UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
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July 6, 2023

EA-23-035

David P. Rhoades
Senior Vice President
Constellation Energy Generation, LLC
President and Chief Nuclear Officer (CNO)
Constellation Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: RESPONSE TO DISPUTED NON-CITED VIOLATION DOCUMENTED IN PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3, INSPECTION REPORT 05000277/2022004 AND 05000278/2022004

Dear David Rhoades:

On March 6, 2023, Constellation Energy Generation (CEG) provided a written response (ML23065A158)[1] to U.S. Nuclear Regulatory Commission (NRC) Inspection Report 05000277, 05000278/2022004 (ML23033A333) issued on February 2, 2023, for an inspection completed at Peach Bottom Atomic Power Station, Units 2 and 3. In the letter, CEG disputed the characterization of non-cited violation (NCV) 05000277, 05000278/2022004-01, as Green (very low safety significance) which was documented in the inspection report.

The NRC conducted a detailed review of your response and the applicable NRC policies and inspection guidance. This review was performed by NRC staff members who possess relevant regulatory knowledge and who did not participate in the subject inspection.

After consideration of the bases provided by CEG, the NRC concluded that this non-cited violation was appropriately dispositioned as more-than-minor and of very low safety significance (Green).

[1] Designation refers to an Agencywide Documents Access and Management System (ADAMS) accession number. Documents referenced in this letter are publicly-available using the accession number in ADAMS at https://adams.nrc.gov/wba/ For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to pdr.resource@nrc.gov.

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,

Raymond R. McKinley

Digitally signed by Raymond R. McKinley
Date: 2023.07.06 08:13:33 -04'00'

for Blake D. Welling, Director
Division of Operating Reactor Safety

Docket Nos. 50-277 and 50-278
License Nos. DPR-44 and DPR-56

Enclosure:
NRC Staff Assessment of Disputed
NCV 05000277, 05000278/2022004-01

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SUBJECT: RESPONSE TO DISPUTED NON-CITED VIOLATION DOCUMENTED IN PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3, INSPECTION REPORT 05000277/2022004 AND 05000278/2022004 DATED JULY 6, 2023

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NRC STAFF ASSESSMENT OF DISPUTED NCV 05000277, 05000278/2022004-01, FAILURE TO IMPLEMENT AN EFFECTIVE MAINTENANCE STRATEGY FOR UNIT 2 AND UNIT 3 RESIDUAL HEAT REMOVAL SYSTEM AGASTAT RELAYS

The U.S. Nuclear Regulatory Commission (NRC) staff reviewed the information provided in Constellation Energy Generation's (CEG) letter (ML23065A158) dated March 6, 2023, to determine whether non-cited violation (NCV) 05000277, 05000278/2022004-01 was appropriately characterized as more-than-minor. This review was performed by NRC staff who possess relevant regulatory knowledge and who did not participate in the inspection that resulted in issuance of this NCV. In performing this assessment, the NRC reviewers relied upon the documents listed in the reference section of this enclosure and consulted with other NRC staff members.

A. BACKGROUND

On February 2, 2023, the NRC issued Inspection Report 05000277, 05000278/2022004 (ML23033A333) for baseline inspections completed at Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3. The inspection report documented a Green finding and associated non-cited violation (NCV) of Technical Specification (TS) 5.4.1.a, "Procedures," and Regulatory Guide (RG) 1.33. Specifically, CEG failed to establish an effective maintenance strategy for Agastat control relays in the safety-related residual heat removal (RHR) systems at Peach Bottom Unit 2 and Peach Bottom Unit 3.

