address or mitigate risk. Corrective actions in the CAPR Set 'A' and CA Set 'F' address this cause.
 - Extent of Cause CC-03: This contributing cause was extended to other applications where the vulnerability in the design of the SG level DCS would prevent automatic and manual control of the SG FW inlet flow. Deficiencies in this area will be addressed under level 1 CR 1872637 CAPR1 and 2.

The inspectors reviewed the safety culture components referenced in NUREG-2165, "Safety Culture Common Language," to determine if these were appropriately considered during the licensee's evaluations of the root causes, extent of conditions, and extent of causes.

The rollup common cause evaluation identified the following safety culture weaknesses in the areas of:

- P.3: Resolution
- H.12: Avoid Complacency.

Corrective actions were developed to address these weaknesses.

3. <u>Objective: Ensure that completed corrective actions to address and preclude repetition of</u> White performance issues are timely and effective. (1 Sample)

Under this objective, the inspectors assessed the appropriateness and timeliness of the licensee's corrective actions.

NRC Assessment: The team concluded that this objective was met.

- a. Completed Corrective Actions to Prevent Recurrence
 - Events 1 & 3:
 - CAPR for direct cause: Revised the troubleshooting procedure to require determination of the basic equipment cause (i.e. failure mechanism).
 - CAPR for direct cause: Revised the corrective action program and the issue resolution processes to require determination of the failure mechanism.
 - CAPR for root cause #1: Management training on the new troubleshooting process and expectations and update the qualification requirements regarding the same.
 - CAPR for root cause #2: Create and issue a design change that improves reliability of the wiring to prevent vibration induced degradation.
 - CAPR for root cause #2: Implement the design change that improves the reliability of the main transformer differential protective circuitry cabling on Unit 1 using stainless steel armored insulation.
 - Event 2: CAPRs were focused on mitigating the impact of the root cause since the cause was indeterminate as allowed by the CAP program.
 - CAPR-1 (action 033) implements a SG level control strategy that prevents a plant trip when FBM218 oscillations occur. This CAPR addresses the root cause and the additional scope that includes the SG HI-HI limit that will initiate an automatic reactor trip.
 - CAPR-2 (action 034) addresses the remainder of the extent of cause, which includes the Feedwater Heater Level controls. CAPR-2 implements a Feedwater Heater Level control strategy that prevents a plant trip when FBM218 oscillations occur.
 - Event 4: No CAPR required for level 2 evaluation per licensee CAP procedure.
 - Rollup: In addition to the CAPRs for events 1-4 the following new common cause CAPRs were generated from this Root Cause Analysis:
 - Action A3: Revise Corrective Action Program procedures to require Management Review Committee review of performance gaps related to Equipment Reliability issues and adverse trends to allow appropriate challenge for intrusiveness, effectiveness, and sustainability to prevent repeat occurrence.
 - Action D1: Revise the Leadership Culture JFG-NSP-Culture to include requirement to discuss the intent for troubleshooting of key equipment issues to identify the equipment cause at the failure mechanism level. Include what risk management processes must be addressed for an indeterminant cause.
 - Action D2: Revise the middle manager JFG-SMM required reading Section 1 to include NPG-SPP-06.14 and Section 2 to include a required activity to Observe or Sponsor Troubleshooting Teams for a 'Key Equipment' Issue (as defined by NPG-SPP-09.18) with a focus on the team's identification a failure mechanism as the equipment cause and what processes and actions are required for an indeterminant cause. Add a refresher periodicity to ensure proficiency.

b. Other Completed Corrective Actions

- Events 1 & 3: There are a number of CA's. In summary, the CA's consist of leadership, management, and line worker training of the new processes for troubleshooting and expectations. In addition to the training there are CA's associated with procedure or preventive maintenance changes to capture learnings from the extent of condition and cause.
- Event 2: Continue to monitor and collect data for the design vulnerability if symptoms recur.
- Event 4: The licensee reinforced the human performance tool usage standards at pre-job briefs (PJB) with all operations crew and performed observations of PJBs and field performance to confirm human performance tool usage standards. The observation was provided to the operations superintendent for review and grading. The licensee also revised the procedure 0-TI-12.10, "Sensitive Equipment List," to include 2-HS-3-945A hand switch and installed a protective cover on the switch.
- Rollup: Other Corrective Actions (non-CAPR) that Address the Root Cause:
 - Action B: Set Senior Leadership Expectations for driving to Failure Mechanism based on the Standard (action credited from CR 1906093-004)
 - Action C: Teach Standard and Expectations using small group cross functional Practical Exercises
 - Action E: PRACTICE/OWN the standard by observing and coaching (Enabling Action) -Revise the Plant Reliability Safety Net Observation Template (action credited from CR 1906093-004)
 - Action F: PRACTICE the Standards and Expectations with targeted Oversight/Coaching personnel engaged during Fleet Key Equipment Issue investigation.
- 4. <u>Objective: Ensure that pending corrective action plans direct prompt and effective actions to address and preclude repetition of White performance issues. (1 Sample)</u>

Under this objective, the inspectors assessed the appropriateness and timeliness of the licensee's planned corrective actions.

NRC Assessment: The team concluded that this objective was met. The inspectors concluded the dates for implementation and completion of the planned root and contributing cause corrective actions were reasonable, effective, and prioritized with consideration for risk significance and regulatory compliance. The inspectors also concluded the licensee established reasonable measures of success to evaluate the effectiveness of the corrective actions. When complete, the NRC plans to inspect and assess the planned corrective actions to prevent recurrence identified in Section a of this objective.

- a. <u>Planned Corrective Actions to Prevent Recurrence</u>
 - Events 1 & 3: CAPR for root cause #2: Implement the design change that improves the reliability of the main transformer differential protective circuitry cabling on Unit 2 using stainless steel armored insulation. Implementation is planned for the spring 2025 refueling outage. As a bridging strategy until design

change completion, the licensee replaced the damaged cable and installed a protective covering over the cable at the location of the vibration induced damage. This bridging strategy was completed prior to coming back online on January 31, 2024.

- Event 2: All CAPRs have been completed for event 2 and procedures are in place.
- Event 4: No CAPR required for level 2 evaluation per licensee CAP procedure.
- Rollup: The additional CAPRs have been implemented, only effectiveness reviews are pending.

b. Other Planned Corrective Actions

- Events 1 & 3: Some CAs are in progress with an expectation of completion in the first of half of 2025 associated with preventive maintenance procedure changes.
- Event 2: Continue to monitor and collect data for the design vulnerability if symptoms recur.
- Event 4: All CAs are completed.
- Rollup: Some CAs are in progress with an expectation of completion in the first of half of 2025.

5. <u>Conclusion (1 Sample)</u>

The team's conclusions were as follows:

Old Design Issue Evaluation

The inspectors did not evaluate the finding and associated violation for treatment as an Old Design Issue as it did not satisfy the criteria specified in IMC 0305 Section 11.05.

Conclusion

The inspectors concluded the corrective actions to preclude repetition of the root and contributing causes of the performance issue were effective and adequately prioritized considering safety significance and regulatory compliance. In addition, the inspectors determined evaluations were documented at a sufficient level of detail, included relevant operating experience, and identified the root causes, contributing causes, extent of conditions, and extent of causes of the performance issue. Based on the results of the inspections, the inspectors concluded the objectives of the IP were met.

The team did observe that some of the actions involving upgraded procedures, could be improved to clarify when the procedures are expected to be entered. For example, repetitive failures of emergency diesel generator dampers were not evaluated under the advanced troubleshooting procedures requiring identification of the failure mechanism. Support systems for safety-related structure systems and components which could result in the failure of the supported system or component should be screened into to prevent repetitive failure of these components similar to events 1 & 3.

INSPECTION RESULTS

No findings were identified.

EXIT MEETINGS AND DEBRIEFS

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

• On December 12, 2024, the inspectors presented the 95001 supplemental inspection results to Delson Erb, Vice President Operational Support, and other members of the licensee staff. Immediately following the exit meeting, Lou McKown, Chief, Projects Branch 5, conducted the Regulatory Performance Meeting with Delson Erb and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection	Туре	Designation	Description or Title	Revision or
Procedure				Date
95001	Corrective Action	CR 1864894		
	Documents	CR 1872637		
		CR 1906983		
		CR 1914685		
		CR 1928330		
		CR 1970912		
	Procedures	NPG-SPP-06.14	Guidelines for Planning and Execution of Troubleshooting Activities	Rev 14
		NPG-SPP-09.70	Complex Troubleshooting	Rev 1
		NPG-SPP-22.300	CAP procedure.pdf	Rev 24
		NPG-SPP-22.300	CAP procedure	Rev 25
		NPG-SPP-22.305	Level 2 Evaluations.pdf	Rev 8
		NPG-SPP-22.306	Level 1 Evaluations	Rev 8
		NPG-SPP-22.600	Issue Resolution	Revs 13 and 14
	Work Orders	WO 124269218		
		WO 124269960		
		WO 124270579		
		WO 124270580		
		WO 124270584		