



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION III  
2443 WARRENVILLE RD. SUITE 210  
LISLE, IL 60532-4352

March 8, 2017

EA-14-193

Mr. Peter A. Gardner  
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 - NRC INSPECTION  
REPORT 05000263/2017008; 07200058/2017001**

Dear Mr. Gardner:

On February 17, 2017, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Monticello Nuclear Generating Plant. The enclosed inspection report documents the results of the inspection which were discussed via telephone on February 17, 2017, with Ms. A. Ward and other members of your staff.

This was a limited scope inspection of Independent Spent Fuel Storage Installation activities that focused on assessing your corrective actions associated with NRC Confirmatory Order (CO) EA-14-193, NRC Inspection Report Nos. 05000263/2015008 and 07200058/2014001, and NRC Office of Investigations (OI) Report No. 3-2014-004. The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations. The inspectors reviewed selected procedures and records and interviewed personnel. The inspection also specifically assessed compliance with the conditions of the CO.

Based on the results of this inspection, no findings were identified. The inspectors determined that the corrective actions taken were adequate and six conditions of the CO have been adequately completed. Therefore, Condition V.2, Condition V.4, Condition V.5, Condition V.6, Condition V.7, and Condition V.8 of the CO are considered closed.

In accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding," of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records System (PARS) component of NRC's Agencywide Documents

P. Gardner

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Access and Management System (ADAMS). ADAMS is accessible from the NRC website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

*/RA/*

Michael A. Kunowski, Chief  
Materials Control, ISFSI, and  
Decommissioning Branch  
Division of Nuclear Materials Safety

Docket Nos. 50-263; 72-058  
License No. DPR-22

Enclosure:  
IR 05000263/2017008(DNMS);  
07200058/2017001(DNMS)

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Letter to Peter Gardner from Michael Kunowski dated March 8, 2017

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos: 050-00263; 072-00058

License No: DPR-22

Report Nos: 05000263/2017008(DNMS)  
07200058/2017001(DNMS)

Licensee: Northern States Power Company, Minnesota

Facility: Monticello Nuclear Generating Plant

Location: Monticello, Minnesota

Dates: February 6 - 17, 2017

Inspectors: Matthew C. Learn, Reactor Engineer  
Nicole E. Fields, Health Physicist

Approved by: Michael A. Kunowski, Chief  
Materials Control, ISFSI, and  
Decommissioning Branch  
Division of Nuclear Materials Safety

Enclosure

## SUMMARY OF FINDINGS

Inspection Report (IR) 05000263/2017008; 07200058/2017001; 02/06/2017-02/17/2017; Monticello Nuclear Generating Plant; Confirmatory Order Followup and Review of Unresolved Item Inspection.

This inspection was performed by two U.S. Nuclear Regulatory Commission (NRC) regional inspectors and consisted of in-office reviews and onsite inspection. No violations of significance were identified by the inspectors.

The NRC staff performed this inspection in accordance with Inspection Procedure (IP) 92702, "Followup on Traditional Enforcement Actions Including Violations, Deviations, Confirmatory Action Letters, Confirmatory Orders, and Alternative Dispute Resolution Confirmatory Orders," to assess the licensee's corrective actions associated with CO EA-14-193 issued on December 21, 2015. Additionally, this inspection included a review of URI 07200058/2015001-01, "CoC 1004 FSAR Revision Control," conducted in accordance with IP 60855.1, "Operation of an Independent Fuel Storage Installation at Operating Plants."

As a result of the licensee's performance, the following CO conditions are now considered closed: Condition V.2, Condition V.4, Condition V.5, Condition V.6, Condition V.7, and Condition V.8. Additionally, as a result of the review performed, URI 07200058/2015001-01 is also considered closed.

### NRC-Identified and Self-Revealed Findings

- No findings of significance were identified.

### Licensee-Identified Violations

- No findings of significance were identified.

## REPORT DETAILS

### Timeline of Actions Associated with Liquid Penetrant Testing (PT) Issues at Monticello Nuclear Generating Plant (MNGP)

October 17, 2013	U.S. Nuclear Regulatory Commission (NRC) Senior Resident Inspector at MNGP observed, via live video feed, PT being performed on a dry shielded canister (DSC) not in accordance with procedural requirements. After review, the licensee declares DSC 11 through 16 inoperable.
December 18, 2013	NRC Office of Investigations (OI), Region III Field Office, initiated OI Case No. 3-2014-004.
July 16, 2014	Xcel Energy (the licensee does business as Xcel Energy) submitted an exemption request for the transfer of noncompliant DSC 16 and storage of noncompliant DSCs 11 through 16.
December 16, 2014	Xcel Energy withdrew the exemption request for DSCs 11 through 16 submitted on July 16, 2014.
February 2015	Phased Array Ultrasonic Testing (PAUT) was performed by AREVA on noncompliant DSC 16 at MNGP.
July 23, 2015	Letter was issued to MNGP by the NRC. Inspection Report (IR) 05000263/2015008 and 07200058/2014001 was issued as an enclosure, which included three apparent violations (AVs), two of which were apparently willful. A factual summary of OI Report 3-2014-004 was also issued as an enclosure.
September 29, 2015	Xcel Energy submitted an exemption request for the transfer and storage of noncompliant DSC 16.
October 15, 2015	Xcel Energy and the NRC met for Alternative Dispute Resolution (ADR).
December 21, 2015	Confirmatory Order (CO) EA-14-193 modifying license DPR-22, which authorizes operation of MNGP, was issued by the NRC as a result of the preliminary settlement agreement reached during ADR. There are nine conditions in this CO, V.1 through V.9.
June 15, 2016	NRC approved the exemption request submitted by Xcel Energy on September 29, 2015, allowing transfer and storage of DSC 16. DSC 16 is now in compliance.

#### 4. OTHER ACTIVITIES

##### 4OA5 Other Activities

##### .1 Followup on Traditional Enforcement Actions Including Alternative Dispute Resolution Confirmatory Orders (IP 92702)

##### a. Inspection Scope

The inspectors reviewed documents and interviewed personnel to determine if adequate corrective actions had been implemented associated with CO EA-14-193, NRC IR No. 05000263/2015008 and 07200058/2014001, and NRC OI Report No. 3-2014-004. The inspectors verified that the root cause and contributing causes associated with these items had been identified, that generic implications had been identified and addressed, and that the licensee's programs and practices had been appropriately enhanced to prevent recurrence. Further, the inspectors reviewed and assessed the licensee's compliance with the conditions of CO EA-14-193.

##### b. Findings

No violations were identified.

##### (1) Corrective Actions

Based on the results of the inspection, the inspectors concluded that the licensee's corrective actions were adequate. Licensee management had assigned responsibility for implementing corrective actions, including any necessary changes in procedures and practices. Corrective actions have been either fully implemented or planned. Follow-up actions were initiated for deviations noted in any recent Quality Assurance (QA) audits conducted by the licensee of the inspection area in which traditional enforcement actions were identified.

##### (2) Root Cause Analysis

Based on the results of the inspection, the inspectors concluded that licensee's root cause evaluation (RCE) was adequate. The problem was evaluated using a systematic methodology to identify the root and contributing causes. The RCE was conducted to a level of detail commensurate with the significance of the problem. The RCE included a consideration of prior occurrences of similar problems and knowledge of prior operating experience.

##### (3) Generic Implications Analysis

Based on the results of the inspection, the inspectors concluded that licensee's generic implication analysis contained within its RCE was adequate. The RCE addressed the extent of condition and the extent of cause of the problem.

##### (4) CO Condition V.1: Restoration of Compliance

"1. The licensee shall restore compliance to 10 CFR Part 72 to DSCs 11 through 16 within 5 years of the date the NRC takes final action upon the September 29, 2015,

exemption request pending for DSC 16 (ML15275A023), or the exemption request is withdrawn, whichever is earlier.”

DSCs 11 through 15 are currently in storage on the independent spent fuel storage installation (ISFSI) pad in Horizontal Storage Modules (HSMs). After these DSCs were placed into storage on the pad, it was discovered that these canisters did not fully comply with CoC 072-01004, Amendment 10, Technical Specification (TS) 1.2.5, “DSC Dye Penetrant Tests of Closure Welds.” An exemption request submitted for DSCs 11 through 15 was subsequently withdrawn by the licensee. As of the conclusion of this inspection, DSCs 11 through 15 are still noncompliant with TS 1.2.5.

The licensee submitted an exemption request for DSC 16 on September 29, 2015. At the time, DSC 16 was located on the refueling floor in the reactor building. On June 15, 2016, the NRC approved the exemption request for DSC 16 from TS 1.2.5. DSC 16 was moved into storage on the ISFSI pad on October 5, 2016 (see Section 4OA2.2 of IR 05000263/2016004; 05000263/2016501; 07200058/2016001). As of June 15, 2016, DSC 16 is in compliance with 10 CFR 72.

This CO Condition is still considered **open** until DSCs 11 through 15 are restored to compliance (required by June 15, 2021).

(5) CO Condition V.2: Project Plan

“2. Within 180 calendar days of the NRC’s final action on the docketed exemption request dated September 29, 2015 (ML15275A023), or the date the exemption request is withdrawn, whichever is earlier, the licensee shall submit a project plan to the Director, Division of Nuclear Materials Safety, Region III, for returning DSCs 11 through 16 to compliance to 10 CFR Part 72.”

On December 12, 2016, Xcel Energy submitted a project plan to the Director of DNMS, Region III, NRC. The submitted project plan proposed that Xcel would submit an exemption request for DSCs 11 through 15 to bring the remaining canisters into compliance. The project plan described performing PAUT on DSC 11, if necessary. The project plan, as presented, proposed to restore compliance to DSCs 11 through 15 by March 2020, including the time to perform PAUT on DSC 11.

With the submission of the project plan on December 12, 2016, this CO Condition is considered **closed**.

(6) CO Condition V.3: Project Plan Progress and Changes

“3. Within 180 days after submittal of the DSCs 11 through 16 project plan, Xcel Energy shall submit a letter to the Director, DNMS, Region III, regarding progress under the plan, and any noneditorial changes to the plan. A letter providing a progress update and any non-editorial plan changes shall be provided every 360 calendar days thereafter to the Director, DNMS, Region III, until the plan is completed.”

As of the conclusion of this inspection, no project plan progress updates or plan changes have been received by the NRC, since the submittal by Xcel Energy of the project plan on December 12, 2016.



This CO Condition is still considered **open** and will remain open until CO Condition V.1 has been completed. The next progress update letter is due by June 10, 2017.

(7) CO Condition V.4: Procedure Evaluation

“4. Within 90 calendar days of the issuance date of the Confirmatory Order, Xcel Energy shall evaluate Monticello’s dry fuel storage procedures and ensure the procedures require direct licensee oversight during the entire evolution of each dye penetrant test performed by contractors on DSC closure welds.”

Procedure 9506, “Dry Shielded Canister Sealing,” controls the performance of PTs on DSC closure welds at MNGP. Each DSC has five closure welds; each closure weld is performed in two passes, with the exception of the outer top cover plate to shell weld, which is performed in three passes. Eleven PTs are conducted on each DSC, one per weld pass. Revision 15 of Procedure 9506, effective date March 16, 2016, includes the requirement that an Xcel Energy employee (NDE QC) is present to observe the performance of the PT, including the documentation of the PT parameters, for each of the eleven PTs performed on a DSC.

With Revision 15 of Procedure 9506 issued on March 16, 2016, this CO Condition is considered **closed**.

(8) CO Condition V.5: Review of Events by Supervisors

“5. Within 120 calendar days of the issuance date of the Confirmatory Order, Xcel Energy shall ensure and document that all first line supervisors and above, who oversee contractors performing field work in the Xcel Energy nuclear fleet, review the circumstances and lessons learned from the events that gave rise to the Confirmatory Order.”

