



Monticello Nuclear Generating Plant
2807 W County Road 75
Monticello, MN 55362

October 2, 2015

L-MT-15-080

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Monticello Nuclear Generating Plant
Docket 50-263
Renewed Facility Operating License No. DPR-22

Response to Non-Cited Violation Dated September 2, 2015

Reference: Monticello Nuclear Generating Plant – NRC Component Design Basis Inspection
(Inspection Report 05000263/2015007)

In the referenced inspection report, the U.S. Nuclear Regulatory Commission (NRC) issued a finding of very-low safety significance (Green), and an associated Non-Cited Violation (NCV) of Title 10, Code of Federal Regulations (CFR), Part 50, Appendix B, Criterion III, "Design Control," for the failure to review for suitability of application of safety-related Agastat and General Electric relays that had exceeded their service life.

After further review and evaluation of NCV 05000263/2015007-02, Northern States Power Company, a Minnesota corporation (NSPM), d/b/a as Xcel Energy, does not contest that a performance deficiency exists, but respectfully disagrees that the performance deficiency identified on September 2, 2015, was in violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control." Accordingly, NSPM is not aligned with the staff's position of the criterion violated and believes 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings" is more appropriate. The basis for NSPM's position of the criterion violated is enclosed.

If you have any questions or require additional information, please contact Mr. Andrew Kouba, Licensing Engineer at (763) 271-7251.

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Summary of Commitments

There are no new commitments and no revisions to existing commitments in this letter.



Peter A. Gardner
Site Vice President, Monticello Nuclear Generating Plant
Northern States Power Company – Minnesota

Enclosure

cc: Administrator, Region III, USNRC
Director, Office of Enforcement, USNRC
Resident Inspector, MNGP, USNRC

ENCLOSURE
REPLY TO NON-CITED VIOLATION

Section 1R21.3.b.(2) of the Monticello Nuclear Generating Plant (MNGP) Component Design Basis Inspection Report No. 05000263/2015007 issued by the Nuclear Regulatory Commission (NRC) dated September 2, 2015, contains in part, the following green non-cited violation (NCV):

Introduction: The inspectors identified a finding of very low safety significance (Green), and an associated NCV of 10 CFR Part 50, Appendix B, Criterion III, "Design Control, for the failure to assure measures were established for the selection and review for suitability of application of materials, parts, equipment and processes that were essential to the safety-related functions of SSC. Specifically, the licensee failed to review for suitability of application of safety-related Agastat and General Electric (GE) relays that exceeded their service life, a condition nonconforming to their design basis, to justify their continued service considering in-service deterioration.

Description: During the 2012 Problem Identification and Resolution (PI&R) inspection, Unresolved Item (URI) 05000263/2012008-01 was opened related to the qualification basis for safety-related relays and motor starter contactors. The URI identified concerns with the licensee not replacing safety-related relays and motor starter contactors that were beyond the vendor's recommended service life without an appropriate evaluation justifying the extension of their service life. The inspectors in consultation with Nuclear Reactor Regulation staff issued Task Interface Agreement (TIA) 2014-01, "Final Task Interface Agreement – Regulatory Position on Design Life of Safety-Related Structures, Systems, and Components Related to Unresolved Items at Donald C. Cook Nuclear Power Plant, Monticello Nuclear Generating Plant and Palisades Nuclear Plant." The TIA was issued on May 7, 2015, and concluded "when a licensee becomes aware that a safety-related SSC's service life has been exceeded or information challenges the presumption that a safety-related SSC can perform its specified function, the licensee must promptly address and document this non-conforming condition in accordance with the licensee's NRC approved Quality Assurance Program, the licensee's operability/functionality program and the CAP. This includes completing appropriate corrective actions in a timely manner and documenting licensee's evaluations justifying the service life extensions."

During this inspection, the inspectors noted the licensee previously initiated AR 01446684, which identified a number of corrective actions. Some actions were already completed and the remaining were scheduled for completion in a timely manner. Immediate corrective actions included instituting a Relay Monitoring Program, performing generic service life evaluations on some of the safety-related Agastat and GE relays, and identifying and replacing relays that had exceeded vendor recommended service life. The licensee continued to identify safety-related relays exceeding vendor recommended service life and had plans to conduct extent of condition reviews. A separate action item was initiated to evaluate motor starter contactors.

Analysis: The inspectors determined the failure to review for suitability of application of safety-related relays installed beyond their service life to justify their continued service, considering in-service deterioration, was contrary to 10 CFR Part 50, Appendix B, Criterion III, and a performance deficiency. The finding was determined to be more than minor in accordance with IMC 0612, Appendix B "Issue Screening," because the inspectors answered "Yes" to the More-than-Minor screening question, "If left uncorrected, would the performance deficiency have the potential to lead to a more significant safety concern?" Specifically, these

safety-related relays were installed in protective circuits such as reactor protection system, etc., and their failure could impact the proper operation of these protective schemes.

The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 Initial Screening and Characterization of Findings," for the Mitigating Systems cornerstone. The inspectors evaluated the finding using Appendix A, "The Significance Determination Process for Findings at Power." The finding screened as very low safety significance (Green) because the inspectors were able to answer "Yes" to screening Question A1 in Exhibit 2, because the finding represented a qualification deficiency of a mitigating SSC confirmed not to result in loss of operability or functionality.

The inspectors did not identify a cross-cutting aspect associated with this finding as it did not reflect licensee's current performance.

Enforcement: Title 10 CFR Part 50, Appendix B, Criterion III, "Design Control," required, in part, "Measures shall be established to assure that the selection and review for suitability of application of materials, parts, equipment, and processes that are essential to the safety-related functions of SSC."

Contrary to the above, as of July 24, 2015, the licensee failed to establish measures to ensure the selection and review for suitability of application of materials, parts, equipment, and processes that were essential to the safety-related functions of SSC. Specifically, the licensee failed to review for suitability of application of safety-related Agastat and GE relays that exceeded their service life, a condition nonconforming to their design basis, to justify their continued service considering in-service deterioration.

Because this violation was of very-low safety significance, and it was entered into the CAP as AR 01446684, where corrective actions to replace or evaluate relays were either already completed or scheduled for completion in a timely manner, this violation is being treated as an NCV, consistent with Section 2.3.2, of the NRC Enforcement Policy. (NCV 05000263/2015007-02, Failure to Review for Suitability of Application Safety-Related Relays Installed Beyond Their Service Life.)

RESPONSE

I. NSPM POSITON

After further review and evaluation of NCV 05000263/2015007-02, Northern States Power Company, a Minnesota corporation (NSPM), d/b/a as Xcel Energy, does not contest that a performance deficiency exists, but respectfully disagrees that the performance deficiency identified on September 2, 2015, was in violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

It is recognized by NSPM that not having a fully implemented Relay Monitoring Program when the issue arose during the 2012 PI&R was not consistent with 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," which requires activities affecting quality shall be prescribed by documented instructions, procedures, or drawings of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings. Instructions, procedures, or drawings shall include appropriate qualitative or quantitative

acceptance criteria for determining that important activities have been satisfactorily accomplished. As identified in the inspection report, this issue is being appropriately addressed, in a timely manner by the corrective action program.

II. BASIS FOR NSPM POSITION

10 CFR Part 50, Appendix B, Criterion III, "Design Control" was appropriately applied to the design, selection and installation of the safety related relays at Monticello. Once installed, continued review for quality is to be provided under station surveillance and preventive maintenance programs via implementing procedures and instructions.

NSPM agrees that equipment information, such as service life, contained in vendor correspondence or vendor manuals should be considered when establishing maintenance and replacement schedules. However, NSPM does not agree that vendor service life information contained within vendor technical manuals or correspondence constitutes design bases information as defined in 10 CFR Part 50.2 or current licensing basis, since this information is not used to create specifications or define technical requirements nor is it used to approve a final design. It is NSPM's position that the NRC has expanded the industry understanding of design bases to encompass vendor recommended service life in order to conclude a nonconforming condition exists when vendor recommended service life is exceeded. The NRC's basis for the finding does not acknowledge the established distinction between the design process which derives the functional requirements and the operational phase, which includes maintenance, that ensures functional requirements are met by establishing maintenance schedules in accordance with quality assurance programs. Technical information of this nature contained within vendor manuals or vendor correspondence is used to inform a design, but does not establish the design or operational acceptance criteria on its own merits.

The NRC finding is treating vendor recommended service life for safety related relays similarly to the treatment of qualified life of a safety related relay in a harsh environment. However, service life, in this application to relays, is an imprecise term used by vendors that may only convey some general understanding of reliability and may not be reflective of the specific conditions experienced at a given station. It does not establish nor define the design bases, licensing basis, or quality level. The current finding does not take into consideration the distinction. Further, the finding fails to explicitly identify where NSPM relies on service life for MNGP as a design input in the approved current licensing and design bases. Thus it fails to demonstrate the nonconforming condition as stated.

Existing regulatory requirements and NRC endorsed quality assurance program standards do not require licensees to adhere to vendor service life recommendations or formally evaluate deviations from those recommendations under the licensee's Appendix B quality assurance program. With that said, NSPM does agree that there has been a failure to establish or maintain appropriate maintenance schedules, and that this performance deficiency should be characterized as a violation of 10 CFR 50 Appendix B, Criterion V, "Instructions, Procedures, and Drawings."

As written, the finding effectively changes existing NRC rules by establishing an equipment qualification requirement for all safety related relays located in mild environments. This is a new position beyond that which is defined in 10 CFR 50.49, "Environmental qualification of electric equipment important to safety for nuclear power plants." The finding implies, without limitations, that there exists a uniform level of quality to vendor maintenance recommendations contained within vendor manuals or vendor correspondence. More pointedly, the finding requires vendor

recommended service life for equipment in mild environments as a specified design criterion in accordance with 10 CFR 50.2 and 10 CFR Part 50 Appendix B, Criterion III, "Design Control" to be translated into absolute thresholds for maintenance frequency and replacement. It presumes that service life information provided by vendors is certified to a specific plant and its application unless formally evaluated differently by the licensee.

Finally, it is our understanding that the Agency is developing a Regulatory Issue Summary (RIS) that will generically identify for the industry the regulatory basis and source of the staff position associated with service life. Development of the RIS was identified in the Agency's response to OIG Audit findings, dated September 21, 2015, ADAMS Accession ML15264A092. Because this RIS is under development and the position in the TIA could be altered or superseded by the RIS, it does not appear to be appropriate for a finding determination associated with the TIA 2014-01 to be made at this time.

III. CONCLUSION

In summary, the finding and associated NCV for safety related relays installed longer than the vendor recommended service life is inappropriately associated with 10 CFR 50, Appendix B, Criterion III, "Design Control," because vendor recommended service life is not part of the design basis for MNGP. NSPM believes that vendor recommendations are technical information that should, when appropriate, be integrated to inform the preventive maintenance procedures for the relays in question as is required by 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings."