**UNITED STATES**
**NUCLEAR REGULATORY COMMISSION**
**REGION III**
**2443 WARRENVILLE ROAD, SUITE 210**
**LISLE, ILLINOIS 60532-4352**

October 8, 2021

Mr. Thomas Conboy
Site Vice President
Monticello Nuclear Generating Plant
Northern States Power Company, Minnesota
2807 West County Road 75
Monticello, MN 55362–9637

SUBJECT: MONTICELLO NUCLEAR GENERATING PLANT – DESIGN BASIS ASSURANCE INSPECTION (TEAMS) INSPECTION REPORT 05000263/2021010

Dear Mr. Conboy:

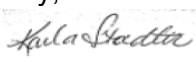
On September 24, 2021, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Monticello Nuclear Generating Plant and discussed the results of this inspection with Chris Church and other members of your staff. The results of this inspection are documented in the enclosed report.

Two findings of very low safety significance (Green) are documented in this report. Each 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 III; the Director, Office of Enforcement; and the NRC Resident Inspector at Monticello Nuclear Generating Plant.

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 Stoedter, Karla
on 10/08/21

Karla K. Stoedter, Chief
Engineering Branch 2
Division of Reactor Safety

Docket No. 05000263
License No. DPR-22

Enclosure:
As stated

cc w/ encl: Distribution via LISTSERV®

Letter to Thomas Conboy from Karla K. Stoedter dated October 8, 2021.

SUBJECT: MONTICELLO NUCLEAR GENERATING PLANT – DESIGN BASIS ASSURANCE INSPECTION (TEAMS) INSPECTION REPORT 05000263/2021010

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**U.S. NUCLEAR REGULATORY COMMISSION**
**Inspection Report**

| | |
|---|---|
| Docket Number: | 05000263 |
| License Number: | DPR-22 |
| Report Number: | 05000263/2021010 |
| Enterprise Identifier: | I-2021-010-0052 |
| Licensee: | Northern States Power Company, Minnesota |
| Facility: | Monticello Nuclear Generating Plant |
| Location: | Monticello, MN |
| Inspection Dates: | August 16, 2021 to September 24, 2021 |
| Inspectors: | J. Brand, Reactor Inspector<br>B. Daley, Senior Reactor Inspector<br>S. Gardner, Electrical Contractor<br>R. Ruiz, Project Engineer<br>E. Sanchez Santiago, Senior Reactor Inspector<br>A. Shaikh, Senior Reactor Inspector |
| Approved By: | Karla K. Stoedter, Chief<br>Engineering Branch 2<br>Division of Reactor Safety |

Enclosure

## SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting a design basis assurance inspection (teams) inspection at Monticello Nuclear Generating Plant, 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

| Failure to Establish the Suitability of the Fault Interrupting Capability of Fuses | | | |
|---|---|---|---|
| Cornerstone | Significance | Cross-Cutting Aspect | Report Section |
| Mitigating Systems | Green<br>NCV 05000263/2021010-01<br>Open/Closed | None (NPP) | 71111.21M |
| The inspectors identified a finding of very low safety significance (Green) and a Non-cited Violation of 10 CFR 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to establish the suitability of the FNA fuses which are used for fault interrupting capability in safety-related functions. Specifically, Bussmann FNA fuses used in the 125 Volt direct current (VDC) system did not meet the Monticello design attributes which relied on the capability to interrupt a 10,000 Amp (10 kA) fault current. | | | |

| Failure to Translate Correct Flow Rate into Plant Flooding Procedure and Calculations | | | |
|---|---|---|---|
| Cornerstone | Significance | Cross-Cutting Aspect | Report Section |
| Mitigating Systems | Green<br>NCV 05000263/2021010-02<br>Open/Closed | None (NPP) | 71111.21M |
| The inspectors identified a finding of very low safety significance (Green) and a Non-cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to use the correct flow input in plant flooding abnormal operating procedures and calculations. When the correct flow rate was used, the time to perform time critical operator actions (TCOAs) following a postulated pipe break in the Plant Administration Building was reduced from 60 minutes to 41 minutes. | | | |

## 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. Starting on March 20, 2020, in response to the National Emergency declared by the President of the United States on the public health risks of the coronavirus (COVID-19), inspectors were directed to begin telework. In addition, regional baseline inspections were evaluated to determine if all or a portion of the objectives and requirements stated in the IP could be performed remotely. If the inspections could be performed remotely, they were conducted per the applicable IP. In some cases, portions of an IP were completed remotely and on site. The inspections documented below met the objectives and requirements for completion of the IP.

