UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JUN 1 5 2011

REPLY TO THE ATTENTION OF:

E-19J

Chief, Rulemaking, Directives, and Editing Branch
U.S. Nuclear Regulatory Commission
Mail Stop T6-D59
Washington, D.C. 20555-0001

Re: Final Plant-Specific Supplement 39 to the Generic Environmental Impact Statement (GEIS) for the License Renewal of Nuclear Plants Regarding Prairie Island Nuclear Generating Plant (PINGP), Units 1 and 2, Goodhue County, Minnesota, NUREG-1437, CEQ #20110154

Dear Sir or Madam:

The U.S. Environmental Protection Agency has reviewed the Final Supplemental Environmental Impact Statement (SEIS) for the above-mentioned project. Our comments are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementing Regulations (40 CFR 1500-1508) and Section 309 of the Clean Air Act.

The PINGP is located on the west bank of the Mississippi River within the city limits of Red Wing, Minnesota. The Prairie Island Indian Community (PIIC) is located immediately north of the plant. The PINGP site consists of approximately 578 acres of land, owned by Northern States Power (the applicant). The developed portion is 60 acres. There are 180 acres of landscaping and 338 wooded acres.

The PINGP is a 2-unit pressurized water reactor plant that utilizes a hybrid cooling system. The plant is licensed to operate at 1650 megawatts-thermal per unit or 575 megawatts-electrical gross of electrical output per unit. There are four draft cooling towers on the site. An Independent Spent Fuel Storage Installation (ISFSI) is located on the site. The ISFSI has 24 dry-storage containers of spent fuel.

The PIIC and the Nuclear Regulatory Commission (NRC) have established a Cooperating Agency relationship through a Memorandum of Understanding. The PIIC has contributed to the Final SEIS in the area of historic and archeological resources, socioeconomics, land use, and environmental justice as they related to license renewal for PINGP 1 and 2. The proposed action is to renew the license for an additional 20 years (the licenses of PINGP 1 and 2 expire on August 9, 2013 and October 29, 2014, respectively).

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The NRC developed a Generic EIS to streamline the license renewal process on the premise that environmental impacts of most nuclear power plant license renewals are similar. NRC develops facility-specific supplemental environmental impact statement documents as the facilities apply for license renewal. EPA provided comments on the Generic EIS during its development process in 1992 and 1996.

We provided comments on the facility-specific Draft SEIS for PINGP 1 and 2 on January 29, 2010 and rated it as EC-2 (Environmental Concerns-Insufficient Information) based on our concerns regarding adequacy and clarify of the radiological impacts and risk estimates, emergency access, environmental justice, cumulative impacts, postulated accidents, abnormal effluent releases, decommissioning, wetlands, floodplains, noise, clean diesel, green building/sustainable development, and some other general issues.

We received the Final SEIS on June 1, 2011. We appreciate that some of our comments were answered; however, we found some information still lacking. We continue to be concerned with adequacy and clarity of radiological impacts, emergency access, environmental justice, decommissioning, clean diesel, and clean building/sustainable development. Below is a brief summary of how comments were addressed and attached is a more detailed analysis. We recommend that NRC and the applicant commit to several mitigation measures and that items listed in the third and fourth bullet points be addressed in writing.

- The following points were clarified or updated and need no further discussion: several editorial or reference related comments (12aED, 12zED, 12aaED, 12abED, 12acED, and 12adED) and clarification that there would be no impacts to wetlands or floodplains from refurbishment (12qAR and 12rAR).
- We recommend commitment to mitigation in the license agreement for the following points: traffic impacts to PIIC (12iEJ), excavation procedures (12jCR), and noise monitoring and mitigation (12sNO).
- We recommend further information or analysis on the following points related to: human health (12bHH, 12cHH, 12dHH, 12eHH, 12fHH, and 12gHH), emergency access (12hEP, 12mEP, and 12oEP), cumulative impacts (12kCI and 12lCI), decommissioning (12pSD), and editorial changes (12wED, 12xED, and 12yED).
- The following were listed as being addressed in the Final SEIS, but were not specifically addressed: construction emissions (12tOS), sustainable/green building practices (12uOS), and use of native vegetation (12vTR).

Thank you for the opportunity to comment on this document. Once the license is granted, please send it to us. If you have any questions or wish to discuss any aspect of this document, please contact Michael Murphy (for radiation-related issues) at 312-353-6686 or Elizabeth Poole (for NEPA-related issues) at 312-353-2087.

Sincerely,

Kenneth A. Westlake, Chief
NEPA Implementation Section
Office of Enforcement and Compliance Assurance

Cc: Heather Westra, Prairie Island Indian Community
Elaine Keegan, U.S. Nuclear Regulatory Commission

Enclosure: Detailed Comments

USEPA's Detailed Comments on PINGP, Units 1 and 2
Final SEIS, NUREG-1437, CEQ #20110154
June 2011

12bHH, 12cHH, 12dHH, 12eHH, 12fHH, 12gHH and 12yED: EPA commented that for several human health issues additional information regarding ranges and limits for data would enhance the risk minimization discussion. EPA commented on the following points as areas where the document might benefit from additional information. NRC responded that these areas are defined as Category 1 issues and have been analyzed in the Generic EIS. EPA remains concerned with the generic assumptions used in this EIS instead of using data collected in the 40 years of operation of this facility. EPA is not suggesting that these issues present new or significant information that might differ from the analysis presented in the Generic EIS. EPA is suggesting that not including this information, such as limits, doses and ranges, implies that there are no impacts, rather than generic impacts common to most license renewals. Therefore, we retain the following comments regarding human health impacts.

