May 30, 2008

Mr. Timothy J. O'Connor Site Vice President Monticello Nuclear Generating Plant Nuclear Management Company, LLC 2807 West County Road 75 Monticello, MN 55362-9637

SUBJECT: MONTICELLO NUCLEAR GENERATING PLANT FIRE PROTECTION TRIENNIAL BASELINE INSPECTION NRC INSPECTION REPORT 05000263/2008006(DRS)

Dear Mr. O'Connor:

On April 18, 2008, the U.S. Nuclear Regulatory Commission (NRC) completed a triennial fire protection baseline inspection at your Monticello Nuclear Generating Plant. The enclosed report documents the inspection findings, which were discussed on April 18, 2008, with Mr. Brad Sawatzke and other members of your staff.

As a result of your intent to adopt the National Fire Protection Association (NFPA) 805 Standard, "Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants, 2001 Edition," as defined by Title 10, Code of Federal Regulations (CFR), Part 50, Section 48(c), the inspection was conducted in accordance with Inspection Procedure (IP) 71111.05TTP, "Fire Protection – NFPA 805 Transition Period (Triennial)," dated May 9, 2006. The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, two NRC-identified findings of very low safety significance were identified. The findings involved violations of NRC requirements. However, because of their very low safety significance, and because the findings were entered into your corrective action program, the NRC is treating these findings as Non-Cited Violations (NCVs) in accordance with Section VI.A.1 of the NRC Enforcement Policy. Both of the NRC-identified findings did not meet the criteria established by Section A of the NRC's Interim Enforcement Policy Regarding Enforcement Discretion for Certain Fire Protection Issues (10 CFR 50.48) for a licensee in NFPA 805 transition. Therefore, we are not exercising enforcement discretion; but will cite these violations in accordance with the NRC's Enforcement Policy.

If you contest the subject or severity of any NCV, 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 a

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copy to the Regional Administrator, U.S. Nuclear Regulatory Commission – Region III, 2443 Warrenville Road, Suite 210, Lisle, IL 60532-4352; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the Resident Inspector Office at the Monticello Nuclear Generating Plant.

In accordance with 10 CFR 2.390 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 Public Document Room or from the Publicly Available Records System (PARS) component of NRC's Agency-wide Documents Access and Management System (ADAMS), accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Julio F. Lara, Chief Engineering Branch 3 Division of Reactor Safety

Docket No. 50-263 License No. DPR-22

Enclosure: Inspection Report 05000263/2008006(DRS) w/Attachment: Supplemental Information cc w/encl: D. Koehl. Chief Nuclear Officer Manager, Nuclear Safety Assessment P. Glass, Assistant General Counsel Nuclear Asset Manager, Xcel Energy, Inc. J. L. Stine, State Liaison Officer, Minnesota Department of Health R. Nelson, President Minnesota Environmental Control Citizens Association (MECCA) Commissioner, Minnesota Pollution Control Agency R. Hiivala, Auditor/Treasurer, Wright County Government Center Commissioner, Minnesota Department of Commerce Manager - Environmental Protection Division Minnesota Attorney General's Office

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Sincerely,

Julio F. Lara, Chief Engineering Branch 3 Division of Reactor Safety

Docket No. 50-263 License No. DPR-22

 Enclosure: Inspection Report 05000263/2008006(DRS) w/Attachment: Supplemental Information
 cc w/encl: D. Koehl, Chief Nuclear Officer Manager, Nuclear Safety Assessment P. Glass, Assistant General Counsel Nuclear Asset Manager, Xcel Energy, Inc. J. L. Stine, State Liaison Officer, Minnesota Department of Health R. Nelson, President Minnesota Environmental Control Citizens Association (MECCA) Commissioner, Minnesota Pollution Control Agency R. Hiivala, Auditor/Treasurer, Wright County Government Center

Wright County Government Center Commissioner, Minnesota Department of Commerce Manager - Environmental Protection Division Minnesota Attorney General's Office

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Letter to Mr. Timothy J. O'Connor from Mr. Julio F. Lara dated May 30, 2008

SUBJECT: MONTICELLO NUCLEAR GENERATING PLANT FIRE PROTECTION TRIENNIAL BASELINE INSPECTION NRC INSPECTION REPORT 05000263/2008006(DRS)

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No:	50-263
License No:	DPR-22
Report No:	05000263/2008006(DRS)
Licensee:	Nuclear Management Company, LLC
Facility:	Monticello Nuclear Generating Plant
Location:	Monticello, MN
Dates:	March 31 – April 4, 2008, and April 14 - 18, 2008
Inspectors:	George M. Hausman, Senior Reactor Inspector (Lead) Benny Jose, Senior Reactor Inspector Robert A. Winter, Reactor Inspector
Approved by:	Julio F. Lara, Chief Engineering Branch 3 Division of Reactor Safety

SUMMARY OF FINDINGS

IR 05000263/2008006(DRS); 03/31/2008 - 04/18/2008; Monticello Nuclear Generating Plant; Fire Protection Triennial Baseline Inspection.

This report covers an announced baseline inspection by regional inspectors. The inspection was conducted in accordance with the U.S. Nuclear Regulatory Commission's (NRC's) Inspection Procedure (IP) 71111.05TTP, "Fire Protection – NFPA [National Fire Protection Association] 805 Transition Period (Triennial)," dated May 9, 2006. Two Green findings were identified by the inspectors. The findings were considered Non-Cited Violations (NCVs) of NRC regulations. The inspectors evaluated both findings in accordance with the criteria established by Section A of the NRC's Interim Enforcement Policy Regarding Enforcement Discretion for Certain Fire Protection Issues (10 CFR [Code of Federal Regulations] Part 50.48) for a licensee in NFPA 805 transition. The inspectors determined that both findings did not meet the criteria established by Section A and are not exercising enforcement discretion; but will cite both NCVs in accordance with the NRC's Enforcement Policy. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process (SDP)." Findings for which the significance determination process does not apply may be Green or be assigned a severity level after NRC management review. The NRC describes its program for overseeing the safe operation of commercial nuclear power reactors in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

A. NRC-Identified and Self-Revealed Findings

Cornerstone: Initiating Events

<u>Green</u>. A finding of very low safety significance and associated NCV of license condition 2.C.4 was identified by the inspectors for the presence of uncontrolled transient combustible material stored in the turbine building. Specifically, in response to an inspector's question, the licensee identified six buckets of resin (72-pounds) in the turbine building's Fire Zone 14C. The six buckets of resin exceeded the licensee's fire protection program's limit (i.e., 280,000-BTUs, the equivalent of two gallons of general purpose solvent) for transient combustible material. In addition, the six buckets of resin (CSUP) and the additional fire load had not been included in the licensee's fire hazards analysis. On April 4, 2008, the licensee entered this finding into their corrective action program (CAP) as CAP 01133361, "Resin Stored in Turbine Building without Permit." The licensee's immediate corrective action was to perform an engineering analysis for Fire Zone 14C and issue a permanent combustible loading change request. The change request allowed for the permanent fire load storage of an additional 200-pounds of resin.

The finding was determined to be more than minor because the finding was similar to IMC 0612, Appendix E, Example 4.k, since the uncontrolled transient combustible materials were not reflected in the fire hazards analysis and the licensee failed to complete the fire protection program's required engineering evaluation. The finding was associated with the protection against external factors attribute of the initiating events cornerstone and adversely affected the cornerstone's objective of limiting the likelihood of events that upset plant stability. Specifically, the licensee failed to control transient combustible material, such that, the transient fire loading in Fire Zone 14C exceeded the fire hazards analysis's limit (i.e., not to exceed the equivalent of two gallons of general

purpose solvent) and the required fire protection program's engineering evaluation was not performed. In addition, no CSUP was issued for the uncontrolled transient combustible material. A low degradation rating was assigned to the finding since the uncontrolled transient combustible material was in approved manufacturer's containers and was in a fire zone with low fire loading. Therefore, the finding was of very low safety significance. This finding has a cross-cutting aspect in the area of human performance and within the cross-cutting component of work practices because the licensee did not effectively communicate expectations regarding procedural compliance. Specifically, the licensee's failure to control transient combustible material was contrary to the licensee's fire protection program since the licensee failed to effectively communicate expectations regarding procedural compliance with the transient combustible process. [H.4(b)] (Section 1R05.2b.(1))

Cornerstone: Mitigating Systems

Green. A finding of very low safety significance and associated NCV of license condition 2.C.4 was identified by the inspectors for the removal of the alternative shutdown system (ASDS) panel's administrative control requirements from the Improved Technical Specifications (ITS) without ensuring those requirements were maintained within the licensee's fire protection program. Specifically, since October 30, 2006, when the licensee implemented ITS, the compensatory measures required to ensure safe shutdown (SSD) capability while the ASDS panel was taken out-of-service or inoperable were deleted and this constituted a change to licensee's fire protection program. The licensee's fire protection program relied upon the ASDS panel's administrative controls contained in the CTS ensured that one train of SSD equipment and/or systems was free of fire damage and provided appropriate interim compensatory measures when the ASDS panel was taken out-of-service or was inoperable. As a result, the licensee entered this finding into their corrective action program as CAP 01134601. "Technical Specification Bases 3.3.3.2 Is Misleading," dated April 15, 2008, and CAP 01134747, "NRC Questioned Lack of Compensatory Measures When a Component Controlled from the ASDS Is Removed from Service," dated April 16, 2008. The licensee's immediate corrective action was to begin investigating changes to the administrative controls for the ASDS panel governing SSD.

The finding was determined to be more than minor because if left uncorrected, the finding would become a more significant safety concern. Specifically, the licensee's failure to maintain the ASDS panel's administrative control requirements within the licensee's fire protection program would adversely affect the ability to achieve and maintain SSD from outside the control room in case of a fire in the control room or the cable spreading room. The inspectors concluded this finding was associated with the protection against external factors attribute of the mitigating systems cornerstone and adversely affected the cornerstone's objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). A low degradation rating was assigned to the finding since the finding's deficiencies would in all probability be compensated by operator experience/familiarity. In addition, the availability and reliability of the manual (i.e., control room) and automatic suppression (i.e., cable spreading room) systems; and plant records that stated the ASDS panel had not been out-of-service for more than 24 hours at a time since the implementation of ITS were additional reasons for the assigned rating. Therefore, the finding was of very low safety significance. This finding has a cross-cutting aspect in the area of human performance and within the

cross-cutting component of resources because the licensee did not ensure that personnel and/or other resources were available and adequate to assure nuclear safety. Specifically, the licensee failed to ensure that the necessary interdisciplinary reviews and/or inputs needed for the up-to-date design documentation reviews occurred when deleting and/or changing the ASDS panel's administrative control requirements. [H.2(c)] (Section 1R05.1b.(1))

B. Licensee-Identified Violations

No violations of significance were identified.

REPORT DETAILS

1. REACTOR SAFETY

Cornerstones: Initiating Events and Mitigating Systems

1R05 <u>Fire Protection</u> (71111.05TTP)

The licensee, in a letter (ADAMS Accession Number ML060730265) to the U.S. Nuclear Regulatory Commission (NRC) dated March 14, 2006, committed to adopt the National Fire Protection Association (NFPA) 805 Standard, "Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants, 2001 Edition," as defined by Title 10, Code of Federal Regulations (CFR), Part 50, Section 48(c) for the Monticello Nuclear Generating Plant (MNGP). The NRC acknowledged the licensee's commitment to adopt the NFPA 805 Standard in their response letter (ADAMS Accession Number ML061500035) dated September 7, 2006.

The NFPA 805 Standard establishes a comprehensive set of requirements for fire protection programs at nuclear power plants. The NFPA 805 Standard incorporated both deterministic and risk-informed, performance-based concepts. The deterministic aspects of the standard are comparable to traditional requirements. However, the transition to a risk-informed performance-based fire protection program requires an in-depth nuclear safety circuit analysis for equipment identified for nuclear safety functions, such as, safe shutdown (SSD). Because the conversion and licensing process to the NFPA 805 Standard was expected to identify and address a variety of issues that were normally the subject of the triennial fire protection baseline inspection, the NRC modified the fire protection inspection program and Enforcement Policy for licensees in transition to the NFPA 805 Standard. As a result, this inspection was conducted in accordance with Inspection Procedure (IP) 71111.05TTP, "Fire Protection – NFPA 805 Transition Period (Triennial)" dated May 9, 2006. Associated with the transition to the NFPA 805 Standard, when a circuit related finding not associated with a finding of high safety significance meets the four criteria established by Section A of the NRC's Interim Enforcement Policy Regarding Enforcement Discretion for Certain Fire Protection Issues (10 CFR 50.48), the violation would receive enforcement discretion in accordance with the NRC's Enforcement Policy.

The purpose of this inspection was to conduct a design-based, plant specific, risk-informed, on-site inspection of the licensee's fire protection program's defense-in-depth elements used to mitigate the consequences of a fire. The fire protection program shall extend the concept of defense-in-depth to fire protection in plant areas important to safety by:

- preventing fires from starting;
- rapidly detecting, controlling and extinguishing fires that do occur; and
- providing protection for structures, systems, and components (SSCs) important to safety so that a fire that is not promptly extinguished by fire suppression activities will not prevent the SSD of the reactor plant.

The inspectors' evaluation focused on the design, operational status, and material condition of the reactor plant's fire protection program and post-fire SSD systems. The objectives of the inspection were to assess whether the licensee had implemented a fire protection program that: (1) provided adequate controls for combustibles and ignition sources inside the plant; (2) provided adequate fire detection and suppression capability; (3) maintained passive fire protection features in good material condition; (4) established adequate compensatory measures for out-of-service, degraded or inoperable fire protection equipment, systems or features; (5) ensured that procedures, equipment, fire barriers and systems exist so that the post-fire capability to safely shut down the plant was ensured; (6) included feasible and reliable operator manual actions when appropriate to achieve SSD; and (7) identified fire protection issues at an appropriate threshold and ensured these issues were entered into the licensee's problem identification and resolution program.

In addition, the inspectors' review and assessment focused on the licensee's post-fire SSD systems for selected risk-significant fire areas and/or fire zones. Inspector emphasis was placed on determining that the post-fire SSD capability and the fire protection features were maintained free of fire damage to ensure that at least one post-fire SSD success path was available.

The NRC regulatory oversight process IP used a risk-informed approach for selecting the fire areas and/or fire zones and attributes to be inspected. The inspectors with assistance from a senior reactor analyst used the licensee's Individual Plant Examination for External Events (IPEEE) to select several risk-significant areas for detailed inspection and review. The fire zones chosen for review during this inspection are listed below and constitute five inspection samples.

Fire Area Fire Zone Description

- VI 7A Battery Room, D-1 and D-5
- VI 7B Battery Room D-3
- XII 14A Turbine Building Load Center No. 2-Upper 4kV Area
- XIII 15A Diesel Generator Room No. 12
- XV 15C Day Tank Room T-45B

For each of these fire zones, the inspection focused on the fire protection features, the systems and equipment necessary to achieve and maintain SSD conditions, determination of licensee commitments, and changes to the fire protection program.

.1 Shutdown from Outside Main Control Room

Title 10 CFR Part 50, Appendix R, Section III.G.1, required that SSCs that were necessary to achieve and maintain post-fire SSD from outside the main control room be protected by fire protection features, such that, one train of systems necessary to achieve and maintain hot shutdown (HSD) conditions was free of fire damage; and

systems necessary to achieve and maintain cold shutdown (CSD) could be repaired within 72-hours.

a. Inspection Scope

The inspectors reviewed the functional requirements identified by the licensee as necessary for achieving and maintaining HSD conditions to ensure that at least one post-fire SSD success path was available in the event of fire in each of the selected fire areas and/or zones for alternative shutdown in the case of control room evacuation. The inspectors reviewed the plant systems required to achieve and maintain post-fire SSD to determine if the licensee had properly identified the components and systems necessary to achieve and maintain SSD conditions for each fire area and/or zone selected for review. Specifically, the review was performed to determine the adequacy of the systems selected for reactivity control, reactor coolant inventory makeup, reactor heat removal, process monitoring, and support system functions. The review also included the fire safe shutdown analysis (SSDA) to ensure that all required components in the selected systems were included in the licensee's SSDA.

The inspectors reviewed the licensee's post-fire SSDA, normal and abnormal operating procedures, piping and instrumentation drawings, electrical drawings, their updated safety analysis report (USAR), and other supporting documents to verify that HSD and CSD could be achieved and maintained from outside the control room for fires that rely on shutdown from outside the control room. This review included verification that shutdown from outside the control room could be performed both with and without the availability of offsite power.

The inspectors also examined the operators' ability to perform the necessary manual actions for achieving SSD by reviewing post-fire shutdown procedures, the accessibility of SSD equipment, and the available time for performing the actions.

The inspectors reviewed the USAR and the licensee's engineering and/or licensing justifications (e.g., NRC guidance documents, license amendments, Technical Specifications, safety evaluation reports (SERs), exemptions, and deviations) to determine the licensing basis.

b. Findings

(1) Shutdown Panel Requirements Removed from Improved Technical Specifications

<u>Introduction</u>: A finding of very low safety significance and associated Non-Cited Violation (NCV) of license condition 2.C.4 was identified by the inspectors for the removal of the alternative shutdown system (ASDS) panel's administrative control requirements from the Improved Technical Specifications (ITS) without ensuring those requirements were maintained within the licensee's fire protection program.

<u>Description</u>: On October 30, 2006, the licensee implemented the ITS for the MNGP. During this inspection, the NRC inspectors' review of the ITS revealed that the Limiting Condition for Operation (LCO) 3.3.3.2 allowed the ASDS panel to be taken out-of-service for 30-days without any compensatory measures. In addition, the inspectors noted that the ITS only required the ASDS panel to be operable in Modes 1 and 2. Title 10 CFR Part 50, Appendix R, requires that for a potential fire in a Section III.G.3 area, such as the MNGP's control room or cable spreading room, the plant must be brought to a CSD condition (Mode 4) within 72-hours utilizing the ASDS panel. Upon further review, the inspectors found that the previous MNGP's custom technical specifications (CTS) only allowed a 7-day LCO for the ASDS panel without compensatory measures. When the licensee submitted the license amendment request to change to the ITS in June 2005, the allowed outage time for the ASDS panel was changed to 30-days in accordance with the guidelines provided in the standard ITS published by NRC. However, the licensee failed to recognize that the standard ITS requirements were based on General Design Criterion (GDC) 19 and that LCO 3.3.3.2 no longer supported the 10 CFR Part 50, Appendix R, Section III.G.3 requirements. Specifically, GDC 19 required power reactors to be brought to HSD and be maintained in HSD conditions from outside the control room in case the control room became uninhabitable due to reasons other than fire, where as Appendix R requirements rely upon CSD conditions.

At MNGP, the ASDS panel was credited for both remote shutdown (GDC 19) and alternative shutdown (10 CFR Part 50, Appendix R, Section III.G.3). When the licensee transitioned to the ITS, the administrative controls required to meet the 10 CFR Part 50, Appendix R, Section III.G.3 functions of the ASDS panel were deleted (e.g., Mode 3 operation, compensatory measures, etc.). Some of the deleted administrative controls were added to the licensee's system operation manual (e.g., the Mode 3 operational requirement was added for the ASDS panel); however, not all ITS deleted ASDS panel administrative controls (e.g., compensatory measures, etc.) were included in this document or any of the other licensee's documents.

The MNGP license condition 2.C.4, allowed the licensee to make changes to the approved fire protection program without prior NRC approval only if those changes would not adversely affect the ability to achieve and maintain SSD in the event of a fire. However, the removal of the ASDS panel's administrative controls from the facility's ITS constituted a change to the licensee's fire protection program that adversely affected the ability to achieve and maintain SSD in the event of a fire in the control room or cable spreading room. The licensee's fire protection program relied upon the facility's CTS for providing appropriate administrative controls whenever the ASDS panel was taken out-of-service or was inoperable. The ASDS panel's administrative controls contained in the CTS ensured that one train of equipment and/or systems was free of fire damage and provided appropriate interim compensatory measures when the ASDS panel was taken out-of-service or was inoperable. This change adversely affected the fire protection program's ability to identify the requirements considered necessary to achieve and maintain SSD in the event of a fire in the control room or cable spreading room. As a result, the licensee entered this finding into their corrective action program (CAP) as CAP 01134601, "Technical Specification Bases 3.3.3.2 Is Misleading," dated April 15, 2008, and CAP 01134747, "NRC Questioned Lack of Compensatory Measures When a Component Controlled from the ASDS Is Removed from Service," dated April 16, 2008, were issued.

<u>Analysis</u>: The inspectors determined that the licensee's failure to evaluate the effects of the ITS implementation on the ASDS panel's administrative control requirements, constituted a change that was contrary to license condition 2.C.4 and was a performance deficiency. The implementation of the facility's ITS resulted in the removal of the ASDS panel's administrative control requirements from the licensee's fire

protection program. The finding was determined to be more than minor because if left uncorrected, the finding would become a more significant safety concern. Specifically, the licensee's failure to maintain the ASDS panel's administrative control requirements within the licensee's fire protection program would adversely affect the ability to achieve and maintain SSD from outside the control room in case of a fire in the control room or the cable spreading room. The inspectors concluded this finding was associated with the protection against external factors attribute of the mitigating systems cornerstone and adversely affected the cornerstone's objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage).

In accordance with Inspection Manual Chapter (IMC) 0609F, "Fire Protection Significance Determination Process," IMC 0609F-01, Attachment 1, "Part 1: Application of Fire Protection SDP Phase 1 Worksheet," and IMC 0609F-02, Attachment 2, "Degradation Rating Guidance Specific to Various Fire Protection Program Elements," all dated February 28, 2005, the inspectors performed an SDP Phase 1 screening and determined that the finding degraded a fire protection defense-in-depth strategy. In IMC 0609F-01, for Step 1.1, the inspectors assigned a finding category of "Post-fire SSD," since systems or functions relied upon for post-fire safe shutdown were affected. For Step 1.2, the inspectors assigned a degradation rating of low. This was based on IMC 0609F-02, Attachment 2, where under "Safe Shutdown Findings: Table A2.3 -Guidance for Ranking an Observed SSD Degradation Finding" a low degradation rating was defined as minor procedural deficiencies that are compensated by operator experience/familiarity. Therefore, a low degradation rating was assigned to the finding since the finding's deficiencies would in all probability be compensated by operator experience/familiarity. In addition, the availability of the defense-in-depth elements for manual (i.e., control room) and automatic suppression (i.e., cable spreading room) systems: the reliability of the manual and automatic fire suppression systems; and plant records that stated the ASDS panel had not been out-of-service for more than 24-hours at a time since the implementation of ITS (October 30, 2006) were additional reasons for the assigned rating. For Step 1.3, Task 1.3.1: "Qualitative Screening for All Finding Categories," Question 1 screened to Green and no further analysis was required. Therefore, the finding was of very low safety significance.

This finding has a cross-cutting aspect in the area of human performance and within the cross-cutting component of resources because the licensee did not ensure that personnel and/or other resources were available and adequate to assure nuclear safety. Specifically, the licensee failed to ensure that the necessary interdisciplinary reviews and/or inputs needed for the up-to-date design documentation reviews occurred when deleting and/or changing the ASDS panel's administrative control requirements. [H.2(c)]

<u>Enforcement</u>: License condition 2.C.4, "Fire Protection," for the MNGP's Renewed License No. DPR-22, corrected by letter dated February 23, 2007, stated NMC shall implement and maintain in effect all provisions of the approved fire protection program, as described in the USAR for the facility and as approved in the SER dated August 29, 1979, and supplements dated February 12, 1981, and October 2, 1985, subject to the following provision: NMC may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain SSD in the event of a fire.

The MNGP's USAR, Section 10.3.1, "Fire Protection System," stated that Appendix J, "Fire Protection Program," Revision 23, described and implemented the licensee's fire protection program. In Appendix J.1, "Introduction," Revision 22, stated the fire protection program was required by Operating License Condition 2.C.4. In Appendix J.2, "Fire Protection Program," Revision 23, stated in the "Licensing Basis Summary" that by letter dated December 12, 1982, the NRC issued its SER for MNGP compliance with 10 CFR 50 Appendix R Section III.G.

In 4 AWI-08.01.00, "Fire Protection Program Plan," the licensee established the basis for their fire protection program. This AWI stated in Section 4.3, "10 CFR 50 Appendix R," that the following sub-section of Appendix R applies to the MNGP's Fire Protection Program: Appendix R, Section III.G, "Fire Protection of Safe Shutdown Capability."

The MNGP's SSDA revealed that two of the four fire areas that contained components from both trains of SSD systems (i.e., a Section III.G.3 area) were the control room and cable spreading room. To meet the requirements for a Section III.G.3 fire area, the licensee installed an ASDS to achieve and maintain SSD in the event of a fire in the control room or cable spreading room.

Contrary to the above, since October 30, 2006, the licensee made changes to the approved fire protection program without prior NRC approval that did adversely affect the ability to achieve and maintain SSD in the event of a fire. Specifically, the licensee's failure to maintain the ASDS panel's administrative control requirements within the licensee's fire protection program would adversely affect the ability to achieve and maintain SSD from outside the control room in case of a fire in the control room or the cable spreading room. Because this violation was of very low safety significance and because it was entered into the licensee's corrective action program as CAP 01134601 and CAP 01134747, this violation is being treated as an NCV, consistent with Section VI.A.1 of the NRC Enforcement Policy. (NCV 05000263/2008006-01 (DRS))

The inspectors evaluated this finding in accordance with the criteria established by Section A of the NRC's Interim Enforcement Policy Regarding Enforcement Discretion for Certain Fire Protection Issues (10 CFR Part 50.48) for a licensee in NFPA 805 transition. The inspectors determined that this finding did not meet the criteria established by Section A and are not exercising enforcement discretion; but will cite the NCV in accordance with the NRC's Enforcement Policy.

.2 Protection of Safe Shutdown Capabilities

Title 10 CFR Part 50, Appendix R, Section III.G.1, required the licensee to provide fire protection features that were capable of limiting fire damage to systems, structures, and components important to SSD. The systems, structures, and components that were necessary to achieve and maintain post-fire SSD were required to be protected by fire protection features that were capable of limiting fire damage to the SSCs so that:

 one train of systems necessary to achieve and maintain HSD conditions from either the control room or emergency control station(s) was free of fire damage; and • systems necessary to achieve and maintain CSD from either the control room or emergency control station(s) could be repaired within 72-hours.

Specific design features for ensuring this capability were specified by 10 CFR Part 50, Appendix R, Section III.G.2.

a. Inspection Scope

For each of the selected fire areas and/or zones, the inspectors reviewed the fire hazards analysis, SSD analysis, and supporting drawings and documentation to verify that SSD capabilities were properly protected.

The inspectors reviewed the licensee procedures and programs for the control of ignition sources and transient combustibles to assess their effectiveness in preventing fires and in controlling combustible loading within limits established in the fire hazards analysis. The inspectors performed plant walkdowns to verify that protective features were being properly maintained and administrative controls were being implemented.

The inspectors also reviewed the licensee's design control procedures to ensure that the process included appropriate reviews and controls to assess plant changes for any potential adverse impact on the fire protection program and/or post-fire SSDA and procedures.

b. Findings

(1) <u>Uncontrolled Transient Combustibles</u>

<u>Introduction</u>: A finding of very low safety significance and associated NCV of license condition 2.C.4 was identified by the inspectors for the presence of uncontrolled transient combustible material stored in the turbine building.

<u>Description</u>: In response to an inspector's question, the licensee identified six buckets of resin (i.e., 12-pounds of resin per bucket) in the turbine building's Fire Zone 14C. The six buckets of resin were stored in the fire zone without an approved combustible source use permit (CSUP) and the additional fire load had not been included in the licensee's permanent combustible loading controls. This amount of resin (72-pounds) exceeded the licensee's fire protection program's limit (i.e., 280,000-BTUs, the equivalent of two gallons of general purpose solvent) for transient combustible material. The additional combustible loading from the resin (styrene and resin in aqueous mixture) was 1,296,000-BTUs. The licensee's Administrative Work Instruction (AWI), 4 AWI-08.01.01, "Fire Protection Practices," Section 4.8.6.B, "Transient Combustibles" stated,

"If additional quantities of transient combustible material are to be introduced in a fire zone in excess of the equivalent of 2-gallons of general purpose solvent, one of the following is used:

 Use of a Form 3067 (CSUP) with assignment of a fire watch to continuously attend the combustible materials, in accordance with 4 AWI-08.01.02 (COMBUSTIBLE SOURCE USE PERMIT)

2. Analysis of the significance of the additional combustible loading by the Fire Protection Engineer. See 4 AWI-08.01.04."

The inspectors observed that Fire Zone 14C contained no detection and automatic suppression systems; however, the fire zone did have fire extinguishers and hose stations available to fight a potential fire.

On April 4, 2008, upon discovery, the licensee entered this finding into their corrective action program as CAP 01133361, "Resin Stored in Turbine Building without Permit." The licensee's immediate corrective action was to perform an engineering analysis for Fire Zone 14C and issue a permanent combustible loading change request. The change request allowed for the permanent fire load storage of an additional 200-pounds of resin.

On April17, 2008, during an inspector's followup walkdown, the inspector identified 12 buckets of resin stored in the same turbine building's Fire Zone 14C. The inspectors were informed that the number of resin buckets stored in this fire zone varies because several times a month resin buckets are brought into the fire zone to recharge each of the five condensate demineralizers. Although the weight (approximately 144-pounds) was below the new limit of 200-pounds, the inspector concluded that the licensee's previous corrective action administrative controls were not adequate and should have specified the number of resin buckets allowed in the fire zone since maintenance workers and operators would not readily be able to identify the weight of the resin in the area. In addition, the inspectors noted that CAP 01133361 initially converted the uncontrolled transient combustible material to a permanent fire load. Subsequently, the inspectors concluded that although the stored resin was a stored transient combustible material that did not exceed the permanent fire loading for the fire zone, CAP 01133361 did not identify what administrative controls would be used to ensure that the 200-pound permanent storage limit would not be exceeded in the future.

<u>Analysis</u>: The inspectors determined that the licensee's failure to control transient combustible material was contrary to the licensee's fire protection program and was a performance deficiency. The finding was determined to be more than minor because the finding was similar to IMC 0612, Appendix E, Example 4.k, since the uncontrolled transient combustible materials were not reflected in the fire hazards analysis and the licensee failed to complete the fire protection program's required engineering evaluation. Specifically, the licensee failed to control transient combustible material, such that, the transient fire loading in Fire Zone 14C exceeded the fire hazards analysis's limit (i.e., not to exceed the equivalent of two gallons of general purpose solvent) and the required fire protection program's engineering evaluation was not performed. In addition, no CSUP was issued for the uncontrolled transient combustible material. Therefore, this performance deficiency also impacted the protection against external factors attribute of the initiating events cornerstone and adversely affected the cornerstone's objective of limiting the likelihood of events that upset plant stability.

In accordance with IMC 0609F, "Fire Protection Significance Determination Process," IMC 0609F-01, Attachment 1, "Part 1: Application of Fire Protection SDP Phase 1 Worksheet," and IMC 0609F-02, Attachment 2, "Degradation Rating Guidance Specific to Various Fire Protection Program Elements," all dated February 28, 2005, the inspectors performed an SDP Phase 1 screening and determined that the finding degraded a fire protection defense-in-depth strategy. In IMC 0609F-01, for Step 1.1, the inspectors assigned a finding category of "Fire Prevention and Administrative Controls," since the finding affected the plant combustible material controls program. For Step 1.2, the inspectors assigned a degradation rating of low. This was based on IMC 0609F-02, Attachment 2, where under "Fire Prevention and Administrative Controls Programs - <u>Findings against the combustible controls program</u>:" a low degradation rating was defined as low flashpoint combustible liquids in quantities above those allowed by plant regulations but stored in approved containers. Therefore, a low degradation rating was assigned to the finding since the uncontrolled transient combustible material was in approved manufacturer's containers and was in a fire zone with low fire loading. For Step 1.3, Task 1.3.1: "Qualitative Screening for All Finding Categories," Question 1 screened to Green and no further analysis was required. Therefore, the finding was of very low safety significance.

This finding has a cross-cutting aspect in the area of human performance and within the cross-cutting component of work practices because the licensee did not effectively communicate expectations regarding procedural compliance. Specifically, the licensee failed to effectively communicate expectations regarding procedural compliance with the fire protection program and transient combustible process. [H.4(b)]

<u>Enforcement</u>: License condition 2.C.4, "Fire Protection," for the MNGP's Renewed License No. DPR-22, corrected by letter dated February 23, 2007, stated NMC shall implement and maintain in effect all provisions of the approved fire protection program, as described in the USAR for the facility and as approved in the SER dated August 29, 1979, and supplements dated February 12, 1981, and October 2, 1985.

The MNGP's USAR, Section 10.3.1, "Fire Protection System," stated that Appendix J, "Fire Protection Program," Revision 23, described and implemented the licensee's fire protection program (e.g., the fire protection organization, the fire brigade training, the controls over combustibles and ignition sources, and the quality assurance provisions for fire protection). In Appendix J.1, "Introduction," Revision 22, stated the fire protection program was required by Operating License Condition 2.C.4.

In 4 AWI-08.01.00, "Fire Protection Program Plan," the licensee established the basis for their fire protection program. This AWI stated in Section 4.5.5, "Implementing Documents," that 4 AWI-08.01.01, "Fire Protection Practices" specified the requirements and limitations associated with the handling, use and storage of combustibles and flammable materials. In addition, Section 4.8.6.B, required that when transient combustible materials were introduced into a fire zone in excess of the equivalent of two gallons of general purpose solvent, complete either a CSUP (Form 3067) or an analysis of the significance of the additional combustible loading.

Contrary to the above, on April 4, 2008, the licensee failed to control transient combustible material that was contrary to the requirements of their fire protection program. Specifically, six buckets of resin containing a fire load in excess of the equivalent of two gallons of general purpose solvent was stored in the fire zone without a completed CSUP (Form 3067) or an analysis of the significance of the additional combustible loading. Because this violation was of very low safety significance and because it was entered into the licensee's corrective action program as CAP01133361, this violation is being treated as an NCV, consistent with Section VI.A.1 of the NRC Enforcement Policy. (NCV 05000263/2008006-02(DRS))

The inspectors evaluated this finding in accordance with the criteria established by Section A of the NRC's Interim Enforcement Policy Regarding Enforcement Discretion for Certain Fire Protection Issues (10 CFR 50.48) for a licensee in NFPA 805 transition. The inspectors determined that this finding did not meet the criteria established by Section A and are not exercising enforcement discretion; but will cite the NCV in accordance with the NRC's Enforcement Policy.

.3 Passive Fire Protection

Branch Technical Position APCSB 9.5-1, Section IV.B.1, "General Guidelines for Plant Protection Building Design," Section IV.B.3, "Cable Construction, Cable Trays and Penetrations," and Section IV.D.2, "Control Room," identified the requirements for the licensee's fire protection passive features.

a. Inspection Scope

For the selected fire areas and/or zones, the inspectors evaluated the adequacy of fire area barriers, penetration seals, fire doors and electrical raceway fire barriers. The inspectors observed the material condition and configuration of the installed barriers, seals and doors. The inspectors reviewed approved construction details and supporting fire tests. In addition, the inspectors reviewed license documentation, such as, NRC SERs, and deviations from NRC regulations and the NFPA codes to verify that fire protection features met license commitments.

The inspectors walked down accessible portions of the selected fire areas and/or fire zones to observe material condition and the adequacy of design of fire area and/or fire zone boundaries (including walls, fire doors, and fire dampers) to ensure they were appropriate for the fire hazards in the area.

The inspectors reviewed the installation, repair, and qualification records for a sample of penetration seals to ensure the fill material was of the appropriate fire rating and that the installation met the engineering design.

b. Findings

No findings of significance were identified.

.4 Active Fire Protection

Branch Technical Position APCSB 9.5-1, Section IV.C.1, "Fire Detection," Section IV.C.3, "Water Sprinkler and Hose Standpipe Systems," Section IV.C.5, "Carbon Dioxide Suppression Systems," and Section IV.D.2, "Control Room," identified the requirements for the licensee's fire protection active features.

a. Inspection Scope

For the selected fire areas and/or fire zones, the inspectors evaluated the adequacy of fire suppression and detection systems. The inspectors observed the material condition and configuration of the installed fire detection and suppression systems. The inspectors reviewed design documents and supporting calculations. In addition, the inspectors reviewed license basis documentation, such as, NRC SERs, deviations from

NRC regulations, and the NFPA codes to verify that fire suppression and detection systems met license commitments.

b. Findings

No findings of significance were identified.

.5 Protection from Damage from Fire Suppression Activities

Title 10 CFR Part 50, Appendix A, Criterion 3, "Fire Protection," required that firefighting systems shall be designed to minimize the adverse effects of fires on SSCs important to safety and to assure that their rupture or inadvertent operation does not significantly impair the safety capability of these SSCs.

a. Inspection Scope

For the selected fire areas and/or fire zones, the inspectors verified that redundant trains of systems required for HSD would not be subject to damage from fire suppression activities or from the rupture or inadvertent operation of fire suppression systems including the effects of flooding. The inspectors conducted walkdowns of each of the selected fire areas and/or fire zones to assess conditions, such as, the adequacy and condition of floor drains, equipment elevations, and spray protection.

b. Findings

No findings of significance were identified.

.6 <u>Alternative Shutdown Capability</u>

Title 10 CFR Part 50, Appendix R, Section III.G.1, required that SSCs important to SSD be provided with fire protection features capable of limiting fire damage to ensure that one train of systems necessary to achieve and maintain HSD conditions was free of fire damage. Options for providing this level of fire protection were delineated in 10 CFR Part 50, Appendix R, Section III.G.2. Where the protection of systems whose function was required for HSD did not satisfy 10 CFR Part 50, Appendix R, Section III.G.2, an alternative or dedicated shutdown capability independent of the area under consideration was required to be provided. Additionally, alternative or dedicated shutdown capability must be able to achieve and maintain hot standby conditions and achieve CSD conditions within 72-hours and maintain CSD conditions thereafter. During the post-fire SSD, the reactor coolant process variables must remain within those predicted for a loss of normal AC power, and the fission product boundary integrity must not be affected (i.e., no fuel clad damage, rupture of any primary coolant boundary, or rupture of the containment boundary).

a. Inspection Scope

The inspectors reviewed the licensee's systems required to achieve alternative SSD to determine if the licensee had properly identified the components and systems necessary to achieve and maintain SSD conditions. The inspectors also focused on the adequacy of the systems to perform reactor pressure control, reactivity control, reactor coolant makeup, decay heat removal, process monitoring, and support system functions.

The inspectors conducted selected area walkdowns to determine if operators could reasonably be expected to perform the alternate SSD procedure actions and that equipment labeling was consistent with the alternate SSD procedure. The review also looked at operator training as well as consistency between the operations shutdown procedures and any associated administrative controls.

b. Findings

No findings of significance were identified.

.7 <u>Circuit Analyses</u>

a. Inspection Scope

In accordance with IP 71111.05TTP, "Fire Protection – NFPA 805 Transition Period (Triennial)," dated May 9, 2006, this Section of the IP was suspended for facilities in the NFPA 805 Standard transition period.

b. Findings

No findings of significance were identified.

.8 <u>Communications</u>

Branch Technical Position APCSB 9.5-1, required that emergency communication equipment be provided. For a fire in an alternative shutdown fire area and/or fire zone, control room evacuation may be required and a shutdown is performed from outside the control room. Radio communications are relied upon to coordinate the shutdown of both units and for fire fighting.

a. Inspection Scope

The inspectors reviewed, on a sample bases, the adequacy of the communication system to support plant personnel in the performance of alternative SSD functions and fire brigade duties.

b. Findings

No findings of significance were identified.

.9 <u>Emergency Lighting</u>

Title 10 CFR Part 50, Appendix R, Section III.J, required that emergency lighting units with at least an 8-hour battery power supply be provided in all areas needed for operation of SSD equipment and in access and egress routes thereto.

a. Inspection Scope

The inspectors performed a plant walkdown of selected areas in which a sample of operator actions would be performed in the performance of alternative SSD functions. As part of the walkdowns, the inspectors focused on the existence of sufficient emergency lighting for access and egress to areas and for performing necessary

equipment operations. The locations and positioning of the emergency lights were observed during the walkdown and during review of manual actions implemented for the selected fire areas and/or fire zones.

b. Findings

No findings of significance were identified.

.10 Cold Shutdown Repairs

Title 10 CFR Part 50, Appendix R, Section III.G.1.b, required that equipment and systems comprising the means to achieve and maintain CSD conditions should not be damaged by fire; or the fire damage to such equipment and systems should be limited so that the systems can be made operable and CSD achieved within 72-hours. Materials for such repairs shall be readily available on-site and procedures shall be in effect to implement such repairs.

a. Inspection Scope

The inspectors reviewed the licensee's procedures to determine whether repairs were required to achieve CSD and to verify that dedicated repair procedures, equipment, and material to accomplish those repairs were available on-site. The inspectors also evaluated whether CSD could be achieved within the required time using the licensee's procedures and repair methods. The inspectors also verified that equipment necessary to perform CSD repairs was available on-site and properly staged.

b. Findings

No findings of significance were identified.

.11 Compensatory Measures

a. Inspection Scope

The inspectors conducted a review to verify that compensatory measures were in place for out-of-service, degraded or inoperable fire protection and post-fire SSD equipment, systems, or features (e.g., detection and suppression systems, and equipment, passive fire barriers, pumps, valves or electrical devices providing SSD functions or capabilities). The inspectors also conducted a review on the adequacy of short term compensatory measures to compensate for a degraded function or feature until appropriate corrective actions were taken.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES (OA)

4OA2 Identification and Resolution of Problems (71152)

a. Inspection Scope

The inspectors reviewed the licensee's CAP procedures and samples of corrective action documents to verify that the licensee was identifying issues related to the fire protection program at an appropriate threshold and entering them in the CAP. The inspectors reviewed selected samples of condition reports, work orders, design packages, and fire protection system non-conformance documents.

b. Findings

No findings of significance were identified.

4OA6 Management Meetings

.1 Exit Meeting Summary

On April 18, 2008, at the conclusion of the inspection, the inspectors presented the inspection results to Mr. Brad Sawatzke and other members of licensee management. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

.2 Interim Exit Meetings

No interim exits were conducted.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee:

- R. Bashall, Contract Appendix R Engineer
- R. Baumer, Compliance Engineering Analyst
- T. Blake, Regulatory Affairs Manager
- C. Boese, Backup Fire Protection Engineer
- S. Brown, System Engineering Manager
- S. Einbinder, Contract Fire Protection Engineer
- S. Freeman, Nuclear Oversight Assessor
- J. Grubb, Site Engineering Director
- W. Guldemond, Nuclear Safety Assurance Manager
- M. Hippe, Fire Protection/Appendix R Program Engineer
- K. Jepson, Human Performance and Industrial Safety Manager
- T. Johnson, Fire Marshal
- M. Kelly, Systems Engineering Supervisor
- P. Kissinger, Assistant Operations Manager
- R. Kleve, Plant Engineering
- R. Ladd, Nuclear Management Company (NMC) Fleet Fire Protection Technical Lead
- R. Loeffer, Licensing Engineer
- J. Masterlark, NMC Fleet NFPA-805 Transition Lead
- N. Overby, Fire Protection System Engineer
- S. Poirier, Administrative Support
- S. Porter, Programs Engineering Manager
- R. Sanderson, Design Engineer
- D. Seestrom, Plant Engineer
- S. Sharp, Operations Manager
- B. Sawatzke, Plant Manager
- T. Taylor, Nuclear Oversight Manager
- P. Young, Programs Engineering Supervisor

Nuclear Regulatory Commission

- L. Benton, Inspector
- L. Haeg, Resident Inspector
- J. Lara, Chief, Engineering Branch 3, Division of Reactor Safety
- S. West, Director, Division of Reactor Safety

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

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05000263/2008006-01(DRS)	NCV	Shutdown Panel Requirements Removed from Improved Technical Specifications (Section 1R05.1b.(1))
05000263/2008006-02(DRS)	NCV	Uncontrolled Transient Combustibles (Section 1R05.2b.(1))
Closed		
05000263/2008006-01(DRS)	NCV	Shutdown Panel Requirements Removed from Improved Technical Specifications (Section 1R05.1b.(1))
05000263/2008006-02(DRS)	NCV	Uncontrolled Transient Combustibles (Section 1R05.2b.(1))

Discussed

None

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 of 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.

CALCULATIONS

Number	Description or Title	Date or Revision
CA-02-113	Evaluation of Fire Barrier Separating Fire Areas/Fire Zones XV/15C and XVI/15D	8
CA-03-052	Instrument Setpoint Calculation, Diesel Fuel Oil Storage Tank Level	November 26, 2003
CA-03-193	Evaluation of Fire Protection System in EDG Building – Fire Ares XIII, XIV, XV & XVI/15A, 15B, 15C & 15D	15
CA-05-084	Combustible Loading Calculation	15
CA-05-124	Hydrogen Generation of No. 13 and No. 16 Battery Rooms	0
CA-05-132	Post-Fire Operator Manual Action Feasibility Review	0
CA-89-558	Hydraulic Calculation for EDG Room Pre-action Sprinkler System	2
CA-90-023	Calculation for Minimum Allowable Fuel Oil Storage Tank Level	1
CA-93-084	Hydrogen Generation of No. 11 and No. 12 Battery Rooms	1

CORRECTIVE ACTION PROGRAM DOCUMENTS ISSUED DURING INSPECTION

<u>Number</u>	Description or Title	Date or Revision
CAP 01133267	SCR-05-0672 Was Completed Incorrectly	April 3, 2008
CAP 01133329	PMRQ 00011104 (WO 351357) is Beyond 125% Periodicity	April 3, 2008
CAP 01133361	Resin Stored in Turbine Building Without Permit	April 4, 2008
CAP 01134601	Technical Specification Bases 3.3.3.2 Is Misleading	April 15, 2008
CAP 01134616	Several Typos Were In CA-90-023. Revision 1	April 15, 2008
CAP 01134645	USAR Appendix J.5 Fire Hazards Analysis Is Inaccurate	April 16, 2008
CAP 01134747	NRC Questioned Lack of Compensatory Measures When a Component Controlled from the ASDS Is Removed from Service	April 16, 2008

CORRECTIVE ACTION PROGRAM DOCUMENTS ISSUED DURING INSPECTION

<u>Number</u>	Description or Title	Date or Revision
CAP 01134754	Procedure 7181 Was Not Used During the Last Cal of DOL	April 16, 2008
CAP 01134770	Diesel Oil Storage Tank Level Calculation CA-03-052 Does Not Include Temperature Error Correction	April 17, 2008

CORRECTIVE ACTION PROGRAM DOCUMENTS ISSUED PRIOR TO INSPECTION

Number	Description or Title	Date or Revision
CAP 01014586	Fire System Check Valve Without Component ID	June 29, 2006
CAP 01022191	Minor Fire at South Crane Rail Area Reactor Building	April 4, 2006
CAP 01026390	Continuous Fire Watch Not Fully Maintained	April 26, 2006
CAP 01065069	Diesel Fire Pump Seal Water Pressure Control Degrading	December 2, 2006
CAP 01071999	Small Fire on Turbine Building 911' Elevation During Welding Activities	January 15, 2007
CAP 01087842	Piping Leak Upstream of FP-171-11	May 14, 2007
CAP 01088245	Shift Fire Drill Not Completed Within 90-Days Per AWI	June 18, 2007
CAP 01114982	Fire Extinguisher Concerns	February 16, 2008
CAP 01120864	Revision 1 to CA-90-023 Did Not Incorporate Addendum 1 to Revision 0 of the Calculation	December 1, 2007
CAP 01120964	Fire Bar. Penetration Seal FZ-585 Inconsistent with Design	January 26, 2008
CAP 01121127	Intake Structure Cable Trays YS4 and YB3 Have Gaps on West End	January 14, 2008
CAP 01121739	Current Fire Drill Practices Challenge Personnel/Plant Safety	March 20, 2008
CAP 01124443	Fire Protection FSA Questions Level of Documentation	March 2, 2008

DRAWINGS

<u>Number</u>	Description or Title	Date or Revision
NE-36404-4A	Schematic Diagram RHR Pump P-202B ACB 152-604	AC
NE-36404-4C	RHR Pump P-202D ACB 152-603 Control	AD
NE-36404-5A	Core Spray Pump P-208B ACB 152-605 Control	S
NF-36310	MNGP Office & Control Building Floor Plans	V
NE-36394-10A	RHR Service Water Pump P-109B Schemes ACB No. 152-608	х
NE-36394-10C	RHR Service Water Pump P-109D ACB No. 152-607	Т

DRAWINGS

<u>Number</u>	Description or Title	Date or Revision
NF-95916-1	Elementary Diagram	76
	Blowdown Control System Division II	
NF-95916-2	Elementary Diagram Blowdown Control System Division II	76
NF-95916-3	Elementary Diagram	76
	Blowdown Control System Division II	10
NF-95916-4	Elementary Diagram	76
	Blowdown Control System Division II	
NF-95916-5	Elementary Diagram	76
NH-36051,	Blowdown Control System Division II MNGP P&ID Diesel Oil System	76
Sheet 1 of 2		10
NH-36516-CC	MNGP Fire Protection System Yard Areas	76
NX-8431-5	50000 Gallon Underground Oil Tank	November 6, 1967
NX-16991-3	MNGP Fire Hazards Analysis, Plan View	В
	Reactor Building Elev. 896'-3"	
NX-16991-4	MNGP Fire Hazards Analysis, Plan View	В
	Reactor Building Elev. 935'-0"	
NX-16991-5	MNGP Fire Hazards Analysis, Plan View	А
	Reactor Building Elev. 962'-6"	
NX-16991-9	MNGP Fire Hazards Analysis, Plan View	В
	Turbine Building Elev. 911'-0"	
NX-16991-10	MNGP Fire Hazards Analysis, Plan View	D
	Turbine Building Elev. 931'-0"	
NX-16991-11	MNGP Fire Hazards Analysis, Plan View	В
	Turbine Building Elev. 951'-0"	
NX-16991-14	MNGP Fire Hazards Analysis, Plan View	A and D
	Administration Building Elev. 928'-0"	
NX-16991-15	MNGP Fire Hazards Analysis, Plan View	В
	Administration Building Elev. 939'-0"	
NX-16991-16	MNGP Fire Hazards Analysis, Plan View	В
	Administration Building Elev. 951'-0"	

FIRE IMPAIRMENTS/REMOVAL PERMITS

<u>Number</u>	Description or Title	Date or Revision
	FP Impairment Log since 11/4/2005	March 2008

MODIFICATIONS

<u>Number</u>	Description or Title	Date or Revision
90Z078	Upgrade Fire Protection Pipe Supports	0

PROCEDURES

Number	Description or Title	Date or Revision
0271	Fire Hose Station and Yard Hydrant Hose House Equipment Inspection	35
0324	Fire Protection System – Sprinkler System Tests	34
1306	Procedure for Portable Diesel Oil Pump Operability Test	12
2176	Joint Fire Drill Procedure with Local Fire Department	September 15, 2005
2176	Joint Fire Drill Procedure with Local Fire Department	October 31, 2006
2176	Joint Fire Drill Procedure with Local Fire Department	October 22, 2007
3831	Fire Protection Engineering Evaluation – FP Seal FZ-0585	0
8236	Application of Nuclear Coatings	12
4 AWI-08.01.01	Fire Prevention Practices	30
4 AWI-08.01.02	Combustible Source Use Permit (CSUP)	9
4 AWI-08.01.04	Fire Protection Combustible Loading	5
M-8107L-083	Lesson Plan Alternate Shutdown System	6
Ops Man C.4-C	Abnormal Procedure Shutdown Outside Control Room	29
Ops Man B.08.05.05	System Operation – Section for Fire Protection	41
OWI-02.01	Operations Shift Turnover	13
Strategy A.3-7-B	Fire Zone 7B, 250V Division 1 Battery Room	8
Strategy A.3-14-B	Fire Zone 14A, Upper 4kV Bus Area (12, 14 & 16) Division 1 Battery Room	13
Strategy A.3-15-A	Fire Zone 15A, No.12 DG Room	7
Strategy A.3-15-B	Fire Zone 15B, No.11 DG Room	9

REFERENCES

Number	Description or Title	Date or Revision
	Fire Watch Patrol (November 2007 to January 2008)	9
	MNGP System Health Report – FIR Fire Protection	February 20, 2008
NEDC-31336P-A	Class 3 "GE Instrument Setpoint Methodology (Proprietary Information)	September 1996

REFERENCES

Number	Description or Title	Date or Revision
NMC-1	Quality Assurance Topical Report	4
NRC GL 86-10	Implementation of Fire Protection Requirements	April 24, 1986
NSP Letter to NRC	License Amendment Request dated March 28, 1986 Fire Detection and Protection Systems TS	March 31, 1986
NSP Letter to NRC	Revision No. 1 to License Amendment Request dated March 31, 1986	October 10, 1986
SRINo. 91-027	EDG Fuel Oil System Inconsistent with NFPA Codes, Contrary to USAR Statements	0
USAR 8.4.1	Safeguards Emergency Diesel Generator System	23
USAR 10.3.1	Fire Protection System	23

VENDOR DOCUMENTS

<u>Number</u>	Description or Title	Date or Revision
	Teledyne Big Beam Six Volt Emergency Lighting	May 1979

WORK DOCUMENTS

Number	Description or Title	Date or Revision
WO9801109	Radio Test Procedure	April 18, 1998
WO00150896 01	1147 Fire Detector Instr Sense Check	June 20, 2006
WO00158462 03	0275-03 Fire Door Inspections	September 7, 2007
WO00265630 01	0275-02 Fire Barrier Wall/Damper/Floor Insp SCAF	February 10, 2007
WO00269726 02	0275-01 Fire Barrier Penetration on Seal Vis Insp	January 22, 2007
WO00270305 01	1306 Portable Diesel Oil Pump Operability Test	October 4, 2006
WO00291715 02	Perform Procedure 4092-PM	January 28, 2007
WO00294761 01	0256-01 Detector Functional Test	February 28, 2007
WO00299441 01	0256 Fire Detection Inst Detector Function Test	February 14, 2007
WO00300677 02	1306 Portable Diesel Oil Pump Operability Test	May 2, 2007
WO00301743 01	0327 Halon Tank Weight and Pressure Test	May 22, 2007
WO00307006 01	1378 Annual Fire Protection System Flow Test	December 13, 2006
WO00333417 01	1061 Emergency Lighting Quarterly Operability Test	December 19, 2007

LIST OF ACRONYMS USED

ADAMS ASDS BTUs CAP CFR CSD CSUP CTS DRP DRS HSD IMC IP IPEEE IR ITS LCO MNGP NCV NFPA NMC NFPA NMC NRR NSP PARS SDP	Agency-wide Document Access and Management System Alternative Shutdown System British Thermal Units Corrective Action Program Code of Federal Regulations Cold Shutdown Combustible Source Use Permit Custom Technical Specifications Division of Reactor Projects Division of Reactor Safety Hot Shutdown Inspection Manual Chapter Inspection Procedure Individual Plant Examination for External Events Inspection Report Improved Technical Specifications Limiting Condition for Operation Monticello Nuclear Generating Plant Non-Cited Violation National Fire Protection Association Nuclear Management Company, LLC U.S. Nuclear Regulatory Commission Office of Nuclear Reactor Regulation Northern States Power Company Publicly Available Records System Significance Determination Process
PARS	Publicly Available Records System
	•
SSCs	Structures, Systems, and Components
SSD	Safe Shutdown
USAR	Updated Safety Analysis Report