## REACTOR SAFETY

71111.21M - Design Bases Assurance Inspection (Teams)

The inspectors evaluated the following components and listed applicable attributes, permanent modifications, and operating experience:

Design Review - Risk-Significant/Low Design Margin Components (IP Section 02.02) (4 Samples)

(1) High Pressure Coolant Injection Pump (P-209)

1. Operating Procedures (normal, abnormal, emergency)
2. Maintenance Effectiveness
3. Modifications
4. System Health
5. Component Walkdown
6. Environmental Qualification
7. Protection Against External Events
    a. Seismic
    b. Flooding
    c. High Energy Line Break
8. Mechanical Design Calculations
    a. Flow Capacity and Balance
    b. Required Submergence (Net Positive Suction Head, Vortexing)
    c. Tank Level Setpoints and Instrument Uncertainty
    d. Suppression Pool Level Setpoints
    e. Hydraulic Transients
    f. Steam Supply
    g. Suppression Water Temperature
    h. Suction Transfer Valve Function
    i. Room Heat up Calculations
9. Test/Inspection Procedures, Acceptance Criteria and Recent Results

a. Pump Comprehensive In-service Testing (IST) Surveillances
b. Pump Quarterly IST Surveillances

(2) D10 Battery Charger

1. Updated Final Safety Analysis Report (UFSAR)/Technical Specification (TS) Requirements
2. Walkdown
3. Operating Procedures
4. System Health
5. Flooding
6. Sizing
7. Current Limit Setting
8. Duty Cycle
9. Contribution to Short Circuit Current
10. Protective Fuses and Breakers
11. Voltage Drop Calculation
12. Circuit Coordination Including Fuse Ratings

(3) 250 VDC Panel D312

1. UFSAR/TS Licensing Requirements
2. Walkdown
3. Operating Procedures
4. System Health
5. Environmental Qualification
6. Short Circuit Calculations
7. Coordination Calculations
8. Fuse Applications and Ratings

(4) Emergency Filtration Train-Emergency Service Water (EFT-ESW)

1. UFSAR/TS Requirements
2. Walkdown
3. Operating Procedures
4. System Health
5. Internal Flooding
6. Time Critical Operator Actions
7. Internal Flooding Calculations
8. Abnormal Operating Procedures
9. Alarm Response Procedures
10. Control Room Annunciators

<u>Design Review - Large Early Release Frequency (LERFs) (IP Section 02.02) (1 Sample)</u>

(1) Containment Electrical Penetrations

1. UFSAR/TS Licensing Basis Requirements
2. Vendor Manuals
3. Purchase Orders and Specifications
4. Design
    a. Bill of Materials
    b. Environmental Qualification
    c. Aging, Qualified Service Life
5. Integrated Leak Rate Test Results

Modification Review - Permanent Mods (IP Section 02.03) (5 Samples)

(1) 601000002813 - Feedwater Heater Drain Valves High Temperature O-ring Replacement
(2) 601000000148 - Replace High Pressure Core Injection Drain Pot Level Switches
(3) 06-105 - Instrument Setpoint Calculation, Condenser Low Vacuum Scram
(4) Engineering Change 24870 - Replace Pressure Switch PS-10-101A/C, Drywell High Pressure Emergency Core Cooling System Initiate
(5) 601000000400 - Screen Refuse Trough Pathway

Review of Operating Experience Issues (IP Section 02.06) (2 Samples)

(1) Information Notice (IN) 2017-06 - Battery and Battery Charger Short-Circuit Current Contributions to a Fault on the Direct Current Distribution System
(2) IN 2014-04 - Potential for Teflon Material Degradation in Containment Penetrations, Mechanical Seals and Other Components

**INSPECTION RESULTS**

| Failure to Establish the Suitability of the Fault Interrupting Capability of Fuses | | | |
|---|---|---|---|
| Cornerstone | Significance | Cross-Cutting Aspect | Report Section |
| Mitigating Systems | Green<br>NCV 05000263/2021010-01<br>Open/Closed | None (NPP) | 71111.21M |

The inspectors identified a finding of very low safety significance (Green) and a Non-cited Violation of 10 CFR 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to establish the suitability of the FNA fuses which are used for fault interrupting capability in safety-related functions. Specifically, Bussmann FNA fuses used in the 125 Volt direct current (VDC) system did not meet the Monticello design attributes which relied on the capability to interrupt a 10,000 Amp (10 kA) fault current.

