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

February 27, 2023

Christopher P. Domingos
Site Vice President
Prairie Island Nuclear Generating Plant
Northern States Power Company, Minnesota
1717 Wakonade Drive East
Welch, MN 55089-9642

SUBJECT: PRAIRIE ISLAND NUCLEAR GENERATING PLANT - REQUEST FOR INFORMATION FOR NRC COMMERCIAL GRADE DEDICATION INSPECTION: INSPECTION REPORT 05000282/2023010 AND 05000306/2023010

Dear Christopher Domingos:

On June 12, 2023, the U.S. Nuclear Regulatory Commission (NRC) will begin a commercial grade dedication (CGD) inspection at Prairie Island. This inspection will be performed in accordance with NRC Inspection Procedure 71111.21N.03, "Commercial Grade Dedication."

The inspection will evaluate the implementation of Prairie Island's process for dedicating commercial-grade items, as required in applicable portions of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to ensure reasonable assurance is provided that these items will perform their intended safety function. Additionally, the inspection will evaluate implementation of Prairie Island's procurement process for safety-related components, as required in Appendix B.

The inspection may include an onsite information gathering visit by the lead inspector. The inspection will include 2 weeks onsite and will consist of 3 NRC inspectors (including the lead inspector). The current inspection schedule is as follows:

- Potential information gathering visit: March 27–31, 2023
- Preparation week: June 5–9, 2023
- Onsite weeks: June 12–16, 2023, and June 26–30, 2023

The purpose of the information gathering visit would be to meet with knowledgeable individuals of your staff to become familiar with the process for dedicating commercial-grade items, and the process for procuring safety-related components at Prairie Island. This visit would also allow the lead inspector to meet with procurement engineering and other site individuals responsible for the inspection to ensure a common understanding of expectations for the inspection. This visit may include a tour of onsite commercial-grade item dedication facilities, receipt inspection facilities, storage facilities, and installed plant components associated with potential inspection samples. During the visit (if performed), the lead inspector will also review the information provided in the initial information request and may request additional information needed to support the inspection.

Experience with previous baseline inspections of similar depth and length has shown that this type of inspection is extremely resource intensive, both for the NRC inspectors and the licensee staff. In order to minimize the inspection impact on the site and to ensure a productive inspection for both parties, we have enclosed a request for information needed for the inspection.

It is important that all of these documents are up-to-date and complete in order to minimize the number of additional documents requested during the preparation and/or the onsite portions of the inspection. Insofar as possible, this information should be provided electronically to the lead inspector. The information request has been divided into four groups:

- The first group lists information necessary for our initial inspection scoping activities. This information should be provided to the lead inspector no later than March 24, 2023. The lead inspector will communicate the initial selected set of samples no later than April 7, 2023.

- The second group of documents requested are those items needed to support our in-office preparation activities. This set of documents should be provided to the lead inspector no later than June 2, 2023. During the in-office preparation activities, the team may identify additional information needed to support the inspection.

- The third group includes the additional information above, a schedule of plant activities associated with the inspection during the onsite period, and any additional requests resulting from the potential information gathering visit. This information should be available to the team onsite on June 12, 2023.

- The fourth group includes supporting information to be provided throughout the onsite inspection. Specifically, corrective action documents and answers to questions developed during the inspection are requested to be provided as the documents are generated.

In addition, the enclosure includes information and requests addressing inspection logistics.

The lead inspector for this inspection is John V. Bozga. We understand that our licensing contact for this inspection is Carrie Seipp of your organization. If there are any questions about the inspection or the material requested in the enclosure, please contact the lead inspector at 630-829-9613.

This letter does not contain new or amended information collection requirements subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). Existing information collection requirements were approved by the Office of Management and Budget, Control Number 3150-0011. The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid Office of Management and Budget Control Number.

This letter and its enclosure will be made available for public inspection and copying at http://www.nrc.gov/reading-rm/adams.html and at the NRC Public Document Room in accordance with 10 CFR 2.390, “Public Inspections, Exemptions, Requests for Withholding.”

Sincerely,

Signed by Bozga, John
on 02/27/23

John V. Bozga, Senior Reactor Inspector
Engineering Reactor and Projects Branch
Division of Operating Reactor Safety

Docket Nos. 05000282 and 05000306
License Nos. DPR-42 and DPR-60

Enclosure:
Commercial Grade Dedication Inspection
Request for Information

cc: Distribution via LISTSERV®

Letter to Christopher P. Domingos from John V. Bozga dated February 27, 2023.

SUBJECT: PRAIRIE ISLAND NUCLEAR GENERATING PLANT - REQUEST FOR INFORMATION FOR NRC COMMERCIAL GRADE DEDICATION INSPECTION: INSPECTION REPORT 05000282/2023010 AND 05000306/2023010

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COMMERCIAL GRADE DEDICATION INSPECTION
REQUEST FOR INFORMATION

I. ADMINISTRATIVE INSPECTION INFORMATION

Inspection Report Number:	05000282/2023010 AND 05000306/2023010
Onsite Inspection Dates:	June 12–16, 2023, and June 26–30, 2023
Inspection Procedure:	IP 71111.21N.03, “Commercial Grade Dedication”
Lead Inspector:	John V. Bozga Senior Reactor Inspector, RIII/DORS/ERPB 630-829-9613
Teammates:	Matthew Domke, Reactor Inspector, RIII/DORS/ERPB Eucherius Rosario, Reactor Inspector, RIII/DORS/EB1

II. LOGISTICS

Email the following inspection logistics to the lead inspector by June 2, 2023, or sooner:

1. Inspection room name/number, directions from the main access facility, and phone number;
2. Interview room name/number;
3. Response team contact information (names and phone numbers), and team roles (e.g., management sponsor, lead, inspector counterpart);
4. Any site access/badging actions needed for each inspector;
5. Any dosimetry actions needed for each inspector;
6. Entrance meeting time and location;
7. Confirmation that the team will have access to a licensee computer with a nearby printer;
8. Confirmation that the team will have Wi-Fi access;
9. Cafeteria location and hours;
10. Inspection response team normal working hours;
11. Any potential resource conflicts during the inspection (e.g., emergency drills and all-staff meetings); and

12. Current management and engineering organizational chart.

III. INFORMATION REQUEST

Contact the lead inspector as soon as possible if you have any questions regarding this information request. Provide the information electronically in "PDF" files, Excel, or other searchable formats, preferably via an electronic sharing service (CERTREC, ShareFile, Box, etc.). Specific Excel formats for various enclosure items may be requested to assist in inspection sample selection. If you do not have access to any of these services or similar, we can provide you access to "Box," which can be used to upload/download and share documents. The files should contain descriptive names and be indexed and hyperlinked to facilitate ease of use. Information in "lists" should contain enough information to be easily understood by someone who has knowledge of light-water reactor technology.

1. Information Requested for Selection of Samples

The following information is requested by March 24, 2023, or sooner, to facilitate the initial sample selection.

Note: If you are unable to provide items 1.1. through 1.16. as requested, please reach out to the lead inspector as soon as possible.

1.1. Risk-Ranking of the top 500 components from your site-specific probabilistic safety analysis (PSA) sorted by Birnbaum Worth. Include values for Risk Achievement Worth, Risk-Reduction Worth, and Fussell-Veseley. Please provide the ranking in an excel spreadsheet that contains the importance measures and the description of the basic event (e.g., not just the basic event designator).

1.2. Risk-ranking of the top 500 components (i.e., Large Early Release Frequency (LERF)) from your site-specific PSA similar to the request in Item 1.1. (Provide in Excel format.)

1.3. Provide a list of the top 500 cut-sets from your PSA. Provide the descriptions of the basic events in the list of cut-sets. (Provide in Excel format.)

1.4. Provide a list of the top 100 cut-sets for each initiator modeled in the PSA that contributes more than 5 percent to the baseline plant core damage frequency. (Provide in Excel format.)

1.5. List of commercial-grade items, with a brief description of application, that have been dedicated for safety-related applications. These items may be dedicated by the site or dedicated by a vendor (or other licensee) and procured by the site. Please note whether the item has been installed in the plant. Please include the component equipment identification of the proposed or installed item location which can be correlated to the lists provided in Items 1.1 and 1.2. The list should encompass the past 6 years of dedication activities.

1.6. List of any commercial grade-items that failed after completing the dedication process. The list should encompass the past 6 years of dedication activities.

1.7. List of components procured as safety-related, with descriptions, if not included above. Please note whether the component has been installed in the plant. Please include the component equipment identification of the proposed or installed location which can be correlated to the lists provided in Items 1.1 and 1.2. The list should encompass the past 6 years of procurement activities.

1.8. List of corrective action program documents, with descriptions, related to commercial-grade items, procurement, or storage, including any items that failed after completing the dedication process. The list should encompass the past 6 years of these activities.

1.9. List components procured as safety-related or commercial-grade items intended to be dedicated for safety-related applications that are on hold because of concerns identified during receipt, dedication, or from operating experience/corrective action program as applicable. If possible, the list should identify the systems and equipment in which these items were intended for use.

1.10. List of components procured as safety-related or commercial-grade items dedicated for safety-related applications, in the past 6 years, where the procurement/dedication process was expedited to support rapid turnaround (less than 7 days). Please include the component equipment identification of the proposed or installed location which can be correlated to the lists provided in Item 1.1 and 1.2.

1.11. Procedures for dedicating commercial-grade items and for procurement of safety-related components. Also include procedures controlling counterfeit, fraudulent, and suspect items.

1.12. Electronic copies of Updated Final Safety Analysis Report, Technical Specifications, Technical Specifications Bases, and Technical Requirements Manual.

1.13. Electronic copies of simplified plant drawings (if available). Note: these may be uncontrolled documents such as big notes, training diagrams, etc.

1.14. List of systems, system numbers/designators, and corresponding names.

1.15. List of site contacts that will be associated with the inspection.

1.16. Copy of qualifications, as applicable, of personnel who performed commercial-grade dedication, safety-related component procurement, and/or receipt inspection/testing activities within the past 6 years.

2. Information Requested to Support Inspection Preparation Activities

The following information is requested by June 2, 2023, or sooner, to facilitate inspection preparation.

This document request is based on typical documents that a generic plant might have. As such, this document request is not meant to imply that any specific plant is required to have all of the listed documents. In addition, your plant-specific document titles may vary from the document titles listed below.

This information should be separated for each selected sample, especially if provided electronically (e.g., folder with sample name that includes specifications, inspection reports, dedication information, etc.).

2.1. Purchase requisitions and purchase orders;

2.2. Other pertinent vendor/licensee correspondence;

2.3. Original and updated design specifications;

2.4. Catalog specifications;

2.5. Procurement basis evaluation such as like-for-like, equivalency, plant design change packages, drawing and specification updates;

2.6. 10 CFR 50.59 documentation, if applicable;

2.7. Material receiving reports, packing lists/invoices, and other shipping documents;

2.8. Receipt inspection reports and any related test reports;

2.9. Other documents to trace the item from the time it was dedicated to the time it was installed, tested, and accepted;

2.10. Certificates of conformance/compliance/quality;

2.11. Vendor test and inspection reports;

2.12. Third-party or sub-vendor test and inspection reports;

2.13. Shelf-life information;

2.14. Vendor dedication/partial dedication information;

2.15. Design/material/process change history information;

2.16. Completed commercial-grade dedication documentation including:

2.16.1 Safety classification;

2.16.2 Identification of safety functions/application requirements;

2.16.3 Identification of critical characteristics;

2.16.4 Identification of verification methods and acceptance criteria for the critical characteristics;

2.16.5 Evaluation of credible failure modes, if applicable; and

2.16.6 Identification of the supplier's quality assurance program that meets 10 CFR Part 50, Appendix B.

2.17. Any deviation from design, material, and performance characteristics relevant to the safety function (nonconformance dispositions);

2.18. Documents showing objective evidence:

2.18.1 Special test and inspection procedures and results;

2.18.2 Commercial-grade survey reports-item, design, material, and specific performance characteristic (relevant to safety function); and

2.18.3 Source inspection reports.

2.19. Completed post-installation test procedure and results;

2.20. Completed stock or material issue forms and installation work orders or reports; and

2.21. Historical performance information, including corrective action documents, maintenance rule performance, failure analysis or root cause analysis for any failed components, and system health reports related to the installed components.

3. Additional Information to be Provided on June 12, 2023, Onsite

3.1. During the in-office preparation activities, the team will be making final selections and may identify additional information needed to support the inspection. The lead inspector will provide a list of the additional information needed during the week of March 27, 2023.

3.2. Schedule of any activities to be conducted on the selected samples during the 2 onsite inspection weeks (e.g., installation, testing, inspection, etc.).

3.3. Schedule of separate interviews with knowledgeable plant personnel for each of the components selected during the beginning of the first onsite week. Interviews will discuss the dedication/procurement process, selected critical characteristics of each sample, installation, and performance of installed items. This can include, but is not limited to, plant personnel from procurement engineering, other engineering disciplines, operations, maintenance, or any other departments that are cognizant of the dedication/procurement, installation, and acceptance criteria/methods of each component including component/system health.

4. Information Requested to be Provided Throughout the Inspection:

4.1. Any corrective action documents generated as a result of the team's questions during this inspection as the documents are generated.

4.2. List of questions and/or document requests submitted by the team and their status (e.g., open, closed) sorted by inspector. Provide daily by 2 p.m. to each inspector. It is recommended to provide the lead inspector with a master list sorted by inspector and each inspector with a list containing only the items originated by that inspector.

If you have questions regarding the information requested, please contact the lead inspector.