

March 10, 2005

Mr. Joseph Solymossy  
Site Vice-President  
Prairie Island Nuclear Generating Plant  
Nuclear Management Company, LLC  
1717 Wakonade Drive East  
Welch, MN 55089

SUBJECT: PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNITS 1 & 2  
INFORMATION REQUEST FOR NRC SAFETY SYSTEM DESIGN AND  
PERFORMANCE CAPABILITY INSPECTION 05000282/2005002(DRS);  
05000306/2005002(DRS)

Dear Mr. Solymossy:

On June 13, 2005, the NRC will begin the required biennial safety system design and performance capability inspection (SSDPC) at your Prairie Island Nuclear Generating Plant. This inspection will be performed in accordance with the NRC baseline inspection procedure 71111.21. The system selected for detailed review during this SSDPC baseline inspection is the auxiliary feedwater system.

Experience has shown that these baseline design inspections are extremely resource intensive for both the NRC inspectors and the utility staff. In order to minimize the impact that the inspection has on the plant and to ensure a productive inspection for both parties, we have enclosed requests for the documents needed to effectively plan and implement this inspection.

The documents requested for the SSDPC inspection have been divided into two groups. The first group is primarily comprised of lists of information necessary to ensure that the inspection team can be adequately prepared for the inspection prior to arrival at the plant. This information should be available in our Regional Office no later than May 10, 2005. The inspection team will begin to review this information during the week of May 16, 2005, and will request specific items from the supplied lists which should be available for review when the team arrives on-site. The second group of documents requested are those items which the team would need during the on-site inspection.

The lead inspector for this inspection is Mr. George M. Hausman. If there are questions about the material requested or the inspection, please call Mr. Hausman at (630) 829-9743.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's

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Sincerely,

**/RA/**

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

Docket Nos. 50-282; 50-306  
License Nos. DPR-42; DPR-60

Enclosure: Initial Document Request

cc w/encl: C. Anderson, Senior Vice President, Group Operations  
J. Cowan, Executive Vice President and Chief Nuclear Officer  
Regulatory Affairs Manager  
J. Rogoff, Vice President, Counsel & Secretary  
Nuclear Asset Manager  
Tribal Council, Prairie Island Indian Community  
Administrator, Goodhue County Courthouse  
Commissioner, Minnesota Department  
of Commerce  
Manager, Environmental Protection Division  
Office of the Attorney General of Minnesota

J. Solymossy

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Manager, Environmental Protection Division  
Office of the Attorney General of Minnesota

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**INFORMATION REQUEST**  
**NRC SAFETY SYSTEM DESIGN AND PERFORMANCE CAPABILITY (SSDPC) INSPECTION**  
**05000282/2005002(DRS); 05000306/2005002(DRS)**

***I. Information Requested for In-Office Preparation Week***

The following information is requested by May 10, 2005, to facilitate the selection of specific items that will be reviewed during the on-site inspection week. The team will select specific items from the information requested below and the lead inspector will identify the selected documents to your staff by the close of business, June 8, 2005. We request that the specific items selected from the lists be available and ready for review on the first day of inspection, June 13, 2005. If you have questions regarding this information, please call the lead inspector as soon as possible. Information may be sent by hard copy or electronically (CD desired) to [gmh1@nrc.gov](mailto:gmh1@nrc.gov).

- (1) Current plant management and engineering organizational charts.
- (2) Name and phone numbers of technical contacts and a regulatory contact.
- (3) Listing and identification of system designators and other acronyms used at the plant.
- (4) All applicable procedures associated with the plant's design and modification process.

The following requested items apply only to the selected system, which has been identified as the auxiliary feedwater system.

- (5) Identification of the design and system engineers for the selected system.
- (6) One copy of the system description, design basis document(s), related training manual(s), system health report(s), maintenance rule system notebooks, and PRA system notebooks.
- (7) One copy of the normal, abnormal and emergency operating procedures (EOPs).
- (8) Three half-size (18" x 24") copies of the piping and instrument drawings (P&IDs).
- (9) Three half-size (18" x 24") copies of the electrical schematics, single-line and key diagrams.
- (10) List of system calculations and calculation revisions. Specifically identify (by number) the latest calculation(s) that address each of the following areas. If a calculation cannot be identified for a particular area, please provide an explanation of why a calculation is not necessary.
  - Breaker and fuse coordination calculations;

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- Instrument uncertainty calculations;
  - Room temperature environmental qualification calculations for major equipment;
  - Relay setting calculations;
  - Set-point calculations for all technical specification or EOP equipment;
  - Time delay calculations (for any component incorporating time delay features);
  - Under-voltage and degraded voltage calculations;
  - Voltage drop calculations for all major electrical components (motors, MOVs);
  - Check valve leakage criteria calculations;
  - Design basis (flow rates, levels, pressures, temperatures) confirmation calculations (including NSSS calculations);
  - Heat exchanger calculations;
  - NPSH and total dynamic head calculations;
  - Operability determination support calculations;
  - Pressure transient and/or water hammer evaluations;
  - Pump minimum recirculation flow calculations;
  - Relief valve sizing calculations;
  - Tank over-pressurization calculations; and
  - Tank sizing calculations.
- (11) List of major modifications or set-point changes made to the selected system since pre-operational testing. Major changes are those that significantly affected the way the system operated, for example, replacement of major components, modification to electrical control logic, etc. Please include the number and title, the modification purpose (description), the date, the status (whether the calculation is active, canceled, superceded or under revision), the 10 CFR 50.59 evaluation or screening and a technical contact. Spell out abbreviations, or acronyms and give word titles for any numbers. Note if any of the modifications required prior NRC approval.
- (12) List of existing temporary modifications, if any.
- (13) List of the selected system electrical equipment/components that have been removed from the EQ Program, if any.
- (14) List of condition reports (corrective action documents) that are in one of the following categories. For each condition report, besides the number and descriptive title, clearly designate the status (open/closed), the importance ranking, the date initiated, the date closed (if applicable), the status of corrective actions, and a technical contact. (Note: It is not necessary to provide a separate list for each category.)

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- Any condition report initiated more than two years prior to the inspection that is still open;
  - Any condition report (open or closed) initiated in the last two years that required an apparent or root cause analysis; and
  - Any condition report (open or closed) initiated in the last two years that required an operability determination (include determination).
- (15) The corrective maintenance history of major components for the last two years. Include a list of overdue PMs, if any.
- (16) List of operability evaluations currently relied upon and those that were previously (past two years) relied upon for operability.
- (17) List of engineering-related operator work-arounds.

**II. Information Requested to be Available on First Day of Inspection (June 13, 2005)**

The following information should be available to the team when the team arrives on-site. Some documents, such as the Updated Final Safety Analysis Report (UFSAR) or the Technical Specification (TS), do not need to be solely available to the team (i.e., they can be located in a reference library or adjacent area) as long as the team has ready access to them. However, they should be located prior to the inspection team arriving on-site so they will be readily available, if requested.

- (1) Copies of the calculations indicated by subject area in item I.(10), excluding data files. Please review the calculations and also provide copies of referenced material (such as drawings, engineering requests, vendor letters).
- (2) Copies of all major design changes, modifications and set-point changes as indicated in item I.(11). For each modification, as a minimum, provide the purpose, the 10 CFR 50.59 evaluation or screening, and the completed post-modification test.
- (3) Copies of any open temporary modifications.
- (4) Copies of all condition reports (corrective action documents) indicated in item I.(14), including any associated root/apparent cause analyses and operability determinations.
- (5) An Index of the surveillances for all TS equipment completed during the last two years.
- (6) List of all maintenance, surveillance, and annunciator response procedures related to the systems. Include name as well as number. For the surveillance

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procedures, provide a cross-reference that shows how each TS requirement is being met.

- (7) One copy of each major equipment drawing (valves, pumps, tanks, strainers), including pump head curves (half-size, 18" x 24").
- (8) Copies of isometric drawings for major flow paths (half-size).
- (9) Copies of elementary diagrams (half-size).
- (10) Index of wiring diagrams (half-size).
- (11) Copies of I&C loop drawings (half-size).
- (12) Copies of P&IDs referred to on the system P&ID (half-size).
- (13) Copies of instrumentation and control logic drawings (half-size).
- (14) A copy of any self-assessments and associated corrective action documents generated in preparation for the inspection.
- (15) Reference materials (make available if needed):
  - Equipment qualification binders;
  - General set of plant drawings;
  - IPE/PRA report;
  - PRA system notebooks for selected systems;
  - Pre-operational tests, including documents showing resolution of deficiencies;
  - Procurement documents for major components in each system (verify retrievable);
  - Relevant operating experience information (such as vendor letters or utility experience);
  - Standards used in system design (such as IEEE, ASME, TEMA);
  - System procedures;
  - Technical Specifications;
  - Technical Data Book;
  - Updated Final Safety Analysis Report; and
  - Vendor manuals.
- (16) Copies of selected operability evaluations and plans for restoring operability, if applicable. Include the contact person for each item.

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- (17) Copies of work-around evaluations and plans for resolution. Include the contact person for each item.

***III. Information Requested to be provided throughout the inspection***

- (1) Copies of any corrective action documents generated as a result of the team's questions or queries during this inspection.
- (2) Copies of the list of questions and concerns submitted by the team members and the status/resolution of the information requested (provide daily during the inspection to the team leader).

NOTE: If you have questions regarding the requested information please contact Mr. George M. Hausman in the NRC Region III Office at (630) 829-9743.