- **12bHH**: Page 4-17; 4.8 Human Health; Table 4-11: All of the values referenced need to be provided to meet plain language and transparency in government.
- **12cHH**: Page 4-19; 4.8.1 Generic Human Health Issues: In additional to providing the exact values for tritium ranges, the actual relative risk added to the base risk from all background radiation could be provided to provide a better comparison for the general public to understand this issue.
- **12dHH**: Page 4-20; 4.8.1 Generic Human Health Issues: Lines 23-29: Providing these values is helpful for comparisons. However, the maximum dose to individuals to the exposure for each isotope as well as the combined dose would be more helpful for individuals to compare risks.
- **12eHH**: Pages 4-42 and 4-43; 4.9.7 Environmental Justice; Human Health Impacts; Lines 44-47 and 1-20: Providing these value ranges for the tritium values along with the drinking water standard for comparison is very helpful. Adding in the additional residual risk from these values would further help to show risk minimization.
- **12fHH**: Pages 4-46 and 4-47; 4.11 Cumulative Impacts; Lines 41-45 and 1-7: It would be more helpful to provide the risk number for a 40-year license versus a 60-year license for this site. With the accumulative data over the current life of the existing license, this could be provided for a better understanding of additional residual risk posed by this facility.
- **12gHH**: Pages 4-50 and 4-51; 4.11.3 Cumulative Human Health Impacts; Lines 28-47 and 1-19: Providing the specific radionuclides that are anticipated to be involved and their relative amounts would help in the additional risk comparison for these options.

- **12yED**: When regulatory dose limits are referenced, the actual dose limit language should also be provided as part of the plain language and transparency requirements for Federal Agencies.

12hEP: EPA commented that PIIC has only one exit and that exit is crossed by train tracks. Since these tracks are heavily used by freight and passenger trains, we are concerned with the accessibility of the only road leading off the island in the event of a catastrophic release. NRC determined that a review of the plant's emergency plan as part of the license renewal process is not needed. EPA, however, views this information as bearing on human health and safety. We feel it is prudent that both residents of Prairie Island and employees of PINGP be provided clear and safe access off the island in the event of a release. We recommend that the applicant discuss the location of a second possible route off the island with the PIIC.

12iEJ: EPA recommended that the applicant commit to the mitigation measures discussed on page 3-8 of the Draft SEIS. NRC responded that the Final SEIS had been updated in Section 3.2.3 to reflect this. We appreciate that the applicant is willing to work with PIIC to mitigate traffic impacts. We would like to further recommend: 1) change NRC response to reflect that the updated section was 3.2.7, not 3.2.3, and 2) include these mitigation measures as special conditions in the license agreement.

12jCR: EPA commented that the applicant has done a commendable job in "initiating corrective actions that include the training of employees and staff to ensure that excavation and trenching control procedures are being followed." EPA questioned what would be done in the future to ensure this continues to take place. NRC responded with details of procedures for ground-disturbing activities. EPA appreciates this, but recommends these be included in the license agreement.

12kCI and 12lCI: EPA commented that the power uprate and expansion of dry cask storage should be included in the cumulative impacts analysis. NRC responded that since the applicant had not submitted a request to amend their license to include these actions, the current SEIS cannot analyze these impacts. While EPA understands that NRC has not received any request for license amendments, it should be noted that the Minnesota Public Utilities Commission issued a permit on December 18, 2009 for both power uprate and dry cask storage expansion at PINGP.

EPA views the granting of a license by the Minnesota Public Utilities Commission as the fruition of the "reasonably foreseeable future". However, since NRC cannot adequately address the power uprate and the addition of dry cask storage for spent fuel in this document because they have not yet received a request for a license amendment, EPA requests that the forthcoming Environmental Assessment (EA), which will address the license amendment, is sent to us for review.

EPA acknowledges that Section 4.11 was updated to reflect additional information regarding the cumulative impacts of the power uprate and the addition of dry cask storage. We recommend that

Table 4-13 be updated to reflect this information. EPA would like more information regarding the timing of these projects; we are concerned that since both projects list similar anticipated impacts, if they are constructed concurrently, this pressure is exacerbated. We also recommend that mitigation measures be developed to offset the noted cumulative impacts as a result of these actions (i.e., increase in workforce, increase pressure on housing and public services, increase in traffic, and increase in tax payments).

12mEP: EPA requested clarification of the following statement: "The potentially cost-beneficial SAMAs [Severe Accident Mitigation Alternatives] do not relate to adequately managing the effects of aging during the period of extended operation; therefore, they need not be implemented as part of the license renewal pursuant to 10 CFR Part 54." NRC responded that this was part of the emergency response plan and because the emergency response plan is not part of the license renewal review process, no changes need to be made to the document. However, EPA was not requesting additional information regarding the SAMA, only that this statement be clarified. This is another example of the document failing to adhere to the government-wide practice of writing in plain-language (see comment number 12wED).

12nEP: EPA recommended a discussion of how increased frequency and severity of weather events due to climate change may affect the safety of the PINGP and impact the environment. NRC responded that since this is within the scope of the emergency response plan, it does not need to be addressed in the SEIS. EPA retains its recommendation. The PINGP is on an island in the Mississippi River, which is experiencing climatic events of increasing frequency and severity. Devastating floods were recorded in 1993, 1995, 1996, 1998, 2001, and 2008. It is unreasonable for NRC to remain silent on the issue of climate change when residents of the island and adjacent communities are depending on the applicant's preparedness for their own safety. Issues associated with climate change, such as flooding, bring along human health impacts that are not exclusive to emergency response planning. We recommend that NRC discuss how the applicant will prepare the facility for ever-increasing severe flooding events and for this information to be shared with the PIIC and local officials in neighboring municipalities and counties.

12oEP: EPA questioned how PIIC would be notified of accidents, given that they were not notified during an event that took place in 1979. EPA also questioned if such procedures were discussed in the GEIS. NRC responded that emergency response planning is not part of the analysis of license renewal. However, EPA views this information as pertinent for human health and safety and relevant to public disclosure.

EPA is not asking for any secure information regarding emergency planning. We are, however, interested in ensuring that residents of PIIC and other surrounding communities are afforded the right to know about accidental releases and the ability to properly safeguard their families. PIIC has provided evidence that the applicant has been negligent in notifying residents of events. This issue is exacerbated by the fact that even if and when an accidental leak occurs, residents of

Prairie Island and employees of PINGP are not guaranteed a clear and safe method of evacuation from the island (see comment 12hEP). We recommend NRC and the applicant coordinate and implement emergency response planning as it pertains to the PIIC with the PIIC government as soon as possible.

12pSD: EPA commented that *Chapter 7: Environmental Impacts of Decommissioning* would benefit from a brief summary of category 1 impacts from decommissioning including: radiation doses; the waste management strategy; air quality issues; water quality issues; ecological resources issues; the spent nuclear fuel stored on-site; and socioeconomic impacts. NRC responded that impacts resulting from decommissioning are considered category 1 issues and can be addressed in a generic fashion. EPA is not suggesting that there might be plant-specific issues associated with decommissioning, but rather the chapter would be clearer with a summary of the anticipated issues. Without such a summary, it appears that there are no anticipated impacts from decommissioning, when really there are impacts of a generic nature that are expected at all decommissioning sites.

12sNO: EPA commented that the Draft SEIS states, "...noise levels may sometimes exceed the 55 dBA level that the EPA uses as a threshold level to protect against excess noise during outdoor activities (EPA, 1974)." We questioned whether or not noise monitoring had been done at the site. NRC responded that they agreed with the comment and there had not been any noise monitoring done at the site. NRC also noted that the applicant was willing to work with PIIC to coordinate and implement noise mitigation as a result of the steam generator replacement project. However, the Final SEIS is not clear what these mitigation measures are and at what threshold they might be implemented. As with any other mitigation measure, we recommend they be included as conditions of the license.

12tOS, 12uOS and 12vTR: EPA provided the following recommendations. NRC listed these comments as being responded to in specific locations. However, there was no response to these recommendations. Therefore, we retain our recommendations regarding the following three items.

- Identify opportunities where the applicant can use clean diesel equipment and several mitigation strategies for reducing construction emissions (*OS – Out of Scope for License Renewal* on page A-284).
- Commit to sustainable building practices and questioned if the building would be constructed to Leadership in Energy and Environmental Design (LEED) standards (*OS – Out of Scope for License Renewal* on page A-284).
- Use native plants for revegetaion after refurbishment, instead of turf grass (*TR – Terrestrial Resources* on page A-287).

12wED: EPA commented that the Draft SEIS includes bureaucratic boilerplate language rather than adhering to government-wide requirements for documents to be written in plain language.

NRC responded that they attempted to write the technical sections of the documents in plain language. However, EPA cited two examples in our Draft SEIS comment letter; neither example was re-written. We can only assume that the document was not subjected to another round of revisions to make it more readable. We recommend that this document is revised to adhere to the plain-language requirements.

12xED: EPA commented that this document does not meet the requirements for data quality in OMB Circulars A-119 and A-130, PDD39 and PDD63, and the Clinger-Cohen Act of 1996, Information Quality Act of 2001, and the National Technology Transfer Act of 1995; referencing the Generic EIS does not fulfill the government-wide directives as best available quality data. NRC responded that their regulations allow for reference to the Generic EIS for Category 1 issues. However, given the availability of some 40 years of environmental data at the facility, the quality of the document would be augmented if the analysis included this data.