Xcel Energy developed the training course FL-LDP-CNT-070L, “DSC Weld Test and Oversight Event Review,” which covers the circumstances and lessons learned from the events that gave rise to CO EA-14-193. Supervisors in the Xcel Energy fleet, including at MNGP and the Prairie Island plant, were selected to receive the training.

By April 20, 2016, all selected supervisors had received the training. The inspectors interviewed four of the supervisors who had received the training to assess their retention of the training material and the effect that the training had on their day-to-day activities.

With the training of all first-line supervisors and above in the Xcel Energy nuclear fleet on the circumstances and lessons learned from the events that gave rise to CO EA-14-193, this CO Condition is considered **closed**.

(9) CO Condition V.6: Assessment of the Effectiveness of Improvements in Oversight

“6. Within 360 calendar days of the issuance date of the Confirmatory Order, the licensee shall assess and document the effectiveness of improvements in oversight of supplemental workers (e.g., contractors) in the Xcel Energy nuclear fleet, including the actions taken in item 5.”

An effectiveness review was performed by Xcel Energy between September 28 and November 30, 2016, to assess the effectiveness of improvements in the oversight of contractors. This effectiveness review consisted of four actions to assess any change in outcomes due to improvements in oversight of contractors, in addition to reviewing the completion of CO Condition V.5.

First, the effectiveness review compared Xcel's FP-MA-COM-02, "Oversight and Control of Supplemental Personnel," with other industry procedures and found that FP-MA-COM-02 was in line with industry-wide benchmarks. Second, interviews were conducted with select Xcel Energy managers; the effectiveness review determined that FP-MA-COM-02 was being implemented effectively. Third, oversight plans for various contractor activities were reviewed to determine if the level of detail in the plans was appropriate and if the requirements of FP-MA-COM-02 were met; the effectiveness review found the level of detail appropriate, and the requirements of FP-MA-COM-02 to be met. Fourth, all significant ("A" and "B" level) issues entered into the corrective action program (CAP) at Xcel Energy nuclear sites and attributed to supplemental personnel were reviewed from October 15, 2013, through November 11, 2016. The effectiveness review noted a significant reduction in both the significance and frequency of these supplemental personnel-related issues in the CAP.

With the completion of the effectiveness review Action Request (AR) 1509878-08, dated December 7, 2016, this CO Condition is considered **closed**.

(10) CO Condition V.7: Lessons Learned Presentation

"7. Within 540 calendar days of the issuance date of the Confirmatory Order, Xcel Energy shall develop and make a presentation based on the facts and lessons learned from the events that gave rise to the Confirmatory Order, with emphasis on corrective actions taken as a result. Xcel Energy agrees to make this presentation at an appropriate industry forum such that industry personnel across the entirety of the United States would have the opportunity to receive the material. Xcel Energy shall inform the Director, DNMS, Region III, of where the presentation will be made, and make the presentation materials available to the NRC for review at least 30 calendar days in advance of the presentation."

On April 1, 2016, Xcel Energy sent a letter to the Director, DNMS, Region III, with the information that Michael Baumann (Xcel Energy Director, Nuclear Fuel) would be making a presentation to address CO Condition V.7 at the NEI Used Fuel Management Conference in Orlando, Florida, on May 4, 2016. This letter also included a copy of the slides to be used in the presentation.

On May 4, 2016, Michael Baumann gave a presentation at the NEI Used Fuel Management Conference in Orlando, Florida. The presentation briefly covered the background, requirements, and issues related to the events that gave rise to the CO. The presentation also covered the content of the CO and Xcel's actions taken to date in response to the CO. The presentation emphasized the lessons learned by Xcel Energy from these events and the corrective actions taken by Xcel at multiple stages in the process.

With the letter dated April 1, 2016, and the presentation given May 4, 2016, this CO Condition is considered **closed**.

(11) CO Condition V.8: Industry Publication Article

“8. Within 360 calendar days of the issuance date of the Confirmatory Order, Xcel Energy shall submit an article to an industry publication, such as UxC Spent Fuel, describing the circumstances of the violation, the root and contributing causes, and the corrective actions. The licensee shall provide a draft to the Director, DNMS, Region III, at least 30 calendar days in advance of the submittal.”

On November 10, 2016, Xcel Energy sent an email to the Director, DNMS, Region III, transmitting a draft of an industry article written to meet CO Condition V.8. The draft article was also transmitted via letter from Xcel Energy to the Director, DNMS, Region III, on November 15, 2016. On December 12, 2016, Xcel Energy submitted the article to UxC Spent Fuel. The industry article was published in the December 23, 2016, issue of UxC Spent Fuel.

The article published in UxC Spent Fuel thoroughly described the events leading to the violations, the immediate actions taken by the licensee, the RCE results, the canister recovery efforts taken by the licensee, the results of the NRC enforcement process for these violations, and the suite of corrective actions taken by the licensee.

With the email dated November 10, 2016, and the article submitted to UxC Spent Fuel on December 12, 2016, this CO Condition is considered **closed**.

(12) CO Condition V.9: Completion Letter

“9. Upon completion of all terms of the Confirmatory Order, Xcel Energy shall submit to the NRC a letter discussing its basis for concluding that the Order has been satisfied.”

As of the completion of this inspection, no letter discussing the basis for concluding that the Confirmatory Order, EA-14-193, has been satisfied has been received by the NRC from Xcel Energy.

This CO Condition is still considered **open**. This condition cannot be closed until CO Condition V.1 through V.8 have been completed, and the licensee submits an appropriate letter.

.2 Operation of an Independent Spent Fuel Storage Installation at Operating Plants  
(IP 60855.1)

a. Inspection Scope

During the 2015 ISFSI inspection, the inspectors identified an unresolved item (URI) associated with the licensee’s ISFSI FSAR change management. Specifically, the licensee utilized CoC 072-01004, Amendment 9, and FSAR Revision 10 to load 61BT DSCs 1 through 10, and the licensee utilized CoC 072-01004, Amendment 10, and FSAR Revision 11 to load 61BTH DSCs 11 through 16. The licensee continued to maintain all 16 casks to the CoC 072-01004 amendment under which the casks were loaded, however using the 10 CFR 72.48, “Changes, Tests, and Experiments,” process, maintained DSCs 1 through 16 to FSAR Revision 12. The inspectors questioned whether it was acceptable to have casks loaded to two different CoC amendments being maintained to one FSAR.

b. Findings

The inspectors found that the licensee was generally implementing an acceptable approach to cask FSAR changes as specified in NEI 96-07, Appendix B, Section B4.1.7. "Cask Design Changes Made by a CoC Holder and Adopted by a General Licensee." Specifically, when the CoC holder, Transnuclear (TN), performed an FSAR change, TN would communicate the change to the licensee with a FSAR Change Notice (FCN) and associated 10 CFR 72.48 Screening or Evaluation. In accordance with licensee procedure 4 AWI-02.07.02, "ISFSI UFSAR and Monticello 72.212. Evaluations Report Control," the licensee would then perform a 10 CFR 72.48 Screening or Evaluation against the licensee's 10 CFR 72.212 evaluations and implementing procedures. When an entire new FSAR revision was issued by TN, the licensee would verify that all FCNs associated with the new revision had been evaluated by the process described above and would then change the cask FSAR to the new FSAR revision. This process was utilized to change the FSAR for DSCs 1 through 10 from Revision 10 to Revision 11, and then subsequently from Revision 11 to Revision 12. Additionally, this process was utilized to change the FSAR for DSCs 11 through 16 from Revision 11 to Revision 12.

The inspectors found two minor violations of NRC requirements in the above process, as implemented by the licensee.

FCN 721004-756 was issued as a result of the issuance of CoC 072-01004, Amendment 10, and as such a 10 CFR 72.48 Screening was not performed by TN. The licensee utilized CoC 072-01004, Amendment 9, for DSCs 1 through 10 and chose to not change these casks to Amendment 10 in accordance with 10 CFR 72.212(b)(4) and 72.212(b)(5). However, the site did choose to change to FSAR Revision 11. This change is subject to the requirements in 10 CFR 72.48, and the change must be evaluated against Revision 10 of the FSAR.

Title 10 CFR 72.48(d)(1) states in part, the licensee shall maintain records of changes in the facility or spent fuel storage cask design, of changes in procedures, and of tests and experiments made pursuant to paragraph (c) of this section. These records must include a written evaluation which provides the bases for the determination that the change, test, or experiment does not require a CoC amendment pursuant to 10 CFR 72.48(c)(2). Contrary to the above, on April 14, 2010, the licensee failed to maintain a written evaluation which provided the bases for the determination that the change FCN 721004-756 does not require a CoC amendment pursuant to 10 CFR 72.48(c)(2). Specifically, FCN 721004-756 was not evaluated by the licensee against Revision 10 of the FSAR.

The inspectors determined the violation was minor, as FCN 721004-756 did not appear to significantly affect the design bases of DSCs 1 through 10.

The licensee documented this issue in its CAP under AR 01550734, "NRC ISFSI Minor Violation 10 CFR 72.48(d)(1)." This failure to comply with 10 CFR 72.48(d)(1) constitutes a minor violation that is not subject to enforcement action in accordance with the NRC's Enforcement Policy.

FCN 721004-756 was evaluated and accepted by the licensee and was later incorporated into FSAR Revision 11 by TN and subsequently into FSAR Revision 12. This FCN, in part, revised FSAR Section K.9.1.7 to add and update information on

neutron poison acceptance for the fabrication of the 61BT DSC, including material description, testing and design requirements, and process controls. The inspectors inquired whether the neutron poison acceptance criteria newly added to FSAR Revision 11 and subsequently incorporated into FSAR Revision 12 was reflective of the actual material condition of DSCs 1 through 10 originally fabricated to CoC 072-01004, Amendment 9. At the time of the exit meeting, no records had been provided to the inspectors to show that DSCs 1 through 10 had been fabricated in accordance with the current design basis, as described in Section K.9.1.7 of Revision 12 of the FSAR.

Title 10 CFR 72.146(c) states in part, the licensee shall subject design changes to design control measures commensurate with those applied to the original design. Contrary to the above, on April 14, 2010, the licensee failed to subject design changes in FCN 721004-756 to the design control measures commensurate with those applied to the original design. Specifically, the licensee failed to verify that neutron poison acceptance for the fabrication of DSCs 1 through 10, including material description, testing and design requirements, and process controls, as specified in FSAR Section K.9.1.7, was descriptive of the already loaded casks before accepting the design change.

The inspectors determined that the violation was minor as the additional neutron poison acceptance criteria had not been described in FSAR Revision 10, to which DSCs 1 through 10 were initially loaded, and no other changes affecting the criticality analysis were identified.

The licensee documented this issue in its CAP under AR 1550731, "NRC ISFSI Minor Violation 10 CFR 72.146." This failure to comply with 10 CFR 72.48(d)(1) constitutes a minor violation that is not subject to enforcement action in accordance with the NRC's Enforcement Policy.

Based upon the results of the NRC review, URI 07200058/2015001-01, "CoC 1004 FSAR Revision Control," is closed.

#### 40A6 Management Meeting

##### Exit Meeting Summary

On February 10, 2017, the inspectors presented the preliminary inspection results to Mr. C. Dieckmann and other members of the licensee staff. A final exit meeting was held via telephone with Ms. A. Ward on February 17, 2017. The licensee acknowledged the issues presented. The inspectors confirmed that none of the potential report input discussed was considered proprietary.

ATTACHMENT: SUPPLEMENTAL INFORMATION

## SUPPLEMENTAL INFORMATION

### KEY POINTS OF CONTACT

#### Licensee

Chuck Dieckmann, Plant Manager  
Mark Lingenfelter, Director of Engineering  
Rick Stadlander, Engineering Plant and Systems Manager  
Anne Ward, Regulatory Affairs Manager  
Todd Erickson, NSSS Engineering Supervisor  
John Peterson, Systems Engineer  
Andrew Kouba, Regulatory Affairs Engineer

#### U.S. Nuclear Regulatory Commission

P. Zurawski, Senior Resident Inspector, Monticello

### LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

#### Opened

None

#### Closed

07200058/2015001-01	URI	CoC 1004 FSAR Revision Control (4OA5)
EA-14-193, V.2	CO Condition	Project Plan (4OA5)
EA-14-193, V.4	CO Condition	Procedure Evaluation (4OA5)
EA-14-193, V.5	CO Condition	Review of Events by Supervisors (4OA5)
EA-14-193, V.6	CO Condition	Assessment of the Effectiveness of Improvements in Oversight (4OA5)
EA-14-193, V.7	CO Condition	Lessons Learned Presentation (4OA5)
EA-14-193, V.8	CO Condition	Industry Publication Article (4OA5)

#### Discussed

EA-14-193	CO	Failure to Perform Penetrant Tests in Accordance with Procedural Requirements; Inaccurate and Incomplete Information Documented on Liquid Penetrant Test Form; Failure to Assess Contractor Control of Quality (4OA5)
EA-14-193, V.1	CO Condition	Restoration of Compliance (4OA5)
EA-14-193, V.3	CO Condition	Project Plan Progress and Changes (4OA5)
EA-14-193, V.9	CO Condition	Completion Letter (4OA5)

## LIST OF DOCUMENTS REVIEWED

The following is a list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspectors reviewed the documents in their entirety, but rather, that selected sections or portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

10 CFR 72.212 Report, Revision 7  
2015 10 CFR 72.48 Screenings/Evaluations  
2016 10 CFR 72.48 Screenings/Evaluations  
2016 ISFSI Action Request Records from 2013 through 2016  
4 AWI-02.07.02 ISFSI UFSAR and Monticello 72.212. Evaluations Report Control; Revision 5  
Approved Population to Receive Training; Supervisors Selected for FL-LDP-CNT-070L  
AR 01146003; Non-Effective Transnuclear FSAR Change Notices; dated July 31, 2008  
AR 01157587; Transnuclear FSAR Change Notice 721004-514; dated October 31, 2008  
AR 011639379; Transnuclear FSAR Change Notices 7210004-557 and 649; dated  
February 13, 2009  
AR 01207569; Non-Effective Transnuclear FSAR Change Notices; dated November 19, 2009  
AR 01208757; Transnuclear FSAR Change Notice 721004-756; dated December 1, 2009  
AR 01212252; Transnuclear FSAR Change Notice 721004-577; dated December 31, 2009  
AR 01219001; Issue Transnuclear NUHOMS UFSAR NUH-003 Revision 11; dated  
April 14, 2010  
AR 01402246; NRC Question on DSC PT Examination Times; dated October 17, 2013  
AR 01404019; OE: Rapid OE for MNGP AR01402246; dated October 29, 2013  
AR 01509694; NRC Confirmatory Order: Violations spent fuel cask NDE; dated  
January 24, 2016  
AR 01509878; NRC Confirmatory Order EA-14-193; dated January 26, 2016  
AR 015435522; SnapShot Report; dated September 28, 2016 through November 30, 2016  
AR 01550731; NRC ISFSI Minor Violation 10 CFR 72.146; dated February 16, 2017  
AR 01550734; NRC ISFSI Minor Violation 10 CFR 72.48(d)(1); dated February 16, 2017  
AR 1509878-08; Effectiveness Review; dated December 7, 2016  
CoC 072-01004; Amendment 10  
CoC 072-01004; Amendment 9  
Draft Article; Spent Fuel Storage Dye Penetrant Issue  
Email from C. Greene (UxC) to M. C. Murphy (Xcel); dated December 12, 2016  
Email from M. C. Murphy (Xcel) to C. Greene (UxC); dated December 12, 2016  
Email from M. C. Murphy (Xcel) to J. Giessner (NRC); dated November 10, 2016  
FL-LDP-CNT-070L; DSC Weld Test and Oversight Event Review (Confirmatory  
Order EA-14-193); dated February 10, 2016  
FP-MA-COM-02; Oversight and Control of Supplemental Personnel; Revision 4  
FP-NO-SAS-08; Project Oversight; Revision 6  
FP-SC-GEN-08; Contract Requisitions; Revision 13  
ISFSI TLD Dose Records; 2006-2016  
Letter from K. Cummings (NEI) to M. Baumann (Xcel); dated June 23, 2016  
Letter from M. C. Murphy (NSPM) to Director, DNMS, NRC Region III; dated April 1, 2016  
Letter from M. C. Murphy (NSPM) to Director, DNMS, NRC Region III; dated  
November 15, 2016  
Letter from T. O'Connor (NSPM) to Director, DNMS, NRC Region III; dated December 12, 2016  
LMS Item Status Report; FL-LDP-CNT-070L Completions; dated April 20, 2016  
NANTeL Plant Access Training; Revision 12

Needs Assessment Worksheet; Confirmatory Order EA-14-193, DSC Weld Tests and Oversight; dated December 28, 2015

NOS Audit Reports, Assessment Reports, Observation Reports, and Task Monitoring Reports related to ISFSI activities; 2013 through 2016

NUH-003; NUHOMS UFSAR, Revision 10

NUH-003; NUHOMS UFSAR, Revision 11

NUH-003; NUHOMS UFSAR, Revision 12

OP-2014-001; Monticello Spent Fuel Project Oversight Plan; Revision 3

Preliminary Agenda of Used Fuel Management Conference (May 3-5, 2016); dated March 30, 2016

Procedure 9506; Dry Shielded Canister Sealing; Revision 15, 16, 17

Project Plan for Returning Dry Shielded Canisters 11 through 16 to Compliance with 10 CFR Part 72; dated December 12, 2016

Regulatory Commitment Completion Challenge; COMM AR: 01506786; dated March 15, 2016

Regulatory Commitment Completion Challenge; COMM AR: 01506789; dated April 19, 2016

Regulatory Commitment Completion Challenge; Effectiveness Review; dated December 8, 2016

Root Cause Evaluation; NRC Question on DSC PT Examination Times CAP 01402246; dated March 31, 2016

SCR-08-0063; 10 CFR 72.48 Screening; dated August 13, 2008

SCR-08-0448; 10 CFR 72.48 Screening; dated December 3, 2008

SCR-09-0118; 10 CFR 72.48 Screening; dated March 6, 2009

SCR-09-0272; 10 CFR 72.48 Screening; dated June 9, 2009

SCR-09-0572; 10 CFR 72.48 Screening; dated January 4, 2010

SCR-09-0578; 10 CFR 72.48 Screening; dated February 27, 2010

SCR-09-0593; 10 CFR 72.48 Screening; dated March 1, 2010

Spent Fuel Storage Dye Penetrant Test Issue Presentation; dated May 4, 2016

UxC Spent Fuel; Special Feature, Xcel Energy's Confirmatory Order Commitment; dated December 23, 2016



## LIST OF ACRONYMS USED

ADAMS	Agencywide Documents Access and Management System
ADR	Alternative Dispute Resolution
AR	Action Request
AV	Apparent Violation
CAP	Corrective Action Program
CFR	Code of Federal Regulations
CO	Confirmatory Order
CoC	Certificate of Compliance
DSC	Dry Shielded Canister
DNMS	Division of Nuclear Materials Safety
FCN	FSAR Change Notice
FSAR	Final Safety Analysis Report
HSM	Horizontal Storage Module
IP	Inspection Procedure
IR	Inspection Report
ISFSI	Independent Spent Fuel Storage Installation
MNGP	Monticello Nuclear Generating Plant
NDE	Non-Destructive Evaluation
NEI	Nuclear Energy Institute
NRC	U.S. Nuclear Regulatory Commission
NSPM	Northern States Power Company - Minnesota
OI	Office of Investigations
PARS	Publicly Available Records System
PAUT	Phased Array Ultrasonic Testing
PT	Liquid Penetrant Test(ing)
QA	Quality Assurance
QC	Quality Control
RCE	Root Cause Evaluation
TN	Transnuclear
TS	Technical Specification
URI	Unresolved Item