In their letter dated March 6, 2023, CEG contested the characterization of the finding as more-than-minor stating that:

> *Constellation Energy Generation, LLC (CEG) is respectfully contesting the significance of the Green finding and associated non-cited violation (NCV) documented in the referenced U.S. Nuclear Regulatory Commission (NRC) Inspection Report for Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3.*
>
> *The referenced inspection report documents a Green finding and associated NCV of Technical Specification (TS) 5.4.1.a, "Procedures," and Regulatory Guide (RG) 1.33, "Quality Assurance Program Requirements (Operation)," for CEG's failure to establish an effective maintenance strategy for Agastat control relays in the safety-related Residual Heat Removal (RHR) system at both PBAPS, Units 2 and 3. RG 1.33, Appendix A, November 1972, Section I, requires in part, that preventive maintenance schedules should be developed to specify inspection of replacement parts that have a specified lifetime. The NRC noted that the vendor specified lifetime for the Agastat relays is 25,000 operations or 10 years from the date of manufacture, whichever occurs first, which was exceeded for a Unit 2 RHR control relay that failed in October 2017 and was over 37 years old.*
>
> *The NRC determined that not establishing a preventive maintenance schedule, or effective maintenance strategy for the PBAPS, Units 2 and 3, RHR system Agastat control relays in accordance with TS 5.4.1.a, and as implemented in station procedure ER-AA-200, "Preventive Maintenance Program," was a performance deficiency that was reasonably within CEG's ability to foresee and correct. The inspectors determined that the performance deficiency was more than minor because if left uncorrected, it would have the potential to lead to a more significant safety concern.*

CEG's position is that the more than minor significance is unwarranted and should be reconsidered based on the supporting information/justification provided in the Attachment to this letter.

B. RESTATEMENT OF PERFORMANCE DEFICIENCY EVALUATION FOR NCV 05000277/278/2022004-01

The NRC inspection report describes the performance deficiency (PD) and the screening criteria used as the basis for considering the PD as of more-than-minor safety significance:

Performance Deficiency: The inspectors determined that not establishing a preventive maintenance schedule, or effective maintenance strategy for Unit 2 and Unit 3 RHR system Agastat control relays in accordance with TS 5.4.1.a, and as implemented in station procedure ER-AA-200, was a performance deficiency that was reasonably within Constellation's ability to foresee and correct.

Screening: The inspectors determined the performance deficiency was more than minor because if left uncorrected, it would have the potential to lead to a more significant safety concern. Specifically, Agastat relay failures in the RHR system have the potential to render a single ECCS instrumentation channel, or single train of the RHR system inoperable per TS, between quarterly surveillance tests. This performance deficiency is similar to Example 13.a in NRC IMC 0612, Appendix E, "Examples of Minor Issues," dated January 1, 2021.

The NRC inspection report further documents the safety significance resulting from the finding, evaluated in accordance with NRC Inspection Manual Chapter (IMC) 0609:

Significance: The inspectors assessed the significance of the finding using IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." The inspectors utilized IMC 0609, Appendix A, Exhibit 2, "Mitigating System Screening Questions," and answered "No" to Question 1: "If the finding is a deficiency affecting the design or qualification of a mitigating SSC, does the SSC maintain its operability, or PRA functionality?". The inspectors answered "No" to Question 2: "Does the degraded condition represent a loss of the PRA function of a single train TS system for greater than its TS allowed outage time?". The inspectors answered "Yes" to Question 3: "Does the degraded condition represent a loss of PRA function of one train of a multi-train TS system for greater than its TS allowed outage time?"

Detailed Risk Assessment: Specifically, TSs related to the RHR system had a 7-day allowed outage time (AOT) in 2017, when the failure of the Agastat relay for '2A' RHR pump occurred. The last time operability of the 'A' train of the RHR system was confirmed, was during performance of ST-O-010-301-2, 92 days before the October 5, 2017, surveillance. Therefore, past operability during this 92-day period was unknown and undetermined, which is greater than the TS AOT of 7 days. Therefore, in accordance with IMC 0609, Appendix A, a detailed risk evaluation (DRE) was performed. The Senior Reactor Analyst (SRA) used the Systems Analysis Programs for Hands-On Evaluation (SAPHIRE), Revision 8.2.6, Peach Bottom Standardized Plant Analysis Risk Model, version 8.80 to perform the DRE. The basic event, RHR-MOV-CC-F016A, MINFLOW Valve 10-16A Fails to Open, was set to TRUE. This was performed to invoke a limited common cause failure potential for the evaluation of the performance

