

**Environmental Impact Statement
Scoping Process**

Summary Report

**Prairie Island Nuclear Generating
Plant, Units 1 and 2
Red Wing, Minnesota**

May 2009



**U.S. Nuclear Regulatory Commission
Rockville, Maryland**

Introduction

On April 11, 2008, the Nuclear Regulatory Commission (NRC) received an application from Northern States Power Co. (NSP) [formerly Nuclear Management Company, LLC (NMC)] for renewal of the operating license of Prairie Island Nuclear Generating Plant, Units 1 and 2 (PINGP 1 and 2). PINGP 1 and 2 are located in Red Wing, Minnesota, which is in Goodhue County on the west bank of the Mississippi River. As part of the application, NSP submitted an environmental report (ER) prepared in accordance with the requirements of 10 CFR Part 51. 10 CFR Part 51 contains the NRC requirements for implementing the National Environmental Policy Act (NEPA) of 1969 and the implementing regulations promulgated by the Council on Environmental Quality (CEQ). Section 51.53 outlines requirements for preparation and submittal of environmental reports to the NRC.

Section 51.53(c)(3) was based upon the findings documented in NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Power Plants," (GEIS). The GEIS, which identified and evaluated the environmental impacts associated with license renewal, was first issued as a draft for public comment. The staff received input from Federal and State agencies, public organizations, and private citizens before developing the final document. As a result of the assessments in the GEIS, a number of impacts were determined to be small and to be generic to all nuclear power plants. These were designated as Category 1 impacts. An applicant for license renewal may adopt the conclusions contained in the GEIS for Category 1 impacts, absent new and significant information that may cause the conclusions to fall outside those of the GEIS. Category 2 impacts are those impacts that have been determined to be plant-specific and are required to be evaluated in the applicant's ER.

The Commission determined that the NRC does not have a role in energy planning decision-making for existing plants, which should be left to State regulators and utility officials. Therefore, an applicant for license renewal need not provide an analysis of the need for power, or the economic costs and economic benefits of the proposed action. Additionally, the Commission determined that the ER need not discuss any aspect of storage of spent fuel for the facility that is within the scope of the generic determination in 10 CFR 51.23(a) and in accordance with 10 CFR 51.23(b). This determination was based on the Nuclear Waste Policy Act of 1982 and the Commission's Waste Confidence Rule, 10 CFR 51.23.

On July 22, 2008, the NRC published a Notice of Intent in the *Federal Register* (73 FR 42628), to notify the public of the staff's intent to prepare a plant-specific supplement to the GEIS (SEIS) regarding the renewal application for the PINGP 1 and 2 operating license. The plant-specific supplement to the GEIS will be prepared in accordance with NEPA, CEQ guidelines, and 10 CFR Part 51. As outlined by NEPA, the NRC initiated the scoping process with the issuance of the *Federal Register* Notice. The NRC invited the applicant, federal, state, local, and tribal government agencies, local organizations, and individuals to participate in the scoping process by providing oral comments at scheduled public meetings, which were held at the Red Wing Public Library, in Red Wing, Minnesota on July 30, 2008, and/or submitting written suggestions and comments no later than September 22, 2008. The NRC issued press releases, placed ads in the local paper, and distributed flyers locally to advertise the public meetings. Approximately 75 people attended the meetings. Both sessions began with NRC staff members providing a brief overview of the license renewal process and the NEPA process. Following the NRC's prepared statements, the meetings were open for public comments. Several attendees submitted written comments, others provided oral comments, which were transcribed by a certified court reporter. The transcripts of the meetings were issued on September 3, 2008 for the afternoon session and September 5, 2008 for the evening session. The transcripts are

1 available for public inspection in the NRC Public Document Room (PDR), located at One White
2 Flint North, 11555 Rockville Pike, Rockville, Maryland, 20852, or from the NRC's Agencywide
3 Documents Access and Management System (ADAMS). The ADAMS Public Electronic Reading
4 Room is accessible at <http://www.nrc.gov/reading-rm/adams/web-based.html>. The transcripts
5 for the public meeting can be found in ADAMS at accession numbers ML082470336 and
6 ML082490514. Persons who do not have access to ADAMS, or who encounter problems in
7 accessing the documents located in ADAMS, should contact the NRC's Public Document Room
8 Reference staff by telephone at 1-800-397-4209, or 301-415- 4737, or by e-mail at
9 pdr.resource@nrc.gov.

10 The scoping process provides an opportunity for public participation to identify issues to be
11 addressed in the SEIS and highlight public concerns and issues. The *Federal Register* Notice of
12 Intent identified the following objectives of the scoping process:

- 13 • Define the proposed action
- 14 • Determine the scope of the SEIS and identify significant issues to be
15 analyzed in depth
- 16 • Identify and eliminate peripheral issues
- 17 • Identify any environmental assessments and other environmental impact
18 statements being prepared that are related to the SEIS
- 19 • Identify other environmental review and consultation requirements
- 20 • Indicate the schedule for preparation of the SEIS
- 21 • Identify any cooperating agencies
- 22 • Describe how the SEIS will be prepared.

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Scoping Comment Period Summary

During the scoping period, the NRC staff received six letters and three e-mails containing comments related to the environmental review for the proposed license renewal of PINGP 1 and 2. Additionally, thirteen people provided oral comments or comments in writing during the July 30, 2008, scoping meetings.

Individuals and/or groups and their affiliation (if applicable) that provided comments during the scoping period are identified in Table 1. A numerical commenter identification code (1-18) was assigned to each commenter for purposes of categorizing the comments.

Table 1. Individuals and/or Groups Providing Comments during Scoping Period.

Commenters appear in alphabetical order, and each commenter has been given a unique commenter identification number.

| Commenter | Affiliation (if stated) | Commenter ID Number |
|-------------------------|---|----------------------------|
| Arneson, Scott | Goodhue County Administrator | 1 |
| Betcher, Steve | Goodhue County Attorney | 2 |
| Crocker, George | Executive Director, North American Water Office | 3 |
| CURE | Communities United for Responsible Energy | 4 |
| Eide-Tollefson, Kristen | Resident, Florence Township MN | 5 |
| Foushee, Lea | Environmental Justice Director, North American Water Office | 6 |
| Himanga, Katie | Mayor, Lake City, Minnesota | 7 |
| Jackson, Mary | Senior Planner, Dakota County Office Of Planning and Analysis | 8 |
| Johnson, Ron | President, Prairie Island Tribal Council & Indian Community | 9 |
| Lemon, Gina | Leech Lake Band of Ojibwe | 10 |
| Lovejoy, Tom | Environmental Impact Coordinator, Wisconsin Department of Natural Resources | 11 |
| Marshman, Joan | Chair, Florence Township Board of Supervisors | 12 |
| Muller, Alan | Executive Director, Green Delaware | 13 |
| Overland, Carol | none provided | 14 |
| PIIC Tribal Council | Prairie Island Indian Community (PIIC) | 15 |
| Schultz, Michael | Red Wing City Council | 16 |
| Vukmir, Andrija | none provided | 17 |
| Wadley, Mike | PINGP Site Vice President, Nuclear Management Company (NMC) | 18 |

1 In order to evaluate the comments, the NRC staff gave each comment a unique identification
 2 code that categorizes the comment by technical issue and also allows each comment or set of
 3 comments to be traced back to the commenter and original source (transcript, letter, or e-mail)
 4 from which the comments were submitted.

5 Comments were placed into one of twenty-eight technical issue categories, which are based on
 6 the topics that will be contained within the staff's draft supplemental environmental impact
 7 statement (SEIS) for PINGP 1 and 2, as outlined by the GEIS. These technical issue categories
 8 and their abbreviation codes are presented in Table 2.

9 **Table 2. Technical Issue Categories.** *Comments were divided into one of the 28*
 10 *categories below, each of which has a unique abbreviation code.*

| Abbreviation Code | Technical Issue | Abbreviation Code | Technical Issue |
|-------------------|-------------------------------------|-------------------|--|
| AM ^(a) | Aging Management | NW ^(a) | Non-radiological Waste |
| AS | Alternative Energy Sources | ON ^(a) | Opposition to Nuclear Power |
| AR | Aquatic Resources | OR ^(a) | Opposition to License Renewal |
| CI | Cumulative Impacts | OS | Outside of Scope ^(c) |
| CR | Cultural Resources | PA | Postulated Accidents |
| EJ | Environmental Justice | RW | Radioactive Waste |
| ER | Environmental Report ^(b) | SD | Shutdown and Decommissioning |
| GW | Groundwater | SE | Socioeconomics |
| HH | Human Health | SN | Support of Nuclear Power |
| HP | NRC Hearing Process | SR | Support for License Renewal |
| LR | License Renewal and its Process | SW | Surface Water |
| LU ^(a) | Land Use | TE | Threatened and Endangered Species and Essential Fish Habitat |
| NO ^(a) | Noise | TR | Terrestrial Resources |
| NS | Nuclear Safety | UR | Uranium Fuel Cycle |

^(a) No comments specific to the categories of aging management, land use, noise, non-radiological waste, opposition to nuclear power, or opposition to license renewal were submitted during the PINGP 1 and 2 scoping period.

^(b) Comments contained in this category pertain to general quality or content of the applicant's Environmental Report

^(c) Outside of Scope are those comments that pertain to issues that are not evaluated during the environmental review of license renewal and include, but are not limited to, issues such as need for power; emergency preparedness; security; terrorism; and spent nuclear fuel storage and disposal.

1 **Presentation of Comments and Responses**

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3 Comments Received During the Scoping Period

4 This document contains a copy of each commenters' submission(s) during the scoping period.
5 For those that provided oral comments at the scoping meetings, comments are taken from the
6 meeting transcripts. Each comment is bracketed and labeled with a unique comment
7 identification number. Note that only those transcript pages on which each individual's
8 comments are contained are included in this document; however, the complete meeting
9 transcripts can be accessed online or in-person from ADAMS at accession numbers
10 ML082470336 and ML082490514. Please refer to the description of ADAMS above for an
11 explanation of how to access these documents.

12 Responses to Comments Received During the Scoping Period

13 The NRC staff's responses to each comment received during the scoping period are organized
14 by technical issue. Each response is prefaced by a summary of the issue to which the
15 comment(s) pertain and a list of the unique identification codes of the comments to which the
16 response applies. Similar comments within a technical issue area may be considered together
17 in the provided response. Some comments applied to more than one technical issue category
18 (indicated by a "/" in the comment identification code), and are, therefore, addressed in more
19 than one section of the staff's responses. For example, the 3-c-ER/HH pertains to both the
20 Environmental Report and Human Health and is, thus, addressed under both Environmental
21 Report and Human Health in the staff's responses.

22 Table 3 provides a complete list of comments received during the scoping period, along with the
23 commenter, comment source (transcript, letter, or e-mail), page number(s) on which the
24 comment and correlating response(s) appears in this document, and ADAMS accession number
25 for the original source of the comment.

26 The preparation of the SEIS will take into account all the relevant issues raised during the
27 scoping process. The SEIS will address both Category 1 and 2 issues, along with any new
28 information identified as a result of scoping. The SEIS will rely on conclusions supported by
29 information in the GEIS for Category 1 issues, and will include the analysis of Category 2 issues
30 and any new and significant information. The draft SEIS will be made available for public
31 comment. The comment period will offer the next opportunity for the applicant, interested
32 Federal, State, local, and tribal government agencies, local organizations, and members of the
33 public to provide input to the NRC's environmental review process. The comments received on
34 the draft SEIS will be considered in the preparation of the final SEIS. The final SEIS, along with
35 the staff's Safety Evaluation Report (SER), will be considered by the NRC in reaching a decision
36 on the PINGP 1 and 2 license renewal application.

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Table 3. Comments Received during Scoping Period. *Comments are listed alphabetically by commenter, and each comment has a unique comment identification code.*

| Comment ID | Commenter | Comment Source | Comment Page No(s). | Response Page No(s). | ADAMS Accession Number |
|------------|--------------------|---------------------------|---------------------|----------------------|------------------------|
| 1-a-SR | Arneson, S. | transcript ^(a) | 13 | 163 | ML082470336 |
| 2-a-SR | Betcher, S. | transcript | 15-16 | 163 | ML082470336 |
| 3-a-LR | Crocker, G. | transcript | 18 | 157 | ML082490514 |
| 3-b-HH | Crocker, G. | transcript | 19-20 | 154 | ML082490514 |
| 3-c-ER/HH | Crocker, G. | transcript | 20-22 | 153, 154, 156 | ML082490514 |
| 4-a-AS | CURE | letter | 25 | 148, 149 | ML083220369 |
| 4-b-AR/SW | CURE | letter | 26-27 | 149, 163 | ML083220365 |
| 4-c-SE | CURE | letter | 27 | 163 | ML083220365 |
| 4-d-AR/HH | CURE | letter | 27 | 150, 154 | ML083220365 |
| 4-e-HH | CURE | letter | 27 | 154, 156 | ML083220365 |
| 4-f-SW | CURE | letter | 27-28 | 163 | ML083220365 |
| 5-a-ER | Eide-Tollefson, K. | letter | 31 | 153 | ML083220377 |
| 5-b-GW/SW | Eide-Tollefson, K. | letter | 31 | 153, 164 | ML083220377 |
| 5-c-LR | Eide-Tollefson, K. | letter | 31-32 | 158 | ML083220377 |
| 5-d-SE | Eide-Tollefson, K. | letter | 32 | 163 | ML083220377 |
| 5-e-AR | Eide-Tollefson, K. | letter | 32 | 150 | ML083220377 |
| 5-f-EJ/RW | Eide-Tollefson, K. | letter | 32 | 152, 161 | ML083220377 |
| 5-g-CI/LR | Eide-Tollefson, K. | letter | 33 | 151, 157 | ML083220377 |
| 5-h-CI | Eide-Tollefson, K. | letter | 33-34 | 151 | ML083220377 |
| 5-i-OS | Eide-Tollefson, K. | letter | 34 | 159 | ML083220377 |
| 5-j-RW | Eide-Tollefson, K. | letter | 34-35 | 161 | ML083220377 |
| 5-k-OS/RW | Eide-Tollefson, K. | letter | 35 | 159, 161 | ML083220377 |
| 5-l-OS | Eide-Tollefson, K. | letter | 35 | 159 | ML083220377 |
| 5-m-CI/RW | Eide-Tollefson, K. | letter | 35 | 151, 161 | ML083220377 |
| 5-n-RW | Eide-Tollefson, K. | letter | 35 | 161 | ML083220377 |
| 5-o-CI/RW | Eide-Tollefson, K. | letter | 35 | 151, 161 | ML083220377 |
| 5-p-RW | Eide-Tollefson, K. | letter | 36 | 161 | ML083220377 |
| 5-q-CI/LR | Eide-Tollefson, K. | letter | 36 | 151, 158 | ML083220377 |
| 5-r-CI/LR | Eide-Tollefson, K. | letter | 36-38 | 151, 152, 158 | ML083220377 |

| Comment ID | Commenter | Comment Source | Comment Page No(s). | Response Page No(s). | ADAMS Accession Number |
|-------------------|--------------------|-----------------------|----------------------------|-----------------------------|-------------------------------|
| 5-s-AS | Eide-Tollefson, K. | letter | 38 | 148 | ML083220377 |
| 5-t-AS | Eide-Tollefson, K. | letter | 38 | 148 | ML083220377 |
| 5-u-LR/OS | Eide-Tollefson, K. | letter | 38-39 | 158 | ML083220377 |
| 5-v-LR | Eide-Tollefson, K. | letter | 39 | 158 | ML083220377 |
| 5-w-CI | Eide-Tollefson, K. | letter | 39-42 | 151 | ML083220377 |
| 5-x-CI | Eide-Tollefson, K. | transcript | 44 | 151 | ML082490514 |
| 5-y-OS/RW | Eide-Tollefson, K. | transcript | 44-45 | 159, 161 | ML082490514 |
| 5-z-NS | Eide-Tollefson, K. | transcript | 45 | 159 | ML082490514 |
| 5-aa-RW | Eide-Tollefson, K. | transcript | 45-47 | 161 | ML082490514 |
| 6-a-HH | Foushee, L. | e-mail | 49 | 154 | ML083220386 |
| 6-b-EJ/UR | Foushee, L. | e-mail | 49 | 152, 165 | ML083220386 |
| 6-c-HH | Foushee, L. | e-mail | 49-50 | 154 | ML083220386 |
| 6-d-HH | Foushee, L. | e-mail | 51-52 | 154 | ML083220372 |
| 6-e-HH | Foushee, L. | e-mail | 52 | 154 | ML083220372 |
| 6-f-EJ/RW/UR | Foushee, L. | e-mail | 52-53 | 152, 161, 165 | ML083220372 |
| 6-g-LR | Foushee, L. | transcript | 55-56 | 157 | ML082490514 |
| 6-h-HH/LR | Foushee, L. | transcript | 57-61 | 154, 158 | ML082490514 |
| 6-i-ER/HH | Foushee, L. | transcript | 62-63 | 153, 154 | ML082490514 |
| 7-a-AR/RW/SW | Himanga, K. | letter | 65 | 149, 161, 163 | ML082660657 |
| 7-b-AR/CR/SW | Himanga, K. | letter | 65-66 | 149, 151, 163 | ML082660657 |
| 7-c-RW | Himanga, K. | transcript | 68-69 | 161 | ML082470336 |
| 7-d-AR/CR/SW | Himanga, K. | transcript | 69 | 149, 151, 163 | ML082470336 |
| 8-a-AR/PA/SW | Jackson, M. | e-mail | 71-72 | 150, 160, 164 | ML083220385 |
| 9-a-LR | Johnson, R. | transcript | 74-75 | 157 | ML082470336 |
| 10-a-CR | Lemon, G. | letter | 77 | 151 | ML082660601 |
| 11-a-AR | Lovejoy, T. | letter | 79 | 149 | ML083080277 |
| 11-b-NS | Lovejoy, T. | letter | 79 | 159 | ML083080277 |
| 11-c-AR/SW | Lovejoy, T. | letter | 79 | 149, 163 | ML083080277 |
| 11-d-EJ/SW | Lovejoy, T. | letter | 80 | 152, 163 | ML083080277 |
| 11-e-AR | Lovejoy, T. | letter | 80 | 149 | ML083080277 |
| 11-f-CI | Lovejoy, T. | letter | 80 | 151 | ML083080277 |
| 12-a-RW | Marshman, J. | transcript | 82-83 | 161 | ML082490514 |

| Comment ID | Commenter | Comment Source | Comment Page No(s). | Response Page No(s). | ADAMS Accession Number |
|-------------------|---------------------|-----------------------|----------------------------|-----------------------------|-------------------------------|
| 13-a-HH | Muller, A. | transcript | 85 | 154 | ML082490514 |
| 13-b-LR | Muller, A. | transcript | 86-87 | 158 | ML082490514 |
| 13-c-ER/LR | Muller, A. | transcript | 88-89 | 153, 158 | ML082490514 |
| 13-d-LR | Muller, A. | transcript | 89-90 | 158 | ML082490514 |
| 13-e-SD | Muller, A. | transcript | 90 | 162 | ML082490514 |
| 13-f-OS | Muller, A. | transcript | 90-92 | 159 | ML082490514 |
| 13-g-UR | Muller, A. | transcript | 93 | 165 | ML082490514 |
| 13-h-RW | Muller, A. | transcript | 93-94 | 161 | ML082490514 |
| 13-i-AS | Muller, A. | transcript | 94-95 | 148 | ML082490514 |
| 13-j-HH | Muller, A. | transcript | 95 | 154 | ML082490514 |
| 14-a-LR | Overland, C. | transcript | 97-98 | 158 | ML082490514 |
| 14-b-AS | Overland, C. | transcript | 98-99 | 148 | ML082490514 |
| 14-c-LR | Overland, C. | transcript | 99 | 157 | ML082490514 |
| 15-a-ER | PIIC Tribal Council | letter | 103-104 | 153 | ML083200029 |
| 15-b-LR | PIIC Tribal Council | letter | 104-105 | 157 | ML083200029 |
| 15-c-LR | PIIC Tribal Council | letter | 105 | 157 | ML083200029 |
| 15-d-HH/EJ | PIIC Tribal Council | letter | 105 | 152, 154, 156 | ML083200029 |
| 15-e-GW | PIIC Tribal Council | letter | 105-108 | 153 | ML083200029 |
| 15-f-HH/EJ | PIIC Tribal Council | letter | 108 | 152, 154 | ML083200029 |
| 15-g-ER | PIIC Tribal Council | letter | 108 | 153 | ML083200029 |
| 15-h-HH | PIIC Tribal Council | letter | 108-110 | 154, 156 | ML083200029 |
| 15-i-RW | PIIC Tribal Council | letter | 110-112 | 161 | ML083200029 |
| 15-j-RW | PIIC Tribal Council | letter | 112 | 161 | ML083200029 |
| 15-k-AS | PIIC Tribal Council | letter | 112 | 148 | ML083200029 |
| 15-l-TR | PIIC Tribal Council | letter | 112-114 | 164 | ML083200029 |
| 15-m-CR | PIIC Tribal Council | letter | 114-117 | 151 | ML083200029 |
| 15-n-TE | PIIC Tribal Council | letter | 117-119 | 165 | ML083200029 |
| 15-o-SE | PIIC Tribal Council | letter | 119-120 | 163 | ML083200029 |
| 15-p-OS | PIIC Tribal Council | letter | 120 | 159 | ML083200029 |
| 15-q-SE | PIIC Tribal Council | letter | 120 | 163 | ML083200029 |
| 15-r-EJ | PIIC Tribal Council | letter | 120-121 | 152 | ML083200029 |
| 15-s-EJ | PIIC Tribal Council | letter | 121 | 152 | ML083200029 |
| 15-t-HH | PIIC Tribal Council | letter | 121 | 157 | ML083200029 |

| Comment ID | Commenter | Comment Source | Comment Page No(s). | Response Page No(s). | ADAMS Accession Number |
|-------------------|---------------------|-----------------------|----------------------------|-----------------------------|-------------------------------|
| 15-u-PA | PIIC Tribal Council | letter | 122 | 160 | ML083200029 |
| 15-v-CI/OS/RW | PIIC Tribal Council | letter | 123 | 151, 159, 161 | ML083200029 |
| 15-w-OS/RW | PIIC Tribal Council | letter | 123 | 159, 161 | ML083200029 |
| 15-x-ER | PIIC Tribal Council | letter | 123 | 153 | ML083200029 |
| 15-y-ER/LR | PIIC Tribal Council | letter | 123-124 | 153, 158 | ML083200029 |
| 15-z-CI/ER | PIIC Tribal Council | letter | 125 | 151, 153 | ML083200029 |
| 15-aa-EJ | PIIC Tribal Council | letter | 125 | 152 | ML083200029 |
| 15-bb-EJ | PIIC Tribal Council | letter | 125-126 | 152 | ML083200029 |
| 15-cc-AS | PIIC Tribal Council | letter | 126 | 148 | ML083200029 |
| 15-dd-SW | PIIC Tribal Council | letter | 126 | 164 | ML083200029 |
| 15-ee-OS/SW | PIIC Tribal Council | letter | 126 | 159, 164 | ML083200029 |
| 15-ff-OS | PIIC Tribal Council | letter | 127 | 159 | ML083200029 |
| 15-gg-HH | PIIC Tribal Council | letter | 127 | 155 | ML083200029 |
| 15-hh-OS | PIIC Tribal Council | letter | 127 | 160 | ML083200029 |
| 16-a-SR | Schultz, M. | transcript | 132-134 | 163 | ML082470336 |
| 17-a-SN | Vukmir, A. | transcript | 136 | 163 | ML082470336 |
| 17-b-SR | Vukmir, A. | transcript | 136 | 163 | ML082470336 |
| 17-c-SN | Vukmir, A. | transcript | 136-137 | 163 | ML082470336 |
| 17-d-RW | Vukmir, A. | transcript | 138 | 161 | ML082470336 |
| 17-e-SR | Vukmir, A. | transcript | 138 | 163 | ML082470336 |
| 18-a-SR | Wadley, M. | transcript | 140-142 | 163 | ML082470336 |
| 18-b-NS | Wadley, M. | transcript | 142-144 | 159 | ML082470336 |
| 18-c-NS | Wadley, M. | transcript | 145 | 159 | ML082470336 |
| 18-d-SR | Wadley, M. | transcript | 145-146 | 163 | ML082470336 |
| 18-e-SR | Wadley, M. | transcript | 146 | 163 | ML082470336 |
| 18-f-SR | Wadley, M. | transcript | 146-147 | 163 | ML082470336 |

^(a) Comments were received orally during one of two scoping meetings held on July 30, 2009, and transcribed by a certified court reporter.

The following pages contain the original comment letters, e-mail messages, and public meeting transcripts pertaining to the PINGP 1 and 2 scoping summary report. Each comment is labeled and identified by a unique comment identification code.

The following pages contain the comments
made by Scott Arneson during the
NRC public scoping meetings held on July 30, 2008

1 Administrator. With me is Steve Betcher, Goodhue
2 County Attorney.

3 I just wanted to say a few things for the
4 record today, that Goodhue County is very pleased
5 with the economic impact that Xcel Energy has on the
6 City of Red Wing and Goodhue County and the entire
7 area. We've appreciated the relationship that we
8 have with Xcel.

9 Just in the past couple of years we've
10 worked through a rate stabilization agreement with
11 them, and we have a great relationship with them.

12 On August 11th they will be coming to the
13 County Board and having a committee of the whole on
14 the renewal application, after which point the County
15 Board will be considering a resolution supporting the
16 relicensure.

17 STEVE BETCHER: And as Goodhue County
18 Attorney, I'd just like to put on the record that
19 we've had a multi-faceted relationship with Xcel
20 Energy over the years; and from the time the nuclear
21 plants opened, that we work closely with them on
22 security issues, we work closely with them on
23 continuing economic support in the tax base of this
24 community, and we believe it's been a very successful

1-a-SR

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made by Steve Betcher during the
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24 community, and we believe it's been a very successful

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1 collaboration up to this point, and we believe that
2 the necessity of energy to our community has
3 certainly been recognized by the plants that we've
4 had here up to this time.

5 And I believe the County Board will be
6 considering the full impact of the relationship and
7 offering their opinions on the future and also their
8 opinions on any concerns that may be identified, and
9 we will be reporting back to them on the comments
10 that we're hearing here today as well.

11 Thank you.

12 MR. RAKOVAN: Thank you, gentlemen.

13 The last person that I have in terms of
14 filling out the yellow cards is Mike Wadley from Xcel
15 Energy.

16 MIKE WADLEY: Thank you.

17 Good afternoon. My name's Mike Wadley.
18 I'm the site vice president for the Prairie Island
19 Nuclear Generating Plant, and I'm here today to
20 provide Xcel Energy's support and perspective of our
21 request for renewal of the operating license for
22 Prairie Island Units 1 and 2.

23 The mission of everyone that works at
24 Prairie Island is clear: It's safe, clean, reliable,

2-a-SR (continued)

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The following pages contain the comments
made by George Crocker during the
NRC public scoping meetings held on July 30, 2008

1 GEORGE CROCKER: George Crocker,
2 Executive Director of the North American Water
3 Office.

4 I've had several people from Wisconsin
5 tell me that they didn't receive notice of this
6 meeting, and I'm wondering if -- if such notice did
7 go out to people on the other side of the river and,
8 if so, when? Or if there could -- if not, if there
9 could be efforts to include people on the Wisconsin
10 side.

} 3-a-LR

11 MS. FRANOVICH: I'll have to go back to
12 my project managers to know exactly who was contacted
13 with a formal letter, who was contacted perhaps with
14 some phone calls and get back to you, Mr. Crocker.
15 I'm not sure off the top of my head.

16 PREMA CHANDRATHIL: Hi. My name is Prema
17 Chandrathil. I'm a public affairs officer out in
18 Region III, which is located down by Chicago.

19 As soon as we received the press release,
20 we went ahead and -- we went ahead and distributed it
21 to the local media in this area. That does also
22 include folks in Wisconsin.

23 We also followed up with a couple phone
24 calls, and we did speak to a couple reporters to go

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1 So Andrew -- you'd better take a page
2 from young Andrew. He knows how to treat the public.

3 Thank you.

4 MR. RAKOVAN: Okay. Next, George
5 Crocker.

6 And again, after George we'll go to Alan
7 Muller.

8 GEORGE CROCKER: Thank you. My name is
9 George Crocker. I'm with the North American Water
10 Office, and I have a comment for the scope of your
11 environmental review relative to considering
12 analyzing, disclosing environmental impacts of
13 continued plant operation.

14 And the comment that I have relates to
15 the story you just heard about routine releases,
16 because I think that the NRC should require Prairie
17 Island and all of the other commercial reactors to
18 document where reported released radionuclides go.

19 Where do they go? I know that you do
20 monitoring. You do a lot of monitoring. If you
21 don't really know what you're looking at when you see
22 all of the little thermal luminescent dosimeter
23 mappings and where the pics are, why you say "Aha,
24 there's monitoring."

3-b-HH

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1 But, you see, that monitoring tells us
2 where the released radiation isn't. And we don't
3 care about that for the very simple reason that it's
4 not there.

5 We want to know where it is. We want to
6 know the isoplats. Like you look at a map of
7 geography and you can see the terrain, we want to see
8 the dispersion pattern for the routine releases.

9 And we know you can do it.

10 Remember the Russian spy who died of
11 plutonium 210 and they tracked him months later with
12 minute amounts of radionuclides that they tracked all
13 over Europe?

14 Remember how the United States busted
15 North Korea a week later from 50,000 feet because of
16 minute quantities of radioactive material?

17 We know how to track radiation, in
18 exquisite detail. But, you see, we're not applying
19 that ability to the routine releases.

20 So my comment is that any environmental
21 report that does not include the primary routine
22 environmental impactor is bogus.

23 And you may fool most of the people all
24 of the time about it, but there are some of us that

3-b-HH (continued)

3-c-ER/HH

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1 you're not fooling, and sooner or later we're going
2 to get some traction on it.

3 We did pass a bill through the Minnesota
4 House not last year but the year before. We lost it
5 in conference. But it would require Minnesota
6 authority to track the radiation, where does it go,
7 so we can specify the isoplat, the dispersion
8 pattern.

9 Now, I'm not challenging the NRC's or the
10 federal government's preemption right to say whether
11 or not it's safe. That's not the point. You have
12 the authority to determine what's inspect and what's
13 not.

14 But the public has the right to know
15 where it goes. And the reason that's important is
16 because the National Academies of Science in its BEIR
17 VII report -- that stands for the Biological Effects
18 of Ionizing Radiation, which came out in June of 2005
19 -- states clearly and unequivocally that there is no
20 safe dose of radiation, that every exposure to
21 radionuclide increases the risk of deleterious
22 effect.

23 And because of that the public has a
24 right to know where the hot spots are, where the

3-c-ER/HH (continued)

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1 concentration points may be, what is the dispersion
2 pattern, are they living within that pattern.

3 And so, please, let's get serious. If
4 this is going to be a technology that's going to be
5 with us for a while -- I have no illusions that until
6 something heads south real fast, which could happen
7 anytime, that we're going to continue living with
8 this threat, but let's at least inform ourselves
9 about what it is. You do not have the right to
10 conceal from the public where the routine reported
11 emissions go. Thank you very much.

12 MR. RAKOVAN: Thank you, sir.

13 Next we'll go to Alan Muller and then to
14 Carol Overland.

15 ALAN MULLER: I brought these
16 (indicating) up because these are the paper copies of
17 the license renewal, at least that which has been
18 released to the public. It's not particularly light
19 reading, but I have had a chance to review some of
20 it, and it seems to me that what is in here raises a
21 great many more questions than are answered.

22 And in fact it answers a lot of rather --
23 if you look in the index, you can see many references
24 to electrical connections and other design and

3-c-ER/HH (continued)

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The following pages contain the written comments
submitted by the Communities for
Responsible Energy during the scoping period
for the Prairie Island Nuclear Generating Plant
license renewal

CURE
Communities United for Responsible Energy
PO Box 8
Frontenac, MN 55026

September 22, 2008

**Comments in Response to XCEL Energy's Application for Certificates of
Need for Additional Dry Cask Storage and Extended Power Uprate at the
Prairie Island Nuclear Generating Plant**

Appendix D: Alternative Technologies Screening

Preamble:

Communities United for Responsible Energy (CURE) is an association of citizens, established in 1996 in response to the selection of Florence Township, Goodhue County, MN as the location for an off-site Nuclear Spent Fuel Storage Facility. CURE members have studied the issues surrounding the operation of nuclear power plants for more than a decade.

The recent recognition that the world faces serious climate change and environmental disruptions chiefly due to the rapid infusion of fossil carbon into the earth's atmosphere by human activities coupled with the need to replace an aged generation and distribution infrastructure poses a serious problem for planners, regulators and the electric generation industry. The decisions and choices made by a relatively few people in Minnesota within the next few years will have enormous impact on coming generations and the environment they will inhabit. Reduction of energy demand driven by a significant conservation ethic and dramatically increased product and system efficiencies are the essential component for reducing the impact of energy generation on the environment. Choosing the best "bridge" technologies to carry us through to the ultimate, truly clean renewable energy sources will be critical. The long lead times to build and high capital costs associated with nuclear power and "clean coal/carbon sequestration" technologies suggest that decisions to commit to such system may be overwhelmed by "carbon tax" regulations or simply non-availability of sufficient investment capital to complete a project. A better approach may be to combine shorter lead time existing renewable technologies with short lead time, high efficiency, natural gas fired equipment. This more nimble approach should allow a faster, more cost effective transition to verging energy generation and storage technologies avoiding the pitfalls of "obsolete before completion" stranded costs.

4-a-AS

Proposal for Alternative Technology : Composite Resource Technology

Southern and Southeastern Minnesota and the eastern bank of the Mississippi River have wind resources equal or better than most sites that have been developed in Northern Europe. The geography is very well suited to “cluster” installations of 3 to 10 utility scale wind turbines. These turbine “ clusters” will soon have access to the transmission and distribution grid presently being upgraded in the area. The wind turbines are a logical match with contemporary combined cycle and/or combined heat/power turbines fueled with natural gas (from Canada and the mid-West US). Other niche technologies (solar, biofuel, methane digester, etc.) may be combined or integrated to the transitioning generation mix. Pumped hydro might be explored to augment peak –demand capacity.

4-a-AS (continued)

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September 22, 2008

**Comments in Response to XCEL Energy's Application for Certificates of
Need for Additional Dry Cask Storage and Extended Power Uprate at the
Prairie Island Nuclear Generating Plant**

Preamble:

Communities United for Responsible Energy (CURE) is an association of citizens, established in 1996 in response to the selection of Florence Township, Goodhue County, MN as the location for an off-site Nuclear Spent Fuel Storage Facility.

CURE members have studied the issues surrounding the operation of nuclear power plants and the storage and transport of radioactive materials for more than a decade. During the earlier debates about nuclear plant operation and storage, industry and state officials continuously assured us that the risk of harm to the environment, animals and people from resulting from operation of the nuclear generating plant and the spent fuel storage facility was minimal and should not be a concern to us. We continue to maintain a healthy suspicion of that assurance.

We have observed that many modern industrial nations, particularly Scandinavia and the 23-country European Union, have established regulations that require government entities and corporations to demonstrate that their actions and products will not harm the environment or the public, now or in the future. We American citizens, on the other hand, are burdened with the requirement to prove that a government or corporate action is harmful to the environment, ourselves or our progeny.

I. Impact on Regional Waters.

Citizens and communities located downstream from Prairie Island have observed the changes that have occurred on the River and Lake Pepin since the PI Plant began operation in the 1970's. They are expressing concern about increased adverse seasonal impact to the character of the river valley and it's ecology.

During a recent public meeting, representatives of XCEL and the State of Minnesota indicated that the proposed 15% uprate of the Prairie Island

} 4-b-AR/SW

plant would require a significant increase in the volume of Mississippi River water used to cool plant systems. They also indicated that the temperature of the water returned to River would be increased by approximately 3°F. There is concern about the impact of seasonal thermal plumes on the nearby and down stream aquatic environment and on the expanse, quality and duration of the ice cover on Lake Pepin. The long tradition of commercial and recreational activities (fishing, snowmobiling and ice boating) on River and Lake ice will surely be threatened by a further increase in water temperature.

} 4-b-AR/SW (continued)
} 4-c-SE

Concern was also voiced about the potential increased intentional or unplanned releases of radioactive water or chemicals into the River and the risk of subtle/ long-term impacts on the aquatic biome.

} 4-d-AR/HH

II. Impact on Regional Atmosphere

Documented and un-documented releases of radioactive gases from Prairie Island facilities continues to be a serious concern for people living in the ellipse southeast of Prairie Island and lying downstream along the Hiawatha Valley. The absence of monitoring for radiation plus lack of a public health base line survey fuel anecdotal rumors of cancer clusters and worry citizens in this zone.

} 4-e-HH

III. Proposal for Monitoring

The recently opened 35W river crossing bridge in Minneapolis establishes a new precedent for collaborative inspection and continuous independent monitoring of a facility that poses a demonstrated potential risk to the public.

CURE proposes that a similar monitoring program be established to continuously monitor the discharges from the Prairie Island Plant to surrounding environment.

We propose that the National Center for Earth-surface Dynamics (NCED - a research facility established by the National Science Foundation (NSF) and based at the University of Minnesota's St. Anthony Falls Laboratory) be engaged to design an appropriate program and instrumentation system to monitor the PI plant's releases to the environment.

} 4-f-SW

Investigations should include but not be limited to the following:

- Thermal energy added to the river.
- Mapping of thermal plumes and their cycles
- Seasonal anomalies
- Observations of changes to the aquatic biome

- Continuous monitoring to detect intentional and unplanned airborne release events of radioactive gasses and particles; mapping of distribution, concentration and duration of release of contaminants.
- Monitoring of area Karst formations that are at risk for potential radioactive contamination of ground water.
- Monitoring of run-off water from the plant and spent fuel storage sites.

It is proposed that the monitoring program be a collaborative effort guided by NCED working in cooperation with and supported by XCEL Energy, MN DNR, MN PCA, area governments, businesses and citizen groups. The data and analysis of the monitoring systems should be accessible to a broad spectrum of government, academic, public health and public interest organizations.

Monitoring equipment should be cost effective and data collection and transmission automated at an appropriate scale.

4-f-SW (continued)

The following pages contain the written comments
submitted by Kristen Eide-Tollefson during the scoping period
for the Prairie Island Nuclear Generating Plant
license renewal

PUBLIC COMMENTS: On NRC Environmental Review of Relicensing of The Prairie Island Nuclear Generating Plant (PING); and Xcels Environmental Report (ER) – Operating License Renewal Stage PING (NMC), Units 1 and 2, Docket No. 50-282 and 50-306, License Nos. DPR-42 and DPR-60.

DG-1149

To: Rulemaking, Directives and Editing Branch,
Office of Administration, U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

From: Kristen Eide-Tollefson, Healingsystems@earthink.net,
P.O. Box 130, Frontenac, MN 55026 651-345-5488

Dear Sir,

I am using the CEQ EIS guidelines to frame my comments. My oral comments can be found in the evening transcript for the Red Wing public hearings. The outline of my comments is as follows:

- I. Affected Environments
- II. Interdisciplinary Approach
- III. Connected Actions and Cumulative Effects
- IV. Baselines
- V. Recommended Alternatives
- VI. Mitigation and Monitoring
- VII. Additional Citations

Thank you for your attention to my comments to the scope of environmental review.

Kristen Eide-Tollefson

Sec. 1502.15 Affected environment. The environmental impact statement shall succinctly describe the environment of the area(s) to be affected or created by the alternatives under consideration. The descriptions shall be no longer than is necessary to understand the effects of the alternatives. Data and analyses in a statement shall be commensurate with the importance of the impact, with less important material summarized, consolidated, or simply referenced. Agencies shall avoid useless bulk in statements and shall concentrate effort and attention on important issues. Verbose descriptions of the affected environment are themselves no measure of the adequacy of an environmental impact statement.

I. Affected Environment. Defining the scope of the affected environment is the foundation of the EIS. The defining of the affected environment either adequate captures, or inadequately constrains considerations in the EIS. This act of defining and describing, impacts interested and affected communities and persons. It is important to interested and potentially affected communities and persons, to be included in the scope and to have their economic, social and natural resource bases identified. See also **IV. BASELINES.**

The scope of the description of the affected environment should not be constrained by the requirement for succinctness in the description itself. Succinctness of description refers to length, not to content.

Prairie Island: The description of the affected environment should adequately describe the social, environmental, economic and health situation of the Prairie Indian Community. Xcel's ER is inadequate in this description.
Neighboring Communities/Counties: The scope should also adequately describe the social, environmental, economic and health characteristics of the affected counties listed in Xcel's ER under 2.6.

Xcel's discussion of the Area Economic Base under 2.6 in its ER is entirely inadequate to describe the affected social, economic and natural environments of the directly affected river communities in the listed counties.

2.9 adequately describes planning concerns for Goodhue County. The county is increasingly looking to the special characteristics of its natural resource base to define its identity and guide future planning. Many of these resources are sensitive and require special consideration and planning treatment. The entire river valley ledge is highly susceptible to groundwater contamination. Surface water protections are increasingly important as well, as noted in 2.8.

50 Mile impact zone: In addition, the NRC EIS should also either describe or say why it does not consider communities/counties within the 50 mile potential impact radius of the plant. Communities are very aware of this radius.

Hiawatha Valley: The EIS should particularly concern itself with the affected environment -- the environmental, social, economic and natural resource bases -- that are common to the river communities, across and downriver from Prairie Island. The ecologies and economies of the river valley communities are deeply

5-a-ER

5-b-GW/SW

5-c-LR

interconnected - both between the shores and along the Great River Road which runs along both sides of the river, Wisconsin (Hwy 35) and Minnesota (Hwy 61).

} 5-c-LR (continued)

Area Economy: The area's economy is based in large part on tourism, recreational fishing and other water resource attractions. These economies are year round, and are affected by water quality, ice qualities and other features of the river/lake ecology. The scope of affected environments should extend to the southern end of Lake Pepin at least.

Some of the important common features of the Hiawatha Valley can be found in materials on:

- Hiawatha Valley Partnership
[www.nextstep.state.mn.us/res_detail.cfm?id=2380 - 14k](http://www.nextstep.state.mn.us/res_detail.cfm?id=2380-14k)
- The Great River Road, <http://www.mnmississippiriver.com/>
- The Mississippi River Commission
<http://www.mvd.usace.army.mil/mrc/index.php>,
- Mississippi River Regional Planning Commission -<http://www.mrrpc.com/>;
- Minnesota Mississippi River Parkway Commission
www.mnmississippiriver.com Carol.Zoff@dot.state.mn.us; and the
- Mississippi Valley Partners business literature.
<http://www.city-image.com/index.php?page=Mississippi-Valley-Partners>

} 5-d-SE

Natural resource and waters information, is available from the Department of Natural Resources (Lake City office), and other commenting agencies.

Sec. 1502.6 Interdisciplinary preparation Environmental impact statements shall be prepared using an inter-disciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts (section 102(2)(A) of the Act)...

II. Interdisciplinary approach. Evaluation of the interdependence of the local river community economies and ecologies -- the natural and "human environments" -- requires a fully interdisciplinary approach (see also connected actions and cumulative effects). The affected river communities should be extended, at least, to the southern border of Lake Pepin, which is directly impacted by PI.

} 5-e-AR

Special characteristics of PIIC: Analysis must in particular include the effects of the continued operation of the plant and expansion of the ISFSI upon the special characteristics of the of the Native American community at Prairie Island. This includes effects upon spiritual traditions, traditional diet, medicines, psychological well being and other categories, as defined by the Prairie Island Indian Community.

} 5-f-EJ/RW

Sec. 1508.8 Effects. "Effects" include (a) Direct effects, which are caused by the action and occur at the same time and place. (b) Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems. Effects and impacts as used in these regulations are synonymous. Effects includes ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions which may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial.

Sec. 1508.14 Human environment. "Human environment" shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment. (See the definition of "effects" (Sec. 1508.8).) This means that economic or social effects are not intended by themselves to require preparation of an environmental impact statement. When an environmental impact statement is prepared and economic or social and natural or physical environmental effects are interrelated, then the environmental impact statement will discuss all of these effects on the human environment

Sec. 1508.25 Scope: connected, cumulative and similar actions. Scope consists of the range of actions, alternatives, and impacts to be considered in an environmental impact statement. The scope of an individual statement may depend on its relationships to other statements (Secs.1502.20 and 1508.28). To determine the scope of environmental impact statements, agencies shall 3 types of actions, 3 types of alternatives, and 3 types of impacts. They include:

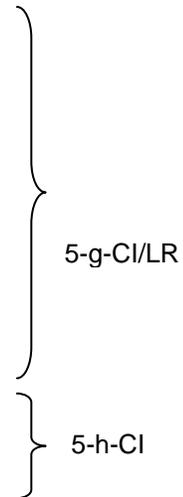
- (a) (a) **Actions** (other than unconnected single actions) **which may be connected actions**, which means that they are closely related and therefore should be discussed in the same impact statement. **Actions are connected if they: (i) Automatically trigger other actions which may require environmental impact statements. (ii) Cannot or will not proceed unless other actions are taken previously or simultaneously. (iii) Are interdependent parts of a larger action and depend on the larger action for their justification.**
- (b) **Cumulative actions**, which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement.
- (c) **Similar actions**, which when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography. An agency may wish to analyze these actions in the same impact statement. It should do so when the best way to assess adequately the combined impacts of similar actions or reasonable alternatives to such actions is to treat them in a single impact statement
- (d) (b) **Alternatives**, which include: i. No action alternative. ii. Other reasonable courses of actions. iii. Mitigation measures (not in the proposed action).
- (e) (c) **Impacts, which may be: (1) Direct; (2) indirect; (3) cumulative.**

Sec. 1508.7 Cumulative impact. "Cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

III. Connected Actions and Cumulative Effects: There are at least 4 pending actions which constitute connected actions and have cumulative effects upon these interdependent systems. These are identified below, and should be analyzed accordingly. We will need to depend upon the expertise of others to clarify the relationship of these actions to the 3 types of actions, impacts and alternatives listed in 1508.25, and addressed in the handbooks. The following chart gives an example: www.seeda.co.uk/RES_for_the_South_East_2006-2016/docs/AnnexF-031106.doc -

The scope of these particular comments should not limit definition and analysis of cumulative impacts, nor the definition and scope of the connected actions. They are merely a starting point which the affected and interested local governments should expand upon. Please confirm that there will be an opportunity in the comment process for these affected communities to address cumulative effects and connected, cumulative and/or similar actions as defined in Sec. 1508.25. Please clarify how that will work.

A. Connected, Cumulative or Similar Actions affected by the PING application. Environmental review under NEPA requires that the potential impacts of related actions present or future, and their **cumulative effects**, be described and analyzed. These actions need not be permitted by the same agency. The following actions,



specifically, are connected to the relicensing of Prairie Island and will be reviewed by both state and federal governments.

Our argument is that the timing of these reviews and the “departmentalization” of the actions is harmful, and blocks adequate EIS analysis of these federal actions, and undermines adequacy of the SER for relicensing. The connected, cumulative and/or similar actions listed below need to be evaluated as connected/cumulative or similar actions and their cumulative effects upon the affected environments must be evaluated. All are dependent upon and interconnected with the NRC relicensing review and permit:

5-h-CI (continued)

1. UPRATE – Certificate of Need Extended Power Uprate – PUC Docket E002/Cn-08-509. Without the extended license there will be no uprate. The license renewal safety review and aging reactor review **MUST** consider the cumulative effects of the uprate temperatures and pressures upon: a) the safety of the aging reactor, over time, and b) the cumulative environmental and socio-economic effects of increased temperatures on the ecology of the lake; c) new fuel types; d) additional emissions (if any) and timing and frequency of those emissions; e) other concerns raised by other parties, particularly the Prairie Island Indian Community (PIIC).

Scenarios: These assessments should be done for various water level scenarios on the ecology of the lake, and consider potential cumulative effects of warming temperatures (global climate change), with heat and emission factors from the uprate. Climate change effects, including temperature and water, are likely within the period of relicensing. This analysis should expand upon water demand, quality and shortage concerns for the area in addressing these scenarios.

5-i-OS

2. Site Permit Extended Power Uprate – PUC Docket E002/GS-08-690. Without relicensing, there would be no site permit process. And it is the location of the uprate, at the PI facility, that creates the context for the connected actions and their cumulative effects upon the affected environments.

3. Additional Dry Cask Storage Certificate of Need PUC Docket E002/CN-08-510. Additional dry cask storage is needed to accommodate waste from relicensed reactors. There is no federal plan for this waste. It is therefore, reasonably speaking, beyond the reach of the confidence decision, regardless of its wording. Even if NRC judges, as it must, the adequacy of the confidence ruling, this does not eliminate the need to address the effects, as connected/cumulative/similar actions in the EIS.

5-j-RW

There are a number of related actions that reach beyond the current license and relicensing period that involve decommissioning, long term storage of wastes at the reactor site, and an unspecified set of scenarios including federal actions (take title; regional interim storage etc) that impact the affected communities and local governments. While we have no illusions that we will significantly change the way in which NRC has dealt with this issue in the past, there are specific impacts that we

would like addressed in the EIS that have to do with future funding, land use, and responsibility for at reactor site waste management. These socio-economic factors directly affect local governments, and it is not reasonable that they should not be addressed at the point of relicensing. Others may have other requests.

} 5-j-RW (continued)

Commitment of Resources: Local governments have ultimate responsibility for the safety and well being of their communities. They must define and defend their interests, as it relates to any actions or non-actions affecting their economic, social and natural environments. The lack of resolution of the storage issue, in the context of NRC extension of uprate, license and cask storage permits, creates significant burdens for these local governments, including but not limited to PIIC. These impacts include lobbying, time, money and expertise needed to provide adequate local oversight of the issues and respond to utility, state and federal initiatives.

} 5-k-OS/RW

Local Government impacts: Most importantly, where these local governments are unable or unwilling to commit resources to provide for the representation and defense of these interests, the intention of NEPA for public involvement, and a number of other NRC, state and federal principles – is undermined.

} 5-l-OS

Funding scenarios: Like NRC, the ability of local governments to ‘do their job’ depends upon funding. Should NRC’s or DOE’s funding continue to be reduced, or should fail – or their ability to perform adequately to their mandate be undermined by funding shortages, the primary burdens for protecting the safety and well being of the affected communities falls to their local government. It is in the context of the cumulative effects of current, and future actual and potential failures of funding (this includes Yucca Mountain) for the NRC/DOE mandates related to waste management, that the unresolved waste issue must be addressed in the EIS. See: www.naruc.org/Resolutions/Nuclear%20Waste%20Disposal.pdf

} 5-m-CI/RW

Xcel’s responsibility: While Xcel, under the federal waste contract, is responsible for the waste until the federal government takes it, Xcel has provided for no mechanisms to ensure the responsible management, monitoring, or funding of indefinite storage; nor has Xcel done contingency planning in the event of federal funding shortages or failure. In fact, Xcel has continued to claim in related dockets that the waste storage is temporary and that their responsibility is subordinate to that of the federal government, despite the clear terms of the contract title. Neither PUC, nor NRC, nor DOE has addressed this gap in responsibility. And none of the ‘responsible’ entities has provided a reasonable set of factors, funding or timeline for the facility and cask replacement recommended by DOE, at each 50 to 100 years.

} 5-n-RW

No-Action: Because there is no federal plan for waste from relicensed reactors, there is no timeline for removal, no specified place for the waste to go, and no known facilities/cask replacement timeline, the cumulative effects of indefinite storage should be assessed.

} 5-o-CI/RW

Deterioration factor impacts line up for PI: The engineering studies for the Yucca Mountain D/EIS use 3 factors to evaluate the vulnerability of the designated regions to the effects of the no action (indefinite at reactor site storage) alternatives: proximity to populations, amount of precipitation, and the freeze thaw cycle, which are the primary factors in cask and facility deterioration rates. All three of these factors are present at Prairie Island.

Impact on commitment of resources, land use: The waste from the original license period is scheduled (in the YM queue) to be gone @2045. At this point the casks with waste from the initial license period/ISFSI will be between 40 and 50 years old. According to the Yucca Mountain DEIS timeline, this is also the point at which breakdown of containment could begin. The pool will be @ 70 years old.

With the casks gone, the site could be restored as early as @2045. If the plant is relicensed, then the site cannot be restored. Because it is so close to the business and residential environments of PIIC, the condition of the site will affect the quality of the environment in which they are doing business and residing. Indefinite storage creates an unacceptable level of unknowns and will not only deprive the Community of a restored environment, but will require expenditures related to due diligence and necessary vigilance in overseeing and responding to conditions at the storage site. These burdens threaten the quality of life and economic vitality of present and future generations.

NEPA requirements: While NRC Rules allows these actions to be analyzed in a vacuum, NEPA and CEQ rules (arguably) do not. These actions can have significant, ongoing and cumulative effects upon the economies and ecologies, security and health of the area; and particularly upon future generations.

IV. BASELINES [7. Define a baseline condition for the resources, ecosystems, and human communities.]. The following baselines (at least) need to be established for the assessment of cumulative impacts, and to allow for meaningful monitoring of the affected environment into the future. These comments should in no way limit the work of EIS analysts, or the types and numbers of baselines to be established. Baselines need to be identified and represented in an accessible way; the data and analysis should be understandable to community members and local officials.

A. Groundwater baseline: Minnesota statute provides parameters for groundwater protection, that require a baseline to be established.

116C.76 NUCLEAR WASTE DEPOSITORY RELEASE INTO GROUNDWATER.

Subdivision 1. Radionuclide release levels. Radioactive waste management facilities for spent nuclear fuel or high-level radioactive wastes must be designed to provide a reasonable expectation that the undisturbed performance of the radioactive waste management facility will not cause the radionuclide concentrations, averaged over any year, in groundwater to exceed:

5-p-RW

5-q-CI/LR

5-r-CI/LR

- (1) five picocuries per liter of radium-226 and radium-228;
- 2) 15 picocuries per liter of alpha-emitting radionuclides including radium-226 and radium-228, but excluding radon; or
- (3) the combined concentrations of radionuclides that emit either beta or gamma radiation that would produce an annual dose equivalent to the total body of any internal organ greater than four millirems per year if an individual consumed two liters per day of drinking water from the groundwater.

Subd. 2. Disposal restricted. The location or construction of a radioactive waste management facility for high-level radioactive waste is prohibited where the average annual radionuclide concentrations in groundwater before construction of the facility exceed the limits in subdivision 1.

Subd. 3. Protection against radionuclide release. Radioactive waste management facilities must be selected, located, and designed to keep any allowable radionuclide releases to the groundwater as low as reasonably achievable.

History: 1986 c 425 s 11

Epri: "Groundwater Protection Guidelines for Nuclear Power Plants, 2008." www.epriweb.com/public/00000000001016099.pdf

B. Historic cancer rates for Goodhue, Dakota, Peirce, and Wabasha Counties through 2006. We have been unable to access these statistics.

C. Thermal conditions south of PI to the southern border of Lake Pepin.

D. Fish populations south of PI to the southern border of Lake Pepin

In addition, the following information would be useful to local communities in understanding the 'baseline' trajectory and flux of emissions/releases over time. Without historic information, current information can be unduly alarming, and difficult to evaluate:

- 1. Air emission releases (See CURE comments), historic, through 2007
- 2. Thermal discharges, historic through 2007
- 3. Effluent discharges – type, timing and frequency, historic through 2007
- 4. Tritium discharges, historic through 2007.

Table 1-5. Steps in cumulative effects analysis (CEA)
to be addressed in each component of environmental impact assessment (EIA)

Scoping

1. Identify the significant cumulative effects issues associated with the proposed action and define the assessment goals.

2. Establish the geographic scope for the analysis.

3. Establish the time frame for the analysis.

4. Identify other actions affecting the resources, ecosystems, and human communities of concern.

Describing the Affected Environment

5. Characterize the resources, ecosystems, and human communities

5-r-CI/LR (continued)

Environment identified in scoping in terms of their response to change and capacity to withstand stresses.

6. Characterize the stresses affecting these resources, ecosystems, and human communities and their relation to regulatory thresholds,

7. Define a baseline condition for the resources, ecosystems, and human communities.

Determining the Environmental

8. Identify the important cause-and-effect relationships between human Consequences activities and resources, ecosystems, and human communities.

9. Determine the magnitude and significance of cumulative effects.

10. Modify or add alternatives to avoid, minimize, or mitigate significant cumulative effects.

11. Monitor the cumulative effects of the selected alternative and adapt management.

<http://orf.od.nih.gov/Environmental+Protection/NEPA/EnvironmentalAssessments.htm>

5-r-CI/LR (continued)

V. Recommended Alternatives:

1. Replacement Option: Combined technologies, specifically wind paired with existing/refurbished gas facilities, should be the primary baseload alternative evaluated by Xcel. Xcel's gas fleet is aging. Its assessment of refurbishment should maximize opportunities for gas/wind combinations, optimizing flexible use of these facilities and avoiding the costs and climate impacts of new gas plants.

5-s-AS

2. Conversion option: An energy and R&D park at Prairie Island, would be a conversion option for the PI site and plant. It would utilize existing equipment, add modular generation and take advantage of the transmission at PI. Hydrogen could be generated during off peak hours and PI could become a hydrogen fueling and experimental station, among other R&D projects. This would bring an alternative selection of high paying 'green' jobs into the area, develop new capacities and provide opportunities to capture funding opportunities as new federal energy initiatives unfold.

5-t-AS

1502.22 - Incomplete or unavailable information.

When an agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an environmental impact statement and there is incomplete or unavailable information, the agency shall always make clear that such information is lacking.

(a) If the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the environmental impact statement.

(b) If the information relevant to reasonably foreseeable significant adverse impacts cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known, the agency shall include within the environmental impact statement: (1) A statement that such information is incomplete or unavailable; (2) a statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment; (3) a summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment, and (4) the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community. For the

5-u-LR/OS

purposes of this section, reasonably foreseeable includes impacts which have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason.

(c) The amended regulation will be applicable to all environmental impact statements for which a Notice of Intent (40 CFR 1508.22) is published in the Federal Register on or after May 27, 1986. For environmental impact statements in progress, agencies may choose to comply with the requirements of either the original or amended regulation.

While the “foreseeable future” is difficult to define with nuclear waste, the scope of incomplete and missing information regarding the fate of waste from relicensed reactors is significant. There is no rational plan, no maintenance or facility replacement schedule for relicensed reactors at Monticello or Prairie Island. There is no contingency planning; no scenario development. The missing information is not only factual, but procedural. This situation should be described, and elaborated, under this section of the EIS.

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(continued)

VI. 1508.20 Mitigation and Monitoring: Mitigation includes:

- (a) Avoiding the impact altogether by not taking a certain action or parts of an action.
- (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- (c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- (e) Compensating for the impact by replacing or providing substitute resources or environments.

From the perspective of a planning commission member in a downriver community that is part of the affected environment of the PING, the most useful kind of mitigation to consider in conjunction with relicensing the plant, is an exploration of long term joint stakeholder mechanisms would allow affected communities and local governments to participate meaningfully in the ongoing decisions involving PING. Several references are included below.

5-v-LR

“Stepwise approach to decision-making for long term radioactive waste”.
www.nea.fr/html/rwm/reports/2004/nea4429-stepwise.pdf

“Uncertainty, innovation, and dynamic sustainable development (applied to nuclear waste)” Lenore Newman School of Environment and Sustainability, Victoria, B.C., Canada V9B 5Y2(e-mail: lenore.newman@royalroads.ca)
<http://ejournal.nbii.org/archives/vol1iss2/0501-001.newman.html>

VII. Citations: The following set of citations from CEQ rules is included for the benefit of other public commentators. For NRC, the inclusion of these sections creates a framework of our expectations regarding the importance and scope of connected/cumulative effects analysis (CEA). We have used primarily CEQ references since this is the standard that NRC uses:

5-w-CI

Table 1-2 Principles of Cumulative Effects Analysis

<http://ceq.hss.doe.gov/nepa/ccenepa/sec1.pdf>

Cumulative Impacts are caused by the aggregate of past, present, and reasonably foreseeable future actions.

The effects of a proposed action on a given resource, ecosystem, and human community include the present and future effects added to the effects that have taken place in the past. Such cumulative effects must also be added to effects (past, present, and future) caused by all other actions that affect the same resource.

2. Cumulative effects are the total effect, including both direct and indirect effects, on a given resource, ecosystem, and human community of all actions taken, no matter who (federal, nonfederal, or private) has taken the actions. Individual effects from disparate activities may add up or interact to cause additional effects not apparent when looking at the individual effects one at a time. The additional effects contributed by actions unrelated to the proposed action must be included in the analysis of cumulative effects.

3. Cumulative effects need to be analyzed in terms of the specific resource, ecosystem, and human community being affected. Environmental effects are often evaluated from the perspective of the proposed action. Analyzing cumulative effects requires focusing on the resource, ecosystem, and human community that may be affected and developing an adequate understanding of how the resources are susceptible to effects.

4. It is not practical to analyze the cumulative effects of an action on the universe; the list of environmental effects must focus on those that are truly meaningful.

For cumulative effects analysis to help the decisionmaker and inform interested parties, it must be limited through scoping to effects that can be evaluated meaningfully. The boundaries for evaluating cumulative effects should be expanded to the point at which the resource is no longer affected significantly or the effects are no longer of interest to affected parties.

5. Cumulative effects on a given resource, ecosystem, and human community are rarely aligned with political or administrative boundaries.

Resources typically are demarcated according to agency responsibilities, county lines, grazing allotments, or other administrative boundaries. Because natural and sociocultural resources are not usually so aligned, each political entity actually manages only a piece of the affected resource or ecosystem. Cumulative effects analysis on natural systems must use natural ecological boundaries and analysis of human communities must use actual sociocultural boundaries to ensure including all effects.

6. Cumulative effects may result from the accumulation of similar effects or the synergistic interaction of different effects. Repeated actions may cause effects to build up through simple addition (more and more of the same type of effect), and the same or different actions may produce effects that interact to produce cumulative effects greater than the sum of the effects.

7. Cumulative effects may last for many years beyond the life of the action that caused the effects. Some actions cause damage lasting far longer than the life of the action itself (e.g., acid mine drainage, radioactive waste contamination, species extinctions). Cumulative effects analysis needs to apply the best science and forecasting techniques to assess potential catastrophic consequences in the future.

B. Each affected resource, ecosystem, and human community must be analyzed in terms of its capacity to accommodate additional effects, based on its own time and space parameters. Analysts tend to think in terms of how the resource, ecosystem, and human community will be modified given the action's development needs. The most effective cumulative effects analysis focuses on what is needed to ensure long-term productivity or sustainability of the resource.

Table 1-4 Types of Cumulative Effects

In simplest terms, cumulative effects may synergistic—where the net adverse cumulative arise from single or multiple actions and may effect is greater than the sum of the individual result in additive or interactive effects. Interactive effects. This combination of two kinds of effects may be either countervailing—actions with two kinds of processes leads to four where the net adverse cumulative effect is less basic types of cumulative effects (Table 1-3; see than the sum of the individual effects—Peterson et al. 1987 for a similar typology).

Type 1 — Additive - Repeated "additive" effects from a single proposed project.

Example: Construction of a new road through a national park, resulting in continual draining of road salt onto nearby vegetation.

Type 2 — Interactive - Stressors from a single source that interact with receiving biota to have an "interactive"

5-w-CI
(continued)

(nonlinear) net effect.
Example: Organic compounds, including PCBS, that biomagnify up food chains and exert disproportionate toxicity on raptors and large mammals.

Type 3 – Additive - Effects arising from multiple sources (projects, point sources, or general effects associated with development) that affect environmental resources additively.
Example: Agricultural irrigation, domestic consumption, and industrial cooling activities that all contribute to drawing down a groundwater aquifer.

Type 4- Interactive - Effects arising from multiple sources that affect environmental resources in an interactive (i.e., countervailing or synergistic) fashion.
Example: Discharges of nutrients and heated water to a river that combine to cause an algal bloom and subsequent loss of dissolved oxygen that is greater than the additive effects of each pollutant.

Criteria. In determining whether a proposed action will or will not "significantly affect the quality of the human environment," OPDIVs/STAFFDIVs should evaluate the expected environmental consequences of a proposed action by means of the following steps, utilizing the guidance provided in 40 CFR 1508.27:

Step One -- Identify those things that will happen as a result of the proposed action. An action normally produces a number of consequences. For example, a grant to construct a hospital may terminate human services; will involve destruction and construction; will provide a service. Actions may be connected, cumulative, or similar (see 40 CFR 1508.25(a)).

Step Two -- Identify the "human environments" that the proposed action will affect. In accordance with 40 CFR 1508.27, the significance of an action must be analyzed in several contexts, such as society as a whole (human, national), the affected region, the affected interests, and the locality. The significance of an action will vary with the setting of the proposed action. Environments may include terrestrial, aquatic, subterranean, and aerial environments, such as islands, cities, rivers or parts thereof.

Step Three -- Identify the kinds of effects that the proposed action will cause on these "human environments." A change occurs when a proposed action causes the "human environment" to be different in the future than it would have been, absent the proposed action. These changes involve the introduction of various "resources" (including those often characterized as waste).

Example: A decrease in the amount of soil entering a stream; the introduction of a new chemical compound to natural environments.

In addition to organisms, substances, and compounds, the term "resources" include energy (in various forms), elements, structures, and systems (such as a trash collection service in a city). Present environmental impacts and reasonably foreseeable future environmental impacts must be considered.

In identifying changes caused by the proposed action, OPDIVs/STAFFDIVs should identify the magnitude of the changes likely to be caused within smaller and larger "human environments" affected (e.g., part of a city, the whole city, the metropolitan area).

The impacts resulting from the proposed action may be direct, indirect, or cumulative (see 40 CFR 1508.25(c)).

Step Four -- Identify whether these changes are significant. The following points should be considered in conjunction with 40 CFR 1508.8 (effects), 40 CFR 1508.14 (human environment), and 40 CFR 1508.27 ("significantly") in making a decision concerning significance:

- A change in the characterization of an environment is significant (e.g., from terrestrial to aquatic).
- The establishment of a species in or removal of a species from an environment may be significant
- The more dependent an environment becomes on external resources, the larger the magnitude of change (and the more likely it is to be significant);
- The larger the environment under consideration, the lower the amount of change needed before the change may be significant.

The CEQ regulations in 40 CFR 1508.27 describe a number of factors that should be considered in evaluating severity (intensity) of an impact. OPDIVs/STAFFDIVs should consider the cumulative effect of the proposed action. An action may

5-w-CI
(continued)

be individually insignificant but cumulatively significant when the action is related to other actions. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

Sec. 1508.27 Significantly. "Significantly" as used in NEPA requires considerations of both context and intensity:

(a) Context. This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.

(b) Intensity. This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity:

- Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.
- The degree to which the proposed action affects public health or safety.
- Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
- The degree to which the effects on the quality of the human environment are likely to be highly controversial.
- The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.
- The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.
- Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.
- The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.
- The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.
- Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

5-w-CI
(continued)

Respectfully submitted,
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651-345-5488/612-331-1430

About the commentator: Eide-Tollefson served on the MN Environmental Quality Board Citizen's Site Advisory Committee for the Goodhue Storage Facility exercise in 1995. After the Florence Township sites were eliminated from consideration, she continued to work as a citizen advocate in state regulatory and legislative arenas, submitting numerous comments on integrated resource planning, and other nuclear and energy resource proposals.

In 2006 she graduated from the Humphrey Institute MPA program with a concentration in "Public Engagement in Energy Policy, Planning and Infrastructure Development". She has served on Environmental and legislative stakeholder and advisory committees and from 1999-2003, was active in the Nuclear Waste Strategy Coalition. She is currently a planning commissioner for Florence Township, Goodhue County. She is, however, not an environmental lawyer or professional and must depend upon the expertise of NRC professionals in evaluating and acting upon her comments and recommendations.

The following pages contain the comments
made by Kristen Eide-Tollefson during the
NRC public scoping meetings held on July 30, 2008

1 MR. RAKOVAN: That was the last card that
2 I had for comments. If someone else has a comment
3 that they'd like to make, if you could just come on
4 up to the mike, and if you could please introduce
5 yourself.

6 KIRSTEN EIDE TOLLEFSON: I am Kirsten
7 Eide Tollefson, and I live in Florence Township, just
8 down the road a little bit.

9 I've been reading nuclear documents for
10 about 12 years and have not, I have to admit, made my
11 way all the way through this one; but I do have a
12 pretty fundamental concern that I would appreciate
13 being addressed by the environmental review.

14 Under NEPA and environmental review in
15 general, the consideration of connected actions and
16 cumulative effects are very important elements to be
17 reviewed, and there are a number of processes
18 concurrently happening.

19 There is the application for the
20 relicensing; there is the fuel change that was
21 mentioned; and then there's a fuel upgrade
22 application, and there's also an extended storage
23 application. And all of these are being
24 simultaneously considered by NRC and by the Minnesota

5-x-CI

5-y-OS/RW

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1 Public Utilities Commission.

2 I'm extremely concerned about the timing
3 of the fuel uprate application. It seems to me that
4 if the plant is going to be run longer and hotter and
5 to a greater capacity, that's going to affect -- and
6 with a different fuel type, that's going to affect
7 both the operations and the pool storage; it's going
8 to affect the safety of the pool; it's of course
9 going to affect the particulars on the long-term
10 storage of the waste at the reactor site, and I'm
11 very, very concerned that that fuel uprate be part of
12 the review of the safety analysis.

13 And it seems very inappropriate for there
14 to be significant factors like heat that are not
15 included in the safety review of an aging reactor.
16 I'm just very, very concerned about that and, again,
17 how that also may affect the pool safety.

18 I'm -- the pool is in the plant, so I'm
19 hoping we consider that part of operations. But I
20 realize we might have cordoned it off into storage
21 areas -- into storage.

22 I also have a question that I wish I had
23 asked earlier. It's a concern about what seems to me
24 to be a changed circumstance in the storage of

5-y-OS/RW (continued)

5-z-NS

5-aa-RW

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1 nuclear wastes at the reactor site.

2 If someone would like to explain this to
3 me later, that would be great, but it seems to me
4 that the difference in waste -- in the confidence
5 decision that waste is safe at a reactor site for 30
6 years after the closure of the plant, which would, of
7 course, put it out into the '70s somewhere -- or -- I
8 have -- I'm not going to add that right now -- there
9 is -- the difference that it makes is that there's
10 not a federal plan that I'm aware of for the waste
11 for the relicensed reactors, and so that confidence
12 has -- doesn't to me have the same bases as the
13 confidence that the waste that has already been
14 generated which is the in queue will have a place to
15 go.

16 So none of the waste for the relicensed
17 reactors has a queue that's in to go anywhere, and I
18 think that's a significant changed circumstance that
19 should be considered in this proceeding.

20 I read the background documents for the
21 EIS for Yucca Mountain for the no-action alternative.
22 And these are the engineering studies upon which they
23 base the recommendation for the no-action
24 alternative.

5-aa-RW (continued)

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1 The no-action alternative recommended
2 that any site where the waste -- the no-action
3 alternative assumed that waste would not be removed
4 from the site but that it would be there for -- it
5 may have been 10,000 years. I think that was the
6 basis. I didn't bring it.

7 But the three factors that were
8 considered in that review that made -- that were the
9 factors for the breakdown of the storage containment
10 which the EIS recommended be replaced fully every 50
11 years, there were three factors in the engineering
12 studies: Precipitation, freeze/thaw cycle, and
13 proximity to populations.

14 And I believe that in Minnesota the
15 precipitation, the freeze/thaw cycle, and the
16 proximity to populations are an extremely critical
17 factor.

18 And so if we have waste that has nowhere
19 to go, isn't in a queue, and doesn't have a federal
20 plan for its removal, I would submit that this is a
21 serious cumulative issue and would like to understand
22 more how that's going to be handled.

23 Thank you.

24 MR. RAKOVAN: Any other comments tonight?

5-aa-RW (continued)

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The following pages contain the written comments
submitted by Lea Foushee during the scoping period
for the Prairie Island Nuclear Generating Plant
license renewal

From: Lea Foushee [lfoushee@nawo.org]
Sent: Friday, August 22, 2008 4:43 PM
To: PrairieIslandEIS Resource
Subject: Testimony additions

I was unable to access the Annual 2007 Radioactive Effluent Release Reports for Prairie Island Nuclear Reactors a timely fashion for the Public Hearing in Red Wing on July 30th, even after calling the Minnesota Department of Health, the Nuclear Management Company, and the Office of Public Assistance at the Nuclear Regulatory Commission. I have been told a multiple of excuses of why these "routine" documents were not posted on the ADAMS electronic website, perhaps the most disturbing is sensitivity screening or scrubbing. The VP of Plant Operations, Mike Wadley sent them to me immediately "the morning after" the Public Hearing was over. After reviewing the actual documents, I realize the "why" of their lateness and lack of availability. There was an undetected gaseous radioactive leak that went on for six months. There was an additional failure that caused a liquid release in 2007. The radioactive effluents reported in both abnormal releases to the environment were extrapolations, NMC Engineering staff calculations. In 2006 during a routine refueling cycle there were 10 abnormal releases of radioactive effluents due to breaking reactor parts. The NRC staff professed that no number scrubbing would ever be done by them, but if Utility staff has to make them up, the numbers are effectively scrubbed, and we will not know what the real releases to the public health and environment may have been.

Additionally I was assured (Nathan Goodman) that a real Environmental Justice analysis would be performed for the plant specific EIS. If this is in fact correct the point of origin of the uranium ore and its fabrication into fuel, and the ultimate disposal of all radioactive wastes generated must be included.

Furthermore we were assured/promised (Brian -- Our Regional Director) specific monitoring of

6-a-HH

6-b-EJ/UR

6-c-HH

the routine radiation effluent releases would be done, including isopleths dispersion to determine where the hundreds and sometimes thousands of curies of radiation actually goes in our environment.

Lea Foushee
North American Water Office
Lake Elmo, MN 55042

} 6-c-HH (continued)

From: Lea Foushee [lfoushee@Nawo.org]
Sent: Monday, September 22, 2008 11:52 AM
To: PrairieIslandEIS Resource
Subject: Fwd: DG-1149 Prairie Island EIS scoping

Sorry if this is a duplicate submission there was no advisory sent to me when the broken link was repaired. I have however added additional points in this submission from the earlier email that was sent.

Begin forwarded message:

From: Lea Foushee <lfoushee@Nawo.org>
Date: September 21, 2008 9:05:27 PM CDT
To: NRCREP@nrc.gov
Subject: Fwd: DG-1149 Prairie Island EIS

Begin forwarded message:

From: Lea Foushee <lfoushee@nawo.org>
Date: September 21, 2008 8:11:43 PM CDT
To: NRCREP@nrc.gov
Subject: DG-1149 Prairie Island EIS

These comments are in addition to the verbal testimony given on July 30, 2008 at the Red Wing Public Hearing on the Relicensing of the Prairie Island Nuclear Plant as well as a written information sheet that NAWO was requested to produce by the public on Tritium. The document was given to the Hearing Record Court Reporter, and is titled Health Risks of Tritium.

I was unable to access the Annual 2007 Routine Radioactive Effluent Release Reports for Prairie Island Nuclear Reactors in a timely fashion for the Public Hearing in Red Wing on July 30th, even after calling the Minnesota Department of Health, George Johns, the Nuclear Management Company staff person, Amy Hass, both her office line and cell phone, and the Office of Public Assistance at the Nuclear Regulatory Commission, Scott Burnell. I have been told multiple excuses why these "routine" documents were not posted on the ADAMS electronic website in advance of the Relicensing Hearing, perhaps the most disturbing was sensitivity screening or scrubbing. It was made abundantly clear

} 6-d-HH

that I would not be given access to this document before the Public Hearing was over.

The VP of Plant Operations, Mike Wadley sent them to me immediately "the morning after" the Public Hearing was over, too late for questions or media coverage of the contents. After reviewing the actual documents, I realize the "why" of their lateness and lack of availability. There was an undetected gaseous radioactive leak that went on for six months that released 3,000 cubic feet of radioactive gas (extrapolation). There was an additional failure that caused a liquid release in 2007. The radioactive effluents reported in both abnormal releases to the environment were extrapolations, NMC Engineering staff calculations. The NRC staff professed that no number scrubbing would ever be done by them, but if Utility staff has to make them up, the numbers are effectively scrubbed, and we will not know what the real releases to the public health and environment may have been. In 2006 during a routine refueling cycle there were 10 abnormal releases of radioactive effluents due to breaking reactor parts.

6-d-HH (continued)

It is also disturbing that there is no longer a total number calculated for number of curies per year from the reactors in question of all isotopes released in the annual radioactive effluent release report document contrary to previous years. A lay person must calculate scientific notation across all releases and quarters to get a total number of curies released. A site specific EIS must contain total curies for all Routine Radioactive Effluent Releases (solid, liquid and gaseous) since the opening of the facility and projections for potential minimum and maximum releases for the additional years that the facility is requesting operations into the future. There must be a discussion about the total radioactivity released that is remaining, still circulating in the environment from those historic releases, and where the concentrations of such releases have been deposited. Without this information provided the document is inadequate in terms of identifying health risk to the public as well as other living creatures. Furthermore we were assured/promised (Brian Holian, Our Regional Director) specific monitoring of the routine radiation effluent releases would be done in a site specific EIS for Prairie Island, including dispersion isopleths to determine where the hundreds and sometimes thousands of curies of radiation actually go in our environment.

6-e-HH

Additionally I was assured (Nathan Goodman) that a real Environmental Justice analysis would be performed for the Prairie Island plant specific EIS. If this is in fact correct, the entire nuclear fuel chain must be assessed for the specific additional exposure risks including the point of origin of the uranium ore and its enrichment and fabrication into fuel, transportation of the fuel, and the ultimate transportation and disposal of all radioactive wastes generated throughout the relicensing period. The risk of radiation exposure to Indigenous Peoples, other

6-f-EJ/RW/UR

Communities of Color, and economically disadvantaged individuals from this expansion far exceeds the fifty mile radius proposed for such an analysis. The fifty mile limitation biases the Environmental Justice analysis and excludes many impacted EJ Communities whose health will be affected by this proposal.

Lea Foushee
North American Water Office
Lake Elmo, MN 55042

} 6-f-EJ/RW/UR (continued)

The following pages contain the comments
made by Lea Foushee during the
NRC public scoping meetings held on July 30, 2008

1 have.

2 CAROL OVERLAND: Then what can I say?

3 LEA FOUSHEE: I'm Lea Foushee. I work
4 with the North American Water Office, and we've been
5 involved with this Prairie Island process for over 25
6 years, and we did not receive a notice either.

7 Just to make it very clear that those of
8 us that have been working on this reactor site
9 historically have not received notice from the NRC
10 period.

11 I got a copy of the NRC notice from
12 another anti-nuclear organization in Washington, D.C.
13 They said, "Hey, do you know about this?"

14 And I said, "Well, yeah, I do, but not
15 because they told me about it."

16 MS. FRANOVICH: You're talking about the
17 notice for the public meeting?

18 LEA FOUSHEE: I'm talking about the
19 notice for this meeting, this --

20 MS. FRANOVICH: For the meeting.

21 LEA FOUSHEE: This -- right.

22 MS. FRANOVICH: I understand.

23 LEA FOUSHEE: And we are in the 50-mile
24 zone for an environmental justice notification, and

} 6-g-LR

} 6-g-LR (continued)

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1 I'm the Director of Environmental Justice for my
2 organization and I did not receive any kind of notice
3 whatsoever.

} 6-g-LR (continued)

4 MS. FRANOVICH: Okay. Thank you.

5 MR. RAKOVAN: Any further questions?

6 Okay. You want me to come to you or --

7 JEFF ERPINE: Jeff Erpine. I'm just a
8 resident.

9 I was wondering as far as Units 1 and 2
10 are concerned, will there be any talk about the
11 critical components they're talking about as far as,
12 like, the aging process, you know, what's being done
13 to manage it?

14 MS. FRANOVICH: Okay. Can you repeat
15 your question? I'm not quite sure I understood you.

16 JEFF ERPINE: Oh, I'm sorry. Will there
17 be a meeting to discuss the critical components?

18 MS. FRANOVICH: The critical components
19 that are being evaluated?

20 JEFF ERPINE: Yes, and what's being done
21 to manage the aging process there?

22 MS. FRANOVICH: Right. We just received
23 the application in mid April, and so we're going
24 through the process now of evaluating what's called

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1 I'm Lea Foushee. I'm the Environmental
2 Justice Director for the North American Water Office.

3 About two months ago I received an
4 anonymous letter telling me that the Routine
5 Radioactive Effluent Release Report for Prairie
6 Island was not available to the public as it
7 ordinarily is in May of the following year that the
8 emissions have been generated.

9 And I said, "Well, you know, maybe it
10 will come out later," and so I didn't do anything
11 about it.

12 48 hours ago I got a request to update a
13 flyer that we produced on Monticello when the
14 Monticello nuclear reactor was being relicensed and
15 make it specific for Prairie Island instead of
16 Monticello, and I said, "Well, okay."

17 And so I went and looked for those
18 reports thinking that by now it's got to be there,
19 it's two months later.

20 It wasn't there. It wasn't there.

21 Every other year it was there, 2008 -- or
22 2006 all the way back to 1999. So I downloaded all
23 those, and so I have all those and it's on my hard
24 drive.

6-h-HH/LR

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1 And I said, "Well, you know, let's go see
2 if we can find the missing report."

3 So I called the Health Development; they
4 of course are totally unavailable. And kept calling
5 them.

6 And I called and they gave me the name of
7 the worker at the plant that supposedly deals with
8 those sort of things, Amy -- Amy what? I can't
9 remember Amy's last name.

10 She didn't answer her phone. I left her
11 a message. She still didn't answer her phone two
12 days later. I called her cell phone; she didn't
13 answer that either.

14 So I called the NRC themselves after
15 looking over and over again for the missing
16 information, and I called the Office of Public
17 Assistance finally and got a warm body. And I was
18 really surprise, because you ordinarily don't get a
19 warm body, you get an answering machine.

20 And they said that I should send them an
21 email with the request for the information and they'd
22 send me a link and give me that information that
23 afternoon.

24 And I thought, "Well, great. Great."

6-h-HH/LR (continued)

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1 Talk about service."

2 And lo and behold the afternoon came and
3 went, of course no email. Of course no email.

4 So I called them back in the morning, and
5 they of course said that they would have to forward
6 that request to a man named Scott Burnell.

7 And said, "Well, how about a" -- "Can I
8 talk to a warm body? Can I really talk to the guy?"

9 They put him on the phone. And so I
10 talked to him, and he said he would talk to the staff
11 of the project and see what he could do, but there
12 was -- he was surprised that it wasn't there,
13 obviously, but there was nothing he could do anyway.

14 So I ended up talking to J.P. Leous. I
15 don't -- I don't know who J.P. is, but he told me
16 that the report was being put through a sensitivity
17 review.

18 Now, I don't know what that means or why
19 the document is two months late and has to go through
20 a sensitivity review, but in 2006, when it was down
21 for refueling, there were ten abnormal releases. Ten
22 abnormal releases.

23 And the routine radioactive effluent
24 releases were over 800 curies when they're ordinarily

6-h-HH/LR (continued)

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1 around 500. Some years they have -- historically
2 have been in the thousands of curies.

3 So my question is what are you covering
4 up? What are you covering up? Why aren't you
5 releasing it in a routine manner if it's routine
6 releases?

7 Monticello is already up there, no
8 problem. Prairie Island, sensitivity scrubbing.
9 Sensitivity scrubbing.

10 So that means one of two things to me.

11 Now, speculation, obviously, but if 2006
12 was several orders of magnitude more radioactive
13 effluent releases than normal, I can only hazard to
14 think what your refusal to release that to the public
15 in a timely fashion might mean.

16 I was summarily told that I was not going
17 to get that information. And there was probably some
18 not-so-happy feelings about that, but nonetheless I
19 think I was denied a public document because of where
20 I work and my history of long-term opposition to this
21 facility.

22 Now Andrew, he told me he would get it to
23 me right away. He was very nice. He said he'd send
24 me a CD and he'd send me the entire thing.

6-h-HH/LR (continued)

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1 So Andrew -- you'd better take a page
2 from young Andrew. He knows how to treat the public.

3 Thank you.

4 MR. RAKOVAN: Okay. Next, George
5 Crocker.

6 And again, after George we'll go to Alan
7 Muller.

8 GEORGE CROCKER: Thank you. My name is
9 George Crocker. I'm with the North American Water
10 Office, and I have a comment for the scope of your
11 environmental review relative to considering
12 analyzing, disclosing environmental impacts of
13 continued plant operation.

14 And the comment that I have relates to
15 the story you just heard about routine releases,
16 because I think that the NRC should require Prairie
17 Island and all of the other commercial reactors to
18 document where reported released radionuclides go.

19 Where do they go? I know that you do
20 monitoring. You do a lot of monitoring. If you
21 don't really know what you're looking at when you see
22 all of the little thermal luminescent dosimeter
23 mappings and where the pics are, why you say "Aha,
24 there's monitoring."

} 6-h-HH/LR (continued)

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1 in the same timeframe we had hoped. We were looking
2 to start it around June 30th; it didn't actually
3 start until I believe it was July 22nd. And so we
4 have extended the scoping period to give the public a
5 full 60 days, so I think we've already accommodated
6 that request.

7 And so with that, I just wanted to remind
8 everyone Lance had indicated that there are public
9 meeting feedback forms that were provided when the
10 meeting first started, so if there are ways we can
11 improve our meetings, make them better, do them
12 differently, please do fill out one of these feedback
13 forms and leave it on the table, or you can mail it
14 to us. The postage is pre-paid. And I know a couple
15 of you have questions; what I'd like to do is go on
16 and close the meeting and then get with you to talk
17 about your questions.

18 LEA FOUSHEE: I want this on the record.

19 MR. RAKOVAN: She wants something on the
20 record.

21 LEA FOUSHEE: The document is Routine
22 Radioactive Effluent Releases.

23 MS. FRANOVICH: Okay.

24 LEA FOUSHEE: That document -- the

} 6-i-ER/HH

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1 results of that document, the radiation that is
2 contained in that document is nowhere in the
3 application to demonstrate that there is anything
4 relating with radiation and health impact.

6-i-ER/HH (continued)

5 MS. FRANOVICH: I understand. Okay.

6 LEA FOUSHEE: It needs to be in there,
7 the routine radiation releases from Prairie Island 1
8 and 2 must be in the environmental impact statement,
9 and they are not.

6-i-ER/HH (continued)

10 And in fact there should be a historical
11 record, because the radiation doesn't just go away in
12 a year.

13 MS. FRANOVICH: I'm thinking that the
14 plants are required to submit effluent reports
15 annually to the NRC, so --

16 LEA FOUSHEE: Yes, but the application
17 should have a summary of at least the last 10 years,
18 and certainly the last 20, if possible.

6-i-ER/HH (continued)

19 MS. FRANOVICH: Point noted. But just so
20 you're -- I just want to --

21 LEA FOUSHEE: But it's not there.

22 MS. FRANOVICH: I just want to assure you
23 that the NRC staff, when we go through the
24 application, the environmental report is a starting

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The following pages contain the written comments
submitted by Katie Himanga during the scoping period
for the Prairie Island Nuclear Generating Plant
license renewal

September 10, 2008

Chief, Rules, Directives, and Editing Branch
Division of Administrative Services
Mailstop T-6D59
U.S. Nuclear Regulatory Commission
Washington, DC 20555

7/22/08
43 FR 42628
(2)

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RULES AND DIRECTIVES
BRANCH
SERVO

Chief:

This letter supplements my remarks made at the License Renewal and Environmental Scoping Review Process meeting for the proposed license renewal at Prairie Island Nuclear Generating Plant, Units 1 and 2, held July 30, 2008 in Red Wing, Minnesota.

Concerns for the Lake City community that emerged from conversation at meetings of both the Lake City Utility Board and Lake City Common Council are as follows:

1. Long-term storage of nuclear waste
2. Thermal impact of service water discharge on the Mississippi River and Lake Pepin.

7-a-AR/RW/SW

We ask that the best available water dispersion modeling be used to assess the natural ecosystem and cultural impacts of thermal discharge and that there be a plan put in place to mitigate adverse impacts. What follows is expanded development of our concerns related to thermal impacts. We recognize Lake Pepin, the Mississippi River, and its tributaries as interacting components of the world's third largest river system. The thermal plume of any water discharge has potential to impact:

Vertebrates and invertebrates. A thermal plume can have direct impacts such as changes in distribution of aquatic organisms (e.g. attracting fish to warmer water during winter), or cause indirect impacts such as increased exposure to predators (e.g. through concentrating prey fish in warmer waters during winter).

Ice. A thermal plume can affect the characteristics of ice or the length of the ice cover season on Lake Pepin. It is a safety consideration, but also cultural in that recreation on the ice is a long-standing community tradition that could be altered because of safety concerns.

Distribution of Sediment. A thermal plume can affect the hydrodynamics of a river which

7-b-AR/CR/SW

SUSI Review Complete
of template = ADM-013

E-RIDS = ADM-03

Add =
R. Plassel (RAP 10)

Birthplace of Waterskiing - 1922

then affect the distribution of sediment in the immediate channel and downstream. Water temperature affects the ability of water to carry sediment (colder water can carry more). The Pollution Control Agency, acting as it is legally required to do under the federal Clean Water Act, is working to develop a Total Maximum Daily Load (TMDL) for Lake Pepin. It is a restoration project with set goals for the dose of pollution that the river system can handle and still be used for specific purposes such as drinking water, fishing or swimming.

Dissolved Oxygen. Water temperature affects dissolved oxygen levels. Increasing water temperature decreases water's ability to carry oxygen.

Endocrine Disruptors. If a thermal plume interacts with a municipal wastewater discharge plume, organisms (e.g. catfish, smallmouth bass) congregating in the warmer water may be subject to prolonged exposure to chemicals such as those found in birth control pills.

Phytoplankton and Zooplankton. Heat can result in increased production of organisms that ultimately can lead to a decrease in light and oxygen in the river and in Lake Pepin.

Parasites. Thermal effluent has been reported to influence the prevalence and abundance of parasites of fish.

As a result of these potential impacts and affects, we ask that changes in seasonal mean temperature be assessed related to the facility upgrade for the entire dispersion plume, both in the main channel of the Mississippi River and on each shore of Lake Pepin.

Please feel free to contact me if you have any questions. I can be reached at (651)345-5383, extension 118 or at khimanga@embarqmail.com.

Sincerely,



Katie Himanga
Mayor

7-b-AR/CR/SW
(continued)

The following pages contain the comments
made by Katie Himanga during the
NRC public scoping meetings held on July 30, 2008

1 federally-recognized Indian tribe, and as such we
2 expect to work with the federal agencies, including
3 the Nuclear Regulatory Commission, on a government-
4 to-government basis, and we are pleased that the NRC
5 has approved our request for a cooperating agency for
6 purposes of preparing parts of the -- for the
7 environmental impact statement for the license
8 renewal.

9 We look forward to working with the NRC
10 over the next two years on this important issue. We
11 will be submitting extensive written comments to the
12 NRC relative to environmental and safety concerns.

13 And I thank you for this opportunity to
14 speak in front of you today. Thank you.

15 MR. RAKOVAN: Thank you, sir.

16 Next will go to Katie Himanga.

17 KATIE HIMANGA: Good afternoon. My name
18 is Katie Himanga. I'm the mayor of the City of Lake
19 City. We're located about 15 miles down river.

20 Thank you for the opportunity to say a
21 few words. The community of Lake City is impacted by
22 the Prairie Island Nuclear Plant, just as other
23 communities in the area are.

24 The Lake City Utility Board had an

7-c-RW

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1 opportunity to talk about the license renewal at its
2 last meeting, and my City Council spoke about it very
3 briefly this past Monday evening.

4 And I bring to you the top two concerns,
5 environmental concerns related to operation of the
6 nuclear plant and ask that they be considered in
7 plans for mitigation through this process.

8 First and foremost the item of concern
9 for us is the long-term storage of nuclear waste.

10 The second concern for us is the thermal
11 impacts of the discharge of water, warm water into
12 the Mississippi River, and we ask that it be
13 considered, both the impacts on the Mississippi River
14 and on the Lake Pepin ecosystem, and also its
15 cultural impacts such as how it might affect ice, for
16 example.

17 And we would ask that the best available
18 modeling be used to determine what those impacts are
19 and plans made for mitigation.

20 Thank you.

21 MR. RAKOVAN: Thank you.

22 Next we'll go to Scott Arneson.

23 SCOTT ARNESON: Thank you.

24 I'm Scott Arneson, Goodhue County

7-c-RW (continued)

7-d-AR/CR/SW

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The following pages contain the written comments
submitted by Mary Jackson during the scoping period
for the Prairie Island Nuclear Generating Plant
license renewal

From: Jackson, Mary [Mary.Jackson@CO.DAKOTA.MN.US]
Sent: Monday, September 22, 2008 5:19 PM
To: PrairieIslandEIS Resource
Cc: Beeman, Michelle; Welsch, Heidi; Chatfield, Kurt
Subject: Prairie Island Relicensing SEIS scoping comments

RE: Prairie Island Nuclear Generating Plant (PINGP) Re-licensing EIS Scoping Comments

To Whom It May Concern,

Staff from Dakota County, Minnesota prepared the following comment for the NRC's consideration,

based on review of the required SEIS scope for relicensing nuclear generation facilities and the Prairie

Island Environmental Report prepared by Xcel Energy.

- 1) No additional SEIS scope items are suggested.
- 2) Additional NRC evaluation within the pre-defined SEIS scope is suggested related to PINGP's

reliance on Mississippi River water for cooling (circulation) water. Xcel Energy's Environmental Report

refers to a future federal project near PINGP to correct a long standing navigation safety issue at Lock

and Dam 3. This lock-and-dam complex is one mile downstream of PINGP and forms Upper Mississippi

River Pool 3. The navigation safety issue is described on the U.S. Army Corps of Engineers website as

follows:

Lock and Dam 3 is a navigation dam and lock on the Mississippi River 6 miles upstream from Red Wing, Minnesota. Its position on a bend in the river makes down bound navigation difficult because of an out draft current that tends to sweep towboats and barges away from the lock toward the gated part of the dam. The out draft current has resulted in many accidents, including 11 incidents since 1968 when tows collided with the gated part of the dam. A related problem is with the low and weak embankments on the Wisconsin side.

Navigation accidents can render the four roller gates inoperable, resulting in overtopping and erosion of the embankments. The three Wisconsin side embankments divide the 8-foot head at the dam into three steps and work together as part of Lock and Dam 3.

Failure

of the embankment system could result in accidental drawdown of Pool 3 with significant economic and environmental consequences.

The Corps has stated that without repair, the Wisconsin embankments at Lock and Dam 3 are

likely to fail within the decade, causing a rapid drawdown of Pool 3. The project to correct the

8-a-AR/PA/SW

Lock 3 approach hazard and strengthen the embankments currently is in design and is partially funded. The Corps' website indicates that the project is programmed for 2010-2017 construction.

Although Xcel's Environmental Report notes the existence of this issue and the Corps' repair project, it did not identify impacts of an accidental loss of its Pool 3 cooling water supply to PINGP, how these impacts would be addressed, and possible subsequent impacts to local communities and the region.

Thank you for the opportunity to comment on the relicensing process.
Sincerely,

Mary Jackson
Senior Planner
Dakota County Office of Planning and Analysis
952-891-7039

8-a-AR/PA/SW
(continued)

The following pages contain the comments
made by Ron Johnson during the
NRC public scoping meetings held on July 30, 2008

1 of Minnesota's electric power supply system for
2 another 20 years; and

3 "Be it further resolved that the City of
4 Red Wing will present a copy of this resolution to
5 the Nuclear Regulatory Commission."

6 Thank you.

7 MR. RAKOVAN: Thank you, sir.

8 Next we'll go to Ron Johnson, followed by
9 Katie Himanga and Scott Arneson.

10 RON JOHNSON: Good afternoon. My name is
11 Ron Johnson. I'm president of the Prairie Island
12 Tribal Council and the Prairie Island Indian
13 Community.

14 I've represented my community for several
15 years, and as president I have the obligation to
16 ensure the health and welfare of the community, which
17 includes also the environment down there.

18 I'm here today as the continuing
19 operation of the Prairie Island Nuclear Generating
20 Plant is one of our most important issues for our
21 community. In fact, most community members have had
22 concerns about the plant since it went online in
23 1973.

24 The Prairie Island Indian Community is a

9-a-LR

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1 federally-recognized Indian tribe, and as such we
2 expect to work with the federal agencies, including
3 the Nuclear Regulatory Commission, on a government-
4 to-government basis, and we are pleased that the NRC
5 has approved our request for a cooperating agency for
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9 We look forward to working with the NRC
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13 And I thank you for this opportunity to
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18 is Katie Himanga. I'm the mayor of the City of Lake
19 City. We're located about 15 miles down river.

20 Thank you for the opportunity to say a
21 few words. The community of Lake City is impacted by
22 the Prairie Island Nuclear Plant, just as other
23 communities in the area are.

24 The Lake City Utility Board had an

9-a-LR (continued)

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The following pages contain the written comments
submitted by Gina Lemon during the scoping period
for the Prairie Island Nuclear Generating Plant
license renewal

Leech Lake Band of Ojibwe



*Arthur "Archie" Larose, Chairman
Mike Bongo, Secretary/Treasurer*

District I Representative
Robbie Howe

District II Representative
Lyman L. Losh

District III Representative
Eugene "Ribs" Whitebird

September 9, 2008

Chief, Rules and Directives Branch
Division of Administrative Services, MS T-6D59
US Nuclear Regulatory Commission
Washington, DC 20555-0001

*7/22/08
73 FR 42628*

①

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RULES AND DIRECTIVES
BRANCH
IS/SPC

RE: **Proposed License Renewal for Prairie Island Nuclear Generating Plant**
Goodhue County, Minnesota
LL-THPO Number: 08-169-NCRI

To Whom It May Concern:

Thank you for the opportunity to comment on the above-referenced project. It has been reviewed pursuant to the responsibilities given the Tribal Historic Preservation Officer (THPO) by the National Historic Preservation Act of 1966, as amended in 1992 and the Procedures of the Advisory Council on Historic Preservation (38CFR800).

I have reviewed the documentation; after careful consideration of our records, I have determined that the Leech Lake Band of Ojibwe does not have any concerns regarding sites of religious or cultural importance in this area. Please keep in close contact with the Prairie Island Community.

Should any human remains or suspected human remains be encountered, all work shall cease and the following personnel should be notified immediately in this order: County Sheriff's Office and Office of the State Archaeologist. If any human remains or culturally affiliated objects be inadvertently discovered this will prompt the process to which the Band will become informed.

Please note: The above determination does not "exempt" future projects from Section 106 review. In the event of any other tribe notifying us of concerns for a specific project, we may re-enter into the consultation process.

You may contact me at (218) 335-2940 if you have questions regarding our review of this project. Please refer to the LL-THPO Number as stated above in all correspondence with this project.

Respectfully submitted,

Gina M. Lemmon
Gina M. Lemmon
Tribal Historic Preservation Officer

Leech Lake Tribal Historic Preservation Office * Established in 1996
An office within the Division of Resource Management
115 Sixth Street NW, Suite E * Cass Lake, Minnesota 56633
(218) 335-2940 * FAX (218) 335-2974

gilemon@live.com or www.nathpo.org (Members since 1998)

E-RIDS = ADM-03

Add =

B. Plasse (RAPD)

*SUNSI Review Complete
Template = ADM-013*

10-a-CR

The following pages contain the written comments
submitted by Tom Lovejoy during the scoping period
for the Prairie Island Nuclear Generating Plant
license renewal



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor
Matthew J. Frank, Secretary
Scott Humrickhouse, Regional Director

West Central Region Headquarters
1300 W. Clairemont Avenue
PO Box 4001
Eau Claire, Wisconsin 54702-4001
Telephone 715-839-3700
FAX 715-839-6076
TTY Access via relay - 711

September 8, 2008

Nathan Goodman
US Nuclear Regulatory Commission
Mail Stop: O-11F1
Washington, DC 20555-0001

Subject: Prairie Island (MN) Nuclear Generating Plant (PINGP) License Renewal - EIS Issue Scoping

Dear Mr. Goodman:

Thank you for inviting Wisconsin Department of Natural Resources (WDNR) to the Nuclear Regulatory Commission (NRC) relicensing "audit" at the PINGP plant on August 20, 2008. It was very informative. At that meeting you invited WDNR to prepare and submit a list of issues we feel should be addressed in NRC's Environmental Impact Statement prepared as part of PINGP relicensing process.

1. Fish Impingement and Entrainment at Water Intake

Information should be provided describing the extent of fish entrainment and impingement at the water intake and associated fish mortality. What is the incremental effect on fish populations? What measures are in place or proposed to minimize losses?

} 11-a-AR

2. Upper Mississippi River Navigation Pool 3 Drawdowns for Habitat Enhancement

A consortium of federal and state agencies is considering use of temporary Pool 3 water level manipulations (i.e. 1-2' drawdowns) for purposes of improving aquatic habitat conditions. We have heard there may be PINGP concerns, such as for fire control or design limits of water intake structure(s), that may conflict with the idea of pool drawdowns. Please describe any such concerns and identify measures that are proposed or could be employed to prevent conflicts with any such drawdowns.

} 11-b-NS

3. Cooling Water Discharge Thermal Effects to:

A. Mississippi River Biological Resources

Describe past fish kills, particularly those associated with effluent thermal mixing during cold water conditions, resulting from past plant operations. Describe the make-up and extent of other biological resources (i.e. mussel community, etc.) in the discharge canal and Mississippi River mixing zone. What studies/monitoring has been done in effort to document thermal discharge impacts to aquatic organisms? What design and/or operational measures have been employed to minimize adverse effects and how successful have they been? What additional remedial measures are proposed or could be used to further avoid or minimize adverse impacts?

} 11-c-AR/SW



B. Mississippi River Public Recreation Use Opportunities

We have routinely received seasonal complaints from the ice fishing public that access to historic fishing areas in upper Lake Pepin is adversely impacted by warm water discharges, resulting in delayed ice formation at winter's onset and more rapid ice deterioration before spring ice-out. The EIS should describe PINGP discharge effects on winter ice cover and usability of traditional ice fisherman access points. Feasible measures to offset adverse impacts should be identified and incorporated as license conditions.

11-d-EJ/SW

4. Zebra Mussel Control Impacts to Native Mussels and Other Aquatic Resources

Best management practices for control of biofouling from zebra mussels and other exotic species continues to evolve. What measures (molluscicides, other) are currently employed to control zebra mussels and has there been any monitoring to determine if such practices result in impacts to native mussels or other aquatic life? Measures to minimize adverse impacts should be identified. Given the evolving identification of best management practice control technology the license should provide for a periodic re-assessment and an adaptive management approach to exotic species management and remedial methods.

11-e-AR

5. Identification of Planned or Foreseeable Future (over new NRC license term) Physical Improvements (i.e. new/upgraded transmission lines, new/modified water intake structures, etc.) and Any Associated Impacts in Wisconsin

Would relicensing set a precedent that would result in an interest by Xcel in constructing new or upgraded transmission lines or other physical improvements that directly or indirectly impact Wisconsin? At our meeting it was explained that no such improvements are proposed or expected and that a license condition would be incorporated indicating no such improvements would be authorized as part of relicensing. We interpret this to mean that any such unforeseen future improvements would be subject to applicable federal and/or state regulations, including NEPA if appropriate, as a separate action. Please confirm this in the EIS.

11-f-CI

As stated at our meeting I am currently the primary WDNR contact person for this project and that Mr. Nick Schaff will serve in that capacity starting in April 2009. If there are any questions regarding the above I would be happy to discuss them. I'm also available to make arrangements for WDNR fisheries, water quality or other program experts to meet with you or other NRC staff, Xcel personnel or representatives from other resource management agencies, to discuss issues of common interest.

Thank you for the opportunity to submit WDNR scoping comments for this project.

Sincerely,
TL 9/8/08

Tom Lovejoy
Environmental Impact Coordinator

cc:
Dave Siebert – Director, WDNR Office of Energy/Environmental Analysis
Nick Schaff - WCR
Gretchen Benjamin, John Sullivan, Ron Benajmin – LaX, WI
Gary Wege – US FWS, Bloomington, MN
Dan Wilcox – Corps of Engineers, St. Paul, MN
Matt Langan – MDNR, St. Paul, MN
Tim Schlagenhaft – MDNR, Lake City, MN

The following pages contain the comments
made by Joan Marshman during the
NRC public scoping meetings held on July 30, 2008

(The following text was submitted prior to the meeting:

"Permanency or Term of Storage.

"Good evening. I am Joan K. Marshman of Frontenac Station, Minnesota. I am the chair of the Florence Township Board of Supervisors and have had ongoing concerns pertaining to the permanency issues with the cask storage at the Prairie Island Nuclear Plant.

"As I stated in testimony before the Minnesota Environmental Quality Board on January 18, 1996, 'The permanency issue is a major concern for many residents of Florence Township, as it should be for the rest of the State of Minnesota.' This has been my concern for the past 12 years.

"High-level radioactive waste storage must be sited away from growing centers of population, major highways, and waterways. Waste management is the responsibility of this generation. Centralized off-site storage such as the Yucca Mountain

12-a-RW

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1 repository is by far preferable to on-site
2 storage at reactor reactor sites throughout
3 the United States.

4 "The question of permanency is still
5 unresolved. To date, the Yucca Mountain
6 repository is ten years past due in
7 accepting the first shipment of irradiated
8 fuel. The Department of Energy (DOE) had a
9 responsibility to remove spent fuel from
10 reactors beginning in 1998. Now the DOE
11 must take immediate action to ensure that
12 the necessary infrastructure is in place to
13 accept the spent fuel that is now in
14 storage on-site at all the nuclear plants
15 across the country.

16 "Thank you for considering my concerns.
17 "Joan K. Marshman, resident of Frontenac
18 Station, Goodhue County, Minnesota; Chair,
19 Florence Township Board of Supervisors.")

12-a-RW (continued)

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The following pages contain the comments
made by Alan Muller during the
NRC public scoping meetings held on July 30, 2008

1 And I might mention that -- and I might
 2 be there, but I'm here -- a study has been carried
 3 out in the vicinity of the Salem nuclear complex and
 4 other places in the country where baby teeth were
 5 collected, the teeth of babies who were born and
 6 lived some stage of their lives in the vicinity of
 7 the reactor; and people took a look to see if there
 8 was more -- were more radioactive elements in those
 9 teeth than in the teeth of babies who lived further
 10 away, and the answer appears to be yes.

11 I haven't seen the raw data, but this is
 12 certainly something that the NRC ought to take a very
 13 close look at, because it would not be appropriate to
 14 relicense a facility if doing that was going to have
 15 major negative health impacts.

16 Okay. That's what I have to say. Thank
 17 you.

18 MR. RAKOVAN: I think she's following me
 19 up here, but Carol Overland.

20 CAROL OVERLAND: That's correct.

21 Well, I'm Carol Overland, and I don't
 22 have all that much to say other than it is correct
 23 that it was really hard to get a copy of this
 24 application, and I do want to make sure for the

13-a-HH

1 and so because license renewal involves the aging of
2 a facility, our concern really is managing of that
3 aging.

4 And so recognizing that there are
5 performance issues that occur at these plants, we
6 have the reactor oversight process that evaluates the
7 significance of those and characterizes the findings
8 in a process by which the regulatory response is
9 determined.

10 Because of that and because we're
11 confident that that process is working to ensure that
12 the plants are operating safely today, we can just
13 focus on aging for license renewal.

14 BRIAN HOLIAN: Can you mention operating
15 experience?

16 MS. FRANOVICH: We also apply that
17 operating experience that we glean from those
18 performance issues to the extent they're relevant to
19 aging management. We incorporate that into our aging
20 management reviews for relicense renewal.

21 Thank you, Brian.

22 ALAN MULLER: Well, I'm not particularly
23 familiar with the operating history of these two
24 reactors, but it does seem to me what you said has

} 13-b-LR

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1 the effect of inappropriately narrowing the
2 re-licensing proceeding almost to the point of
3 tending to render it meaningless.

} 13-b-LR (continued)

4 MS. FRANOVICH: I understand your view.
5 I understand your view on that.

6 ALAN MULLER: Okay. Thank you.

7 MS. FRANOVICH: Umhum.

8 MR. RAKOVAN: Any other --

9 Yeah, sure. Why not.

10 Unfortunately, I don't have a handheld,
11 so I have to use this lapel.

12 Please introduce yourself.

13 KIRSTEN EIDE TOLLEFSON: I'm Kirsten Eide
14 Tollefson, and I live down in Frontenac, which is
15 about 10 miles down river, 10, 15 miles down river.

16 And I'm a little confused as to whether
17 or not I am part of the scope. I mean I've been
18 involved in Prairie Island reactors. In Frontenac we
19 had our own review process down there for waste, and
20 we had a very difficult time being recognized for
21 notice. Our newspaper, the Lake City Graphic, which
22 is one of closest newspapers, was not on the notice
23 list in the application and in fact never received
24 notice.

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1 concentration points may be, what is the dispersion
2 pattern, are they living within that pattern.

3 And so, please, let's get serious. If
4 this is going to be a technology that's going to be
5 with us for a while -- I have no illusions that until
6 something heads south real fast, which could happen
7 anytime, that we're going to continue living with
8 this threat, but let's at least inform ourselves
9 about what it is. You do not have the right to
10 conceal from the public where the routine reported
11 emissions go. Thank you very much.

12 MR. RAKOVAN: Thank you, sir.

13 Next we'll go to Alan Muller and then to
14 Carol Overland.

15 ALAN MULLER: I brought these
16 (indicating) up because these are the paper copies of
17 the license renewal, at least that which has been
18 released to the public. It's not particularly light
19 reading, but I have had a chance to review some of
20 it, and it seems to me that what is in here raises a
21 great many more questions than are answered.

22 And in fact it answers a lot of rather --
23 if you look in the index, you can see many references
24 to electrical connections and other design and

13-c-ER/LR

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1 engineering details; but if you look for something
2 like health effects, this application is silent. At
3 least it's silent to me. Perhaps I missed something.

4 But as Ms. Overland commented, it has not
5 been particularly easy to obtain copies of this. It
6 certainly required some agitation on her part to
7 obtain this one, which I borrowed.

8 And I'm wondering -- and I guess this is
9 question -- if the applicant is expected by the NRC
10 to provide copies of the applications to interested
11 citizens, you might want to --

12 Can I -- is it appropriate for me to pose
13 that as a question?

14 MR. RAKOVAN: We're kind of taking
15 comments right now.

16 ALAN MULLER: Okay.

17 MR. RAKOVAN: I mean if you want, we can
18 handle that after the period, but we were -- I think
19 we're just looking for specific comments right now,
20 if you don't mind, sir.

21 ALAN MULLER: Okay. My comment, then, is
22 that the applicant ought to provide copies of the
23 application to anybody who wants one. I suppose it
24 costs a few bucks to reproduce these two books, but

13-c-ER/LR (continued)

13-d-LR

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1 there are other prices that will be paid by the
2 residents of the world for the continued operation of
3 this facility.

13-d-LR (continued)

4 Now, one of the interesting things in
5 this book is that the one operating license expired
6 in 2013 and the other one in 2014. That's not very
7 far from now, and it's difficult not to form the
8 impression that the license renewal is regarded as a
9 done deal, because it's a little bit hard to believe
10 that in fact if there was a serious possibility that
11 that wasn't to be approved, that NSP is actually
12 prepared to carry out the process of shutting the
13 facility down and obtaining substitute sources of
14 power.

13-e-SD

15 I have looked at the filed resource plan
16 of Xcel, and there was no mention of the possibility
17 that the facility might not be allowed to continue to
18 operate. In fact, contained in their resource plans
19 are the assumption that the electrical output is
20 going to be increased by some tens of megawatts from
21 each reactor.

22 Now, I also noticed an interesting item
23 in here, and this is page 2.1-9, and it's section
24 2.1.1.5.2. It says "Fuel transition." And I'll read

13-f-OS

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1 this paragraph to you:

2 "A licensed amendment request requesting
3 NRC approval for the transition to a new fuel type
4 for use in Prairie Island Units 1 and 2 reactors is
5 expected to be submitted concurrent with the NRC
6 review of the license renewal application. A review
7 of the effect of the transition to a new fuel type on
8 the LRA has been completed with the following
9 results:

10 "Scoping the transition to a new fuel
11 type will have no effect on the application of the
12 system scoping criteria or the results of system
13 scoping," and so on and so forth, which to me says in
14 nuclear regulatory lingo that this is another major
15 aspect relating to the continued operation of this
16 plant that is being handled in isolation from the
17 license renewal, and that's not appropriate.

18 If anyone is going to make an informed
19 judgment about whether this facility ought to
20 continue to operate, that ought to include the future
21 plans for changes there. How do we know that a,
22 quote/unquote, "new fuel type" doesn't pose
23 additional hazards or whatever that we don't know
24 anything about?

13-f-OS (continued)

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1 Very likely that might involve, you know,
2 the use of plutonium in the plant, plutonium mixed
3 with something else, and that has a whole range of
4 implications of its own.

5 So I think as always seems to me to be
6 the case with the NRC, there's sort of a blinders-on
7 proceeding here, which, unless one is very
8 persistent, has more the effect of obscuring what's
9 going on than shedding light on it.

10 Now, just a couple of comments and then
11 I'll shut up.

12 There's mention here of environmental
13 justice as something to be considered within a
14 50-mile radius of the site.

15 Now, in my world, in my concept of this,
16 it seems obvious that if the plant is going to
17 operate for 20 more years, that's going to result in
18 the mining and processing of more uranium; and the
19 doing of that is going to have major health impacts
20 that are far beyond 50 miles.

21 It's going to have impacts in Navajo
22 communities many hundreds of miles away from here. It
23 may have impacts in the state of Virginia, where
24 uranium mining is being proposed. And anybody who

13-f-OS (continued)

13-g-UR

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1 knows thing anything about uranium mining knows that
2 it's left a trail of sick and dying people behind it.

3 So my suggestion is that the NRC ought to
4 forget about this 50-mile business and look at the
5 actual impacts of the continued operation of these
6 two nuclear reactors.

7 Now, looking a little bit further down
8 the fuel cycle, it's obvious that more nuclear waste
9 is going object generated by 20 more years of
10 operation and that something is going to happen to
11 that.

12 If in fact, as seems unlikely to me, what
13 happens is that it ends up in Nevada at a proposed
14 nuclear waste dump there, that will certainly have an
15 impact on people in that area. And there are many
16 opinions about that that have been expressed by the
17 State of Nevada's Nuclear Projects Office, the
18 congressional delegation from that state and so on.
19 Also, by the western Shoshone, who live in the area
20 and whose concerns have been disregarded by the
21 federal agencies that are trying to permit that
22 nuclear dump.

23 So my testimony to you now is that those
24 impacts in additional nuclear waste disposal ought to

13-g-UR (continued)

13-h-RW

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1 be fully considered in the relicensing proceeding for
2 Prairie Island.

13-h-RW (continued)

3 Now, maybe that's all that I should take
4 the time to say, but another interesting aspect of
5 this application is the consideration of
6 alternatives, which is something that's required
7 under the National Environmental Policy Act. And the
8 alternatives that are brought forth by NSP or Xcel in
9 the application are burning gas, burning coal, and
10 purchased power.

11 But that does not strike me as an
12 appropriate scope of alternatives to be considered.
13 The investment that would go into the continued
14 operation of this plant could go into demand side
15 management activities such as load response and
16 conservation and efficiency programs; it could go
17 into solar-thermal electricity-generating facilities;
18 it could go into electrical storage facilities to be
19 associated with the growing wind industry in
20 Minnesota.

13-i-AS

21 There are lots of alternatives, all of
22 which would make more sense -- or many of which would
23 make more sense than coal and gas and purchased
24 power; and the impression one gets from reading the

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1 discussion of alternatives is that the applicant has
2 chosen his alternatives carefully in order to support
3 the conclusion that the plant should continue to
4 operate.

5 But I think the NRC has broader
6 responsibilities to the public and should extend the
7 scope of the review of alternatives far beyond what
8 we've seen in the application.

9 I mentioned earlier that there's little
10 or nothing in here said about health effects; but as
11 Mr. Crocker pointed out, quite rightly, there is a
12 continuous release of radioactivity from this kind of
13 a facility, particularly release of radioactivity
14 into the Mississippi River and also into the air
15 breathed by the community, the host community for the
16 facility.

17 So there ought to be a full evaluation of
18 the cumulative health impacts of an additional 20
19 years of radioactive releases from these two
20 reactors, and it ought to be a real review, not a
21 review carried out by a certain establishment of
22 tamed scientists who believe with religious intensity
23 that radiation is either harmless or perhaps it's
24 even good for you.

13-i-AS (continued)

13-j-HH

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12 certainly something that the NRC ought to take a very
13 close look at, because it would not be appropriate to
14 relicense a facility if doing that was going to have
15 major negative health impacts.

16 Okay. That's what I have to say. Thank
17 you.

18 MR. RAKOVAN: I think she's following me
19 up here, but Carol Overland.

20 CAROL OVERLAND: That's correct.

21 Well, I'm Carol Overland, and I don't
22 have all that much to say other than it is correct
23 that it was really hard to get a copy of this
24 application, and I do want to make sure for the

} 14-a-LR

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1 record that everyone who requests an application
2 should get an application.

3 There aren't that many of us odd people
4 that like to read this stuff, and if we really want
5 to put the time in, give us the application. It will
6 make your lives a lot easier.

7 And actually, you know, Alan Muller
8 addressed many of the things I wanted to raise, but
9 as far as replacement power goes, there was this
10 great study a while back -- Kirsten Eide Tollefson
11 will remember it -- of the Prairie Island replacement
12 power using a wind/gas combo.

13 Was that wind/gas? It was. Right?

14 Anyway -- right.

15 KIRSTEN EIDE TOLLEFSON: It was a
16 conversion, a gas conversion.

17 CAROL OVERLAND: Right.

18 KIRSTEN EIDE TOLLEFSON: It was an
19 integrated resource plant.

20 CAROL OVERLAND: So it was strictly gas?

21 MR. RAKOVAN: Miss, if you're going to
22 talk, I'm going to have to get you on the transcript.
23 I'm sorry.

24 CAROL OVERLAND: Oh. Well, I'm just --

14-a-LR (continued)

14-b-AS

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1 I'm trying to make sure -- I referred to -- I thought
2 it was a wind/gas combo, but maybe I'm not right.
3 Maybe it was just gas conversion. But we'll get a
4 copy of that into the record, so that will show one
5 more alternative that is possible.

6 And speaking of wind/gas conversions, I
7 also want to bring up that that is a very real
8 possibility, and the state of Delaware has just
9 ordered an off-shore wind project, and that's to have
10 gas back-up to make it for power. If Delaware can do
11 it, Minnesota can do it. You know, there are things
12 that we can do that are alternatives to this.

13 And I'll submit further comments by the
14 deadline.

15 And as far as notice goes, you know, this
16 obviously is a problem. Many of us did not get
17 notice who have been participating in nuclear issues
18 for a long time.

19 And because of that, the comment period
20 should be extended at least as long as the defective
21 -- the notice was defective. So if notice didn't go
22 out until the 25th and should have gone out when,
23 extend it the other way. That only fair.

24 Thank you.

14-b-AS (continued)

14-c-LR

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The following pages contain the written comments
submitted by the Prairie Island
Indian Community during the scoping period
for the Prairie Island Nuclear Generating Plant
license renewal

Ronald Johnson
President

Lucy Taylor
Secretary



Johnny Johnson
Vice President

Victoria Winfrey
Treasurer

Shelley Buck-Yeager
Assistant Secretary/Treasurer

September 22, 2008

Chief, Rulemaking, Directives and Editing Branch
Division of Administrative Services
Office of Administration
Mailstop T-6D 59
US Nuclear Regulatory Commission
Washington, DC 20555-0001

RE: Environmental scoping for the relicensing of the Prairie Island Nuclear
Generating Plant, Units 1 and 2

Dear Rulemaking, Directives, and Editing Branch Chief:

The Prairie Island Indian Community (Community or Tribe) would like to offer the following suggestions and comments regarding the scope of the draft Supplemental Environmental Impact Statement (SEIS) that will be prepared by the US Nuclear Regulatory Commission (NRC) for a 20-year operating license extension, as required by the National Environmental Policy Act (NEPA). The comments are offered in response to the notice in the Federal Register on July 22, 2008 (73 FR 42628).

It should be noted that views expressed in this document are the views of the Tribal Council, on behalf of the Community. Individual community members, of course, are free to express their own views, which may or may not be the same. Individual tribal members may express their concerns in writing.

Community Background

The Prairie Island Indian Reservation is located on Prairie Island, which is formed at the confluence of the Vermillion and Mississippi Rivers in southeastern Minnesota (approximately 35 miles SE of the Twin Cities of Minneapolis and St. Paul, MN). The size of the Prairie Island Indian Community has grown through several federal reorganization acts and direct purchases by the Tribal Council, and now totals over 3,000 acres (land and water) (Figure 1).

The United States Congress passed "The Prairie Island Land Conveyance Act of 2005," which transferred an additional 1300 acres of US Army Corps of Engineers land (approximately 485 acres of forested wetlands and prairie and approximately 819 acres of

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open water) to the Prairie Island Indian Community. These tribal lands provide a diverse habitat for fish and wildlife, including open prairie, forested wetlands, shrub swamps, and many other palustrine wetland types. In addition, this area is part of the Mississippi River flyway that provides resting and feeding areas for many migratory bird species.

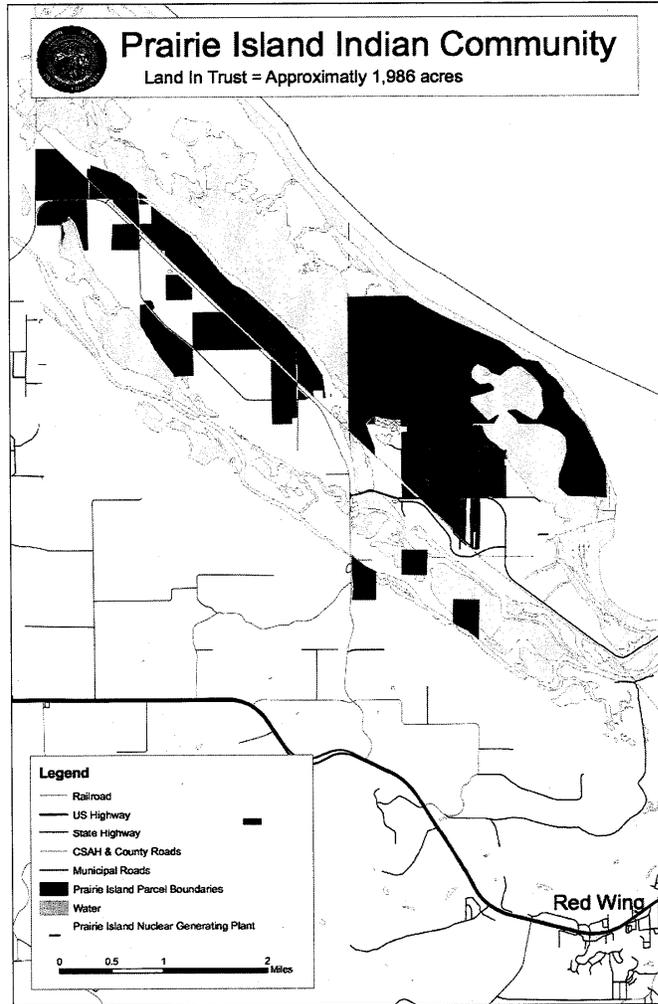