Description:

At Monticello, Design Basis Calculation CA-14-037, “125 V Division I Coordination Study,” states that “all fuses in the 125 VDC Division I system have been shown to adequately interrupt fault currents in 125 VDC systems.”

Furthermore, Monticello Calculation CA-91-001, “125 VDC Fault Current,” states, “the 125 VDC system protective fuses’ interrupting capability will be verified to exceed the relevant calculated fault current.” The fault current in the Division I system was calculated to be as high as 7841 Amps. Calculation CA-91-001 further states that installed fuses are tabulated in the calculation “to ensure that fuse interrupting capability exceeds the relevant calculated fault current.” The conclusions section Calculation CA-91-001 states, “the 125 VDC system fuses have interrupting capability of 10,000 Amps (10 kA) or greater.” Finally, CA-91-001 states, “Therefore, the installed fuses remain adequate for interrupting the maximum short circuit currents.”

Additionally, CA-91-001 only calculates short circuit values down to the main 125 VDC distribution panels D11, D111, D21, and D211. Monticello has no other formal calculations that compute the reduction of fault currents further downstream. This makes it crucial that all

equipment and isolation devices are rated for 10 kA, since this is the bounding value used for CA-91-001 to ensure that equipment can withstand any potential fault current.

The Bussmann FNA fuses used in the 125 VDC system at Monticello do not have a 10 kA fuse rating for a DC application. Instead, the fuses have a 250 VAC (vice VDC), 10 kA, rating per Bussmann specifications. A fuse in an AC circuit can break the arc easier since the current passes through the zero potential 60 cycles per second; therefore, an AC voltage rating does not necessarily apply at the same DC voltage. Because the DC fuses did not have a DC rating, Monticello contacted Bussmann on April 23, 1991, to obtain a DC interrupting rating for the fuse. Bussmann responded to Monticello by providing a 125 VDC rating/interrupting capability of 1600 Amps. This rating is well below the interrupting capability assumed in, and required by, the Monticello design basis calculations. In 2000, the licensee contracted Bussmann to perform testing in accordance with Underwriters Laboratory Standard 248 for qualifying DC fuses. The results found that the fuses were non-conforming. Because of this, additional testing of the FNA fuses was conducted which concluded that "issues remain at an available current level of 2kA."

Even though the interrupting capability (1600 Amps) provided by the vendor and the subsequent testing revealed that the FNA fuses did not have the required capability/rating to interrupt faults up to 10 kA, the licensee continued to use the FNA fuses in DC applications, and these fuses were still in service in those applications. This is important because an underrated fuse could self-destruct in an unsafe manner under an over-duty fault condition. Specifically, the fuse could physically fail affecting other components, or the fuse could fail to isolate a fault.

Corrective Actions: The licensee evaluated this issue in their corrective action process and established and evaluated lower bounding fault conditions to ensure that the fuses were still reliable. This calculational re-evaluation established operability and functionality of the fuses by ensuring that the FNA fuses could still operate based upon the lower fault current that the fuses would actually see (as opposed to the 10 kA ratings for isolation devices required by CA-91-001). Long term corrective actions include revising multiple calculations to reflect the lower interrupting rating of the FNA fuses.

Corrective Action References: CAP 501000055719 - DBAI 2021 FNA Fuse Rating for Direct Current

Performance Assessment:

Performance Deficiency: The inspectors determined that the failure to establish the suitability of the fault interrupting capability of fuses was contrary to the licensee's design basis acceptance criteria and conclusions. Specifically, Calculation CA-91-001 states the 125 VDC system fuses have interrupting capability of 10,000 (10 kA) Amps or greater; however, the Bussmann FNA fuses used in safety related applications did not have a rating of 10,000 Amps. Instead, Bussmann had only provided a rating of 1600 Amps for the FNA fuses, and testing of the fuses showed non-conforming results for the fuses down to 2000 Amps.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Design Control 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 FNA fuses were not qualified for a 10 kA interrupting rating. This resulted in a reasonable doubt concerning the assurance of the reliability of these fuses.

Significance: The inspectors assessed the significance of the finding using Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." The finding was determined to be of very low safety significance (Green) because the performance deficiency did not affect the operability or probabilistic risk assessment functionality of the FNA fuses.

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: Title 10 CFR 50, Appendix B, Criterion III, "Design Control," states, in part, that measures be established for review for suitability of application of equipment that are essential to safety-related functions. Contrary to this, since September 2000 to present, the licensee's measures did not establish the suitability of the FNA fuses which are used for fault interrupting capability in safety-related functions. Specifically, these FNA fuses, which have an interrupting capability of 1600 Amps per the vendor, are used in safety related systems that require an interrupting capability of 10 kA.

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

| Failure to Translate Correct Flow Rate into Plant Flooding Procedure and Calculations | | | |
|---|---|---|---|
| Cornerstone | Significance | Cross-Cutting Aspect | Report Section |
| Mitigating Systems | Green<br>NCV 05000263/2021010-02<br>Open/Closed | None (NPP) | 71111.21M |

The inspectors identified a finding of very low safety significance (Green) and a Non-cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to use the correct flow input in plant flooding abnormal operating procedures and calculations. When the correct flow rate was used, the time to perform time critical operator actions (TCOAs) following a postulated pipe break in the Plant Administration Building was reduced from 60 minutes to 41 minutes.

Description:

The inspectors reviewed internal flood calculations in the plant administration building (PAB) including the safety related heating, ventilation and air conditioning (HVAC) room, the emergency filtration room, and the safety related 125 VDC battery chargers/250 VDC battery rooms to verify the effects of postulated pipe breaks in these areas were properly evaluated and adequate operator response times, including time critical operator actions (TCOAs), had been properly assessed, implemented and validated to protect applicable safety related equipment. Additionally, the inspectors performed several walkdowns, interviewed applicable systems and design engineers and performed a time critical operator response time walkdown review with operators. When reviewing applicable documents and calculations to respond to the inspectors' questions, the licensee noted that an outdated flow value from a postulated service water (SW) pipe had been used. Specifically, Flood Calculation 04-123, "Evaluation of Internal Flooding in Plant Administration Building 3rd Floor HVAC Room," dated

June 29, 2004, used an outdated (non-conservative) internal flood value of 660 gallons per minute (gpm) for the postulated break in a 3 inch non-safety related service water line in the PAB third floor HVAC Room. This value was used as input in the development of time critical operator actions (TCOA OWI-03.07, Figure 5.6.2) needed to protect safety related equipment in several safety related areas in the PAB, including the safety related station batteries located in the PAB basement. Based on this 660 gpm flow rate, the established TCOA time was non-conservatively set to 60 minutes. In 2006, a higher flow value of 1,035 gpm was established per new Calculation 06-082, Rev. 0 for this break. However, this higher flow was not properly incorporated into applicable documents, and a new TCOA and associated validation was not performed to determine the impact the higher flow would have on the operators' response time to isolate the break. The most vulnerable components for this break are the lowest alternating current connections for the 125 VDC battery chargers/250 VDC battery rooms.

Based on the information above, the licensee's engineering staff determined that it would take 41 minutes for the water from the postulated pipe break to reach the safety related 125 VDC battery chargers/250 VDC battery rooms vice the previously determined time of 60 minutes. As a result, the available time for operators to perform time critical actions to isolate the break was reduced from 60 minutes to 41 minutes. The inspectors were concerned about the possibility for the 41 minute response time to have been exceeded if the licensee, believing they had 60 minutes to accomplish the isolation task per Operations Manual C.4-I, delayed the execution of the isolation due to a false sense of time margin. In addition, the inspectors noted TCOA (OWI-03.07, Item 2) involving the 3 inch SW break in the HVAC room was last validated in 2018 per WO 700034289, and the validation credited two control room annunciators (ANN-6-C-08, Earthquake and ANN-20-B-22, Service Water Header Low Pressure) to alert operators. The inspectors also noted the validation showed that operators were able to isolate the break in less than 16 minutes. However, the Team determined a credible scenario existed which had not been considered by the licensee. Specifically, if all three SW pumps were running and given the calculated flow from the postulated 3 inch pipe break, there would be enough SW flow provided by the three running SW pumps such that the two credited control room annunciations would not occur to alert operators as currently credited in the existing TCOAs.

Station personnel re-evaluated the TCOAs for the credible scenario identified by the inspectors and determined that although there may not be early annunciations to alert operators, as credited in the existing TCOAs, there were station personnel located in the PAB basement 24 hours per day, 7 days a week who could detect the break and notify the control room early enough such that the postulated break could be isolated in the newly determined 41 minutes. In addition, the licensee stated there were non-safety related sump level indicators located in the PAB basement that alarm in the control room providing operators' indication of a pipe break. The inspectors assessed the licensee's evaluation and determined within reason that the time critical operators' actions to isolate the break and protect the lowest alternating connections for the 125 VDC battery chargers/250 VDC battery rooms could be completed within the newly calculated time (41 minutes). Therefore, the inspectors determined the issue would not have affected the availability and operability of safety related systems upon a postulated internal flood event in the PAB.

Corrective Actions: The licensee initiated a corrective action to evaluate this issue. The licensee performed a new calculation using the correct higher flow to determine the correct allowable time the operators have to perform the required TCOA to protect the safety related battery chargers/250 VDC battery rooms located in the PAB basement. As a result, the

licensee will revise Flow Analysis 04-123 to include reference to Calculation 06-082 for the correct flow rate, revise C.4-I, "Plant Flooding," to require isolation of the SW break in 30 minutes rather than 60 minutes, update the TCOA bases to indicate flooding from the 3 inch SW break in the PAB will reach the battery rooms in 41 minutes, revise OWI-03.07, Fig 5.6.2 to 30 minutes, and revise Calculation 07-035, "Internal Flood Analysis."

Corrective Action References: CAP 501000055282 - Time Critical Operator Action Time not Accurate

Performance Assessment:

Performance Deficiency: The failure to incorporate the correct flow for a postulated break of a 3 inch non-safety related SW pipe in the third floor HVAC room into design basis calculations and internal flooding procedures was a performance deficiency.

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, the failure to use the correct postulated break flow in design basis calculations and procedures supporting the licensee's response to a postulated 3 inch pipe break in the PAB third floor resulted in reducing the time available for operators to perform time critical actions to isolate the break and protect safety related equipment.

Significance: The inspectors assessed the significance of the finding using Appendix A, “The Significance Determination Process (SDP) for Findings At-Power.” Using Exhibit 2, "Mitigating Systems Screening Questions," the finding screened as having very low safety significance (Green) because the finding did not represent a loss of operability or functionality and did not represent an actual loss of safety function of the system or train.

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: Title 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” requires, in part, measures shall be established to assure that applicable regulatory requirements and the design basis, as defined in § 50.2 and as specified in the license application, for those structures, systems, and components to which this appendix applies are correctly translated into specifications, drawings, procedures, and instructions. The design control measures shall provide for verifying or checking the adequacy of design, such as, by the performance of design reviews, by the use of alternate or simplified calculational methods, or by the performance of a suitable testing program.

Contrary to the above, from June 30, 2006, to August 2, 2021, the licensee did not correctly translate updated /increased flow for a postulated pipe break in a non-safety related SW pipe into procedures and instructions to ensure operators were able to isolate this break to protect safety related equipment. Specifically, the licensee failed to correctly translate increased flow (1,035 GPM) out of a postulated 3 inch non-safety related SW pipe break provided in Calculation 06-082, Rev. 0, into the applicable time critical operator actions (TCOA OWI-03.07, Figure 5.6.2) and into plant flooding abnormal operating procedure (Operations Manual C.4.I), to verify operator actions to isolate the break could be performed within the allowable time to protect safety related battery chargers/250 VDC battery rooms located in the PAB basement.

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 September 24, 2021, the inspectors presented the design basis assurance inspection (teams) inspection results to Chris Church and other members of the licensee staff.

**DOCUMENTS REVIEWED**

| Inspection Procedure | Type | Designation | Description or Title | Revision or Date |
|---|---|---|---|---|
| 71111.21M | Calculations | 06-105 | Instrument Setpoint Calculation, Condenser Low Vacuum Scram | 2 |
| | | CA-02-0192 | MNGP 125 Volt Div. II Battery Calculation | 3 |
| | | CA-02-179 | MNGP 125 Volt Div. I Battery Calculation | 4 |
| | | CA-03-200 | Internal Flooding Evaluation Due to a Postulated Break in 2.5" Fire Line | 0 |
| | | CA-04-047 | MNGP 250 VDC Division II Battery Calculation | 2 |
| | | CA-04-123 | Evaluation of Internal Flooding in Plant Administration Building 3rd Floor HVAC Room | 0 |
| | | CA-06-082 | SW Break Flow Calc, for Postulated Internal Flooding Scenarios | 0 |
| | | CA-07-035 | Internal Flood Analysis | 0 |
| | | CA-14-037 | 125 VDC Division I Coordination Study | 0 |
| | | CA-14-038 | 125 VDC Division II Coordination Study | 0 |
| | | CA-14-039 | 250 VDC Coordination Study | 0 |
| | | CA-89-007 | Evaluation of 125 VDC and 250 VDC Ground | 5 |
| | | CA-91-001 | 125 VDC Fault Current | 2 |
| | | CA-91-006 | 125 VDC Battery Charger Sizing | 5 |
| | | CA-91-009 | 250 VDC System Short Circuit Current Calculations | 1 |
| | | CA-91-015 | MO-2035 Thrust, Voltage Drop, Overloads | 0 |
| | Corrective Action Documents | 501000055719 | Issues with MCC-311/312 Env Qual | 05/02/2018 |
| | | AR 01377905 | 11 Battery Replacement Intercell Resistance Above A/C | 10/03/2013 |
| | | AR 01455581 | D10 Div. I 125 VDC Charger Undervoltage Alarm Received | 01/29/2016 |
| | | AR 01456839 | TS SR 3.8.4.2 Non Conservative for the 125 VDC Chargers | 04/24/2017 |
| | | AR 01473309 | Unclear Guidance on How to Meet TS 3.8.4.A.2 | 09/02/2015 |
| | | AR 01521845 | As-Found D10 Charger Current Limit Setting Low out of Spec | 05/19/2016 |
| | | CR 99003431 | AC Fuses Used in DC Systems | 11/17/1999 |
| | Corrective Action Documents Resulting from | 501000055209 | DBAI Labeling Issue NH-33335 | |
| | | 501000055219 | Ladder in Torus Bay Not Stored Properly | |
| | | 501000055282 | Time Critical Operator Action (TCOA) Time not Accurate | |

| Inspection Procedure | Type | Designation | Description or Title | Revision or Date |
|---|---|---|---|---|
| | Inspection | 501000055657 | DBAI 2021 A6Y Fuse Catalog Information | 09/02/2021 |
| | | 501000055658 | DBAI 2021 14-037 Lists ETAP Library Values | 09/03/2021 |
| | | 501000055706 | 2021 DBAI Fuse Model Update for 14-037 | 09/03/2021 |
| | | 501000055715 | MIN Fuse Rating Documentation | 09/06/2021 |
| | | 501000055719 | DBAI 2021 - FNA Fuse Ratings for DC | 09/03/2021 |
| | Drawings | NH-36250 | High Pressure Coolant Injection System (Water Side) | 87 |
| | | NH-6249 | High Pressure Coolant Injection System (Steam Side) | 85 |
| | Miscellaneous | 601000000400 | Screening Refuse Trough Pathway | 01/21/2021 |
| | | 603000001640 | Design Basis Document (DBD) Internal Flooding | 5 |
| | | AR 600000212526 | Operating Experience Evaluation of NRC IN 2017-06 | 07/27/2018 |
| | | B.09.09-02 | Operations Manual 250 VDC System | 6 |
| | | B.09.09-06 | Operations Manual 250 VDC System | 5 |
| | | MO1833-1489 | Operating Experience Assessment of IN 88-86, Supplement 1, Operating with Multiple Grounds in Direct Current Distribution Systems | 06/28/1989 |
| | | NA | Letter from A Magee to D Runkle | 04/23/1991 |
| | | NX-16646 | Technical Manual - C & D Battery Chargers 250 Volt, 125 Volt | 8 |
| | | QF-1128 (FP-OP-CTC-01) | Time Critical Operator Action Time Validation | 05/18/2018 |
| | | SCR-08-0175 | Screen for Replacement of Div. II 125 VDC Battery Charger 20 | 3 |
| | | SCR-16-0048 | Screening for EC 26165: Change Condenser Low Vacuum Annunciator and Low Vacuum SCRAM Setpoints to Increase Margin for Summer Operation and All Related Documentation Changes | 1 |
| | Procedures | Ops Man C.4-I | Operations Manual Section: Abnormal Procedures C.4-I, Plant Flooding | 18 and 19 |
| | | OWI-03.07 | Operations Work Instructions-03.07: Time Critical Operator Actions | 20 and 21 |