deficiency. Other RHR motor operated valve failure probabilities were increased by an order of magnitude to account for increased failure probability though current surveillance tests were satisfactory. The SRA did not include recovery for proper identification and repositioning of the valve(s) by operators. This is considered a bounding analysis for Unit 2 and would represent the potential risk to Unit 3, separately. No failures were identified on Unit 3. A 92-day exposure time was used to bound the degraded condition and performance deficiency. The increase in core damage frequency (CDF) for the conditional increased failure to open was calculated to be 9E-8/year for the internal risk contribution. The dominant core damage sequence consisted of a postulated loss of 4kV E12 bus, containment failure with loss of all injection, failure to recover the power conversion system, and common failure of the RHR min flow lines. IMC 0609, Appendix A, "SDP For Findings At-Power," does not require a detailed evaluation of external risk contribution for internal event CDF increases below a 1E-7/yr threshold. Additionally, the impact on large early release frequency would not change this risk determination. This issue was determined to be of very low safety significance (Green) for the calculated increase in CDF/yr due to the degraded condition.

C. LICENSEE POSITION

In their March 6, 2023, letter, CEG contested the more-than minor assessment of the PD stating:

CEG has reviewed the information from the inspection report as described above and has elected to not contest the assigned Performance Deficiency, but offers the following information for further NRC review and consideration in contesting the significance of this Green NCV. It is the position of CEG that the maintenance strategy developed for the subject relays is appropriate, meets the requirements of Regulatory Guide 1.33, and does not require changes in response to this failure. Therefore, it is not reasonable to conclude that if left uncorrected, the performance deficiency would have the potential to lead to a more significant safety concern. Similar to the minor Example 13.a from IMC 0612 Appendix E, the engineering evaluation of this maintenance strategy shows that a replacement PM is not required over the remaining term of the operating license. In addition, this situation can be compared to Example 3.l. In this example, the licensee failed to incorporate industry data in implementation of activities that would provide assurance that equipment would meet its design basis function. The example can be screened as minor if the licensee could show that the data population was sufficiently large to represent the performance of the equipment, such that no changes to the testing and maintenance programs were necessary. For the Peach Bottom relay failure, as discussed in detail below, the reviews of site and industry data have demonstrated that the current maintenance strategy is supported by expected failure modes and failure rates and provide reasonable assurance of meeting the specified safety function.

D. NRC STAFF REVIEW

The NRC staff reviewed CEG's position regarding the inspectors' more-than-minor conclusion and applicable NRC inspection guidance. The NRC staff reviewed guidance in IMC 0611, "Power Reactor Inspection Reports," IMC 0612, "Issue Screening," and IMC 0612, Appendix E, "Examples of Minor Issues."

NRC Process for Screening Inspection Issues

NRC IMC 0612 and its appendices provide NRC inspectors guidance to screen inspection issues. Once the inspectors identify that a PD exists, the PD is screened to determine whether it is of more-than-minor safety significance in accordance with IMC 0612. IMC 0612, Section 05.01 lists three screening questions that inspectors use to determine whether a PD is more-than-minor. This section also provides specific guidance on the use of each of these questions and directs inspectors to use the examples in IMC 0612, Appendix E, "Examples of Minor Issues," to inform the minor/more-than-minor determination.

IMC 0612, Section 0612-05 states, in part:

> *The minor/more-than-minor determination requires inspectors to apply reasonable judgment to assess if the performance deficiency has created the potential of more-than-minor safety or security consequences. In making this determination, inspectors should consider the circumstances, the likelihood of adversely affecting the cornerstone objectives, and the effect on applicable cornerstone objectives affecting safety and security. Other factors such as maintaining defense in depth, engineered safety margins, and the prevention of too much reliance on human operators for rapid critical decisions should also be considered in this assessment. Equipment inoperability is not a prerequisite for the performance deficiency to be more-than-minor*.
>
> *It should also be understood that with all judgment-calls, some variability will exist whenever different inspectors have to apply judgment to unique and site-specific circumstances to determine if a performance deficiency is more-than-minor. To ensure that the Reactor Oversight Process is risk-informed, significant effort should not be expended on making minor or more-than-minor determinations. Inspectors should risk inform their level of effort commensurate with the potential safety significance of the performance deficiency. Ultimately, the inspection report signature authority makes the final determination based on their interpretation of the guidance within the IMC*.

As noted in Section B of the Enclosure, the more-than-minor screening question used by inspectors for this issue was "If left uncorrected, would the performance deficiency have the potential to lead to a more significant safety concern?" The inspectors also used IMC 0612, Appendix E, Example 13.a to inform their decision.

NRC Review of CEGs Written Response

Based on the scope of the contestation discussed in CEG's letter, the reviewers focused on the basis for the more-than-minor conclusion and arguments presented in CEG's letter that the PD should be deemed minor. The reviewers did not reconsider the described PD or associated violation. Additionally, the reviewers did not evaluate whether the corrective actions described in the CEG letter were adequate.

The NRC inspection report and CEG's contestation letter both focused on the application of IMC 0612, Appendix E, Example 13.a, as the basis for considering the PD to be more-than-minor and minor, respectively. Because Example 13.a addresses service life issues and is directly related to the subject PD, the reviewers agreed the use of this example is appropriate

for informing the inspectors' "more-than-minor" response to the NRC IMC 0612, "Issue Screening" question, "If left uncorrected, would the performance deficiency have the potential to lead to a more significant safety concern?"

Example 13.a states:

> *In 2005, the licensee assessed (as required by regulatory requirements or self-imposed standards) a Vendor Bulletin which stated the period of time that a Molded-Case Circuit Breakers (MCCBs) can be installed without refurbishment or replacement is 20 years for mild environment applications. Vendor Bulletin stated that this time interval could be extended through preventive maintenance, testing, and aging analysis based on operational usage (number of demands or cycles) and actual plant conditions. The licensee's engineering evaluation of the Bulletin concluded that based on the environmental conditions and usage of the affected MCCBs, the MCCBs should either be refurbished or replaced before exceeding 20 years of service. The licensee planned to revise their MCCB preventive maintenance procedures by 2008 to require refurbishment or replacement of all MCCBs in safety-related systems prior to exceeding 20 years of service.*
>
> *During this inspection (2016), the preventive maintenance procedures had not been updated thus the affected MCCBs remained in service for 26 to 28 years, well beyond their 20 year refurbishment or replacement interval. To date, no MCCBs failures have occurred at the licensee's site.*
>
> *The PD: The licensee failed to translate MCCB refurbishment/replacement schedules into maintenance instructions contrary to regulatory requirements or self-imposed standards.*
>
> *Minor if: If left uncorrected, it is not reasonable to conclude the PD would have the potential to lead to a more significant safety concern. Specifically,*
>
> - *the licensee re-evaluated existing preventive maintenance procedures and determined the intent of the Vendor Bulletin was met,*
>   *-or-*
> - *the licensee re-analyzed the existing engineering evaluation (or performed a new one after NRC identification of the issue) and determined the newly calculated time period extended beyond the expiration of the operating license. In performing the new engineering evaluation, the conditions in MTM below did not apply.*
>
> *MTM if: If left uncorrected, the PD has the potential to lead to a more significant safety concern. Specifically, absent NRC's intervention, the license's failure to establish and perform appropriate preventative maintenance refurbishments or replacements can lead to in-service component deterioration and resultant failures of MCCBs to perform their safety-related functions.*
>
> *-or-*
>
> *The PD was associated with the equipment performance 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, exceeding the previously analyzed time period for replacement or refurbishment caused reasonable doubt on the continual ability of the MCCBs to perform their safety-related functions. In re- analyzing the existing engineering evaluation (or in performing a new one after NRC identification of the issue), the licensee (a) used a different approach because the original approach resulted in unfavorable margin; or (b) revised assumptions solely to obtain favorable results; or (c) revised other calculations in order to establish operability or functionality; or (d) determined the remaining margin falls outside the licensee's design process acceptance criteria. Unfavorable margin means that had the correct values been used originally, the licensee's design process would not have accepted the modification.

CEG asserted that this issue was minor because an engineering evaluation of the current maintenance strategy shows that a replacement preventive maintenance activity is not required over the remaining term of the Peach Bottom operating license. CEG concluded that in the mild applications with ambient temperatures of 80°F, such as the Peach Bottom application for this relay, the qualified life of this relay is 209 years. Therefore, CEG asserted that it can reasonably be expected that an Agastat TR relay installed in a normally deenergized, mild service condition, non-critical application will not require replacement over Peach Bottom's currently licensed lifetime.

The reviewers found that the CEG response addressed the first part of IMC 0612, Appendix E, Example 13.a which states that the issue is minor if the licensee re-analyzed the existing engineering evaluation (or performed a new one after NRC identification of the issue) and determined the newly calculated time period extended beyond the expiration of the operating license. However, the reviewers determined that CEG did not address the guidance in the example which states, "In performing the new engineering evaluation, the conditions in 'more-than-minor' below did not apply."

These conditions are as follows:

Paragraph 1 - If left uncorrected, the performance deficiency has the potential to lead to a more significant safety concern. Specifically, absent NRC's intervention, the license's failure to establish and perform appropriate preventative maintenance refurbishments or replacements can lead to in-service component deterioration and resultant failures of [SSCs] to perform their safety-related functions.

-or-

Paragraph 2 - The performance deficiency was associated with the equipment performance 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, exceeding the previously analyzed time period for replacement or refurbishment caused reasonable doubt on the continual ability of the [SSC] to perform their safety-related functions. In re-analyzing the existing engineering evaluation (or in performing a new one after NRC identification of the issue), the licensee:

(a) used a different approach because the original approach resulted in unfavorable margin; or
(b) revised assumptions solely to obtain favorable results; or
(c) revised other calculations in order to establish operability or functionality; or

(d) *determined the remaining margin falls outside the licensee's design process acceptance criteria. Unfavorable margin means that had the correct values been used originally, the licensee's design process would not have accepted the modification.*

With regards to Paragraph 1 above, IMC 0612, Section 05.01.b.3 provides additional clarifying guidance. Specifically, this section states, "*The 'potential to lead to a more significant safety concern' speaks to the realistic potential that the condition introduced by the performance deficiency would eventually progress to the point of adversely affecting a cornerstone objective if left uncorrected*." Based on the information available, including CEG's response, the reviewers determined that this more-than-minor condition remains applicable to the PD.

The NRC inspection report states that there are 38 similar relays installed in the Peach Bottom Unit 2 RHR system and 38 relays in the Unit 3 RHR system with no preventive maintenance schedule of replacement frequency identified. The NRC inspection report further states that CEG did not perform a failure analysis of failed relay 2-10A-K084A. The reviewers considered that for this unexpected failure, CEG did not ascertain why it occurred and what process should have prevented it. The reviewers concluded that this performance, if left uncorrected, also has the realistic potential to progress to the point of resulting in unavailability and unreliability of the RHR system.

With regards to Paragraph 2, the reviewers noted that CEG's response did not address the four evaluation points in the more-than-minor assessment. However, the reviewers noted that the CEG contestation letter states, based on evaluations performed by CEG, the life of the relay was extended to greater than the licensing period of the plant. The evaluation appears to be based on an environmental qualification report from another site and was performed in response to inspector questions. CEG stated:

> *In response to inspector concerns regarding the maintenance question, additional research was conducted to confirm that the strategy is reasonable for non-critical relays. This research produced varying expected lifespans for control relays, with significant influence from the installed service condition and normal state of the relay. Although Peach Bottom does not use this relay in Environmentally Qualified (EQ) applications, other sites have analyzed Agastat TR relays for this application. Components required by 10CFR50.49 for environmental qualification (EQ) must be specifically tested for each of their service conditions to include duty cycle. The extensive testing that is performed to environmentally qualify a component results in a lifetime bound by the most limiting factor based on the test conditions. This testing and analysis produces a Qualified Life that is specific to the installed service conditions. An EQ analysis was performed for Quad Cities Station (EQ-80Q), which found that in a more severe application with ambient temperatures of 120F, the relay has a Qualified Life of 24.6 years. In mild applications with ambient temperatures of 80F, such as the Peach Bottom application, the Qualified Life of this relay is 209 years. Therefore, it can reasonably be expected that an Agastat TR relay installed in a normally deenergized, mild service condition, non-critical application will not require replacement over Peach Bottom's currently licensed lifetime.*

The reviewers confirmed that the evaluation created by CEG was not performed prior to the inspection that resulted in the subject NCV. As a result, the reviewers concluded that Example 13.a, Paragraph 2 part (a), and most likely (b) and (c) should be answered "yes." By

answering in the affirmative, the reviewers concluded that NRC screening guidance to the inspectors was properly implemented to reach a conclusion that the PD was more-than-minor.

Finally, the reviewers noted that Example 13.a assumes there were no equipment failures to date, however, this is not the case for the Peach Bottom installed Agastat relays. CEG's response letter stated that the failure of time delay relay 2-10A-K084A resulted in an entry into TS Limiting Condition of Operation (LCO) 3.3.5.1 for inoperable control logic associated with DPIS-2-10-121A (2A RHR pump differential pressure indicating switch) and was a maintenance rule functional failure. The reviewers found that an inoperable control logic adversely affects the mitigating cornerstone objective of maintaining the availability, reliability, and capability of systems that respond to initiating events, and therefore would cause this issue to be more-than-minor.

Additional Considerations

In completing this review, which focused on the implementation of the NRC's more-than-minor process and the inspection conclusions, NRC reviewers noted the following additional avenues of inquiry may be germane to NCV 05000277, 05000278/2022004-01.

- CEG did not perform a failure analysis on the 2-10A-K084A relay in 2017 and, thus, did not ascertain whether the relay failure was due to a random failure, age-related degradation, or other factors. The reviewers considered that this missing information impacts CEG's basis for establishing effective preventive maintenance strategies and replacement programs for the 2-10A-K084A relay, for both the program prior to issuance of the associated NCV and the program going forward.

- The reviewers noted that the 2-10A-K084A relay and other relays of the same model in the Peach Bottom Unit 2 and Unit 3 RHR systems were classified by CEG as non-critical components. The reviewers ascertained that CEG's Performance Centered Maintenance (PCM) template therefore recommends no periodic replacement or preventive maintenance for these relays. The reviewers considered that no periodic replacement or preventive maintenance appeared to indicate that CEG considered these relays to be effectively classified as 'run-to-failure.'

  NUMARC 93-01[i], "Industry Guidelines for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," provides guidance to licensees that may be used to implement the requirements of 10 CFR 50.65 (Maintenance Rule). This guidance states repeatedly that structures, systems, and components within the scope of the Maintenance Rule can be allowed to run-to-failure provided they have little or no contribution to system safety function. The reviewers noted that in the Peach Bottom 50.69 categorization process, CEG classified valve MO-2-10-016A and associated relay 2-10A-K084A as high safety significant (RISC-1) to support the RHR pump minimum flow function. This function is classified by CEG as a high safety significant function. The other Unit 2 and Unit 3 RHR pumps and associated relays are similarly classified. Though the reviewers questioned CEG's implementation of maintenance rule guidance and associated commitments (e.g., treatment of these relays as run-to-failure) given that CEG categorized these relays as RISC-1, the reviewers did not consider this to be within the scope of review of CEG's contestation letter.

- The reviewers did not evaluate the adequacy of the underlying technical basis cited by CEG to make their conclusion that relay 2-10A-K084A has an established service life of 209 years. However, the reviewers did note that CEG's conclusion was limited to theoretical analysis and extrapolation, since there is no operating experience to support that a 209-year service life is realistic. Such a preventative maintenance strategy for a class of relays used extensively in emergency safety features (ESF) would warrant further review both for system performance and for probabilistic risk model equipment reliability assumptions.

E. CONCLUSION

After consideration of the bases provided by CEG, the NRC staff concluded that this NCV was appropriately dispositioned as more-than-minor and of very low safety significance (Green).

F. REFERENCES

- IMC 0612, "Issue Screening," dated 12/12/2019
- IMC 0612, Appendix B, "Issue Screening Directions," dated 08/08/2022
- IMC 0612, Appendix E, "Examples of Minor Issues," dated 12/10/2020
- NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," Revision 4A
- Regulatory Guide 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," Revision 4
- PB-5069-10-10A-003, "10 CFR 50.69 SCD – Residual Heat Removal System – Peach Bottom Units 2 & 3," Revision 1

[i] The NRC endorsed this guidance in Regulatory Guide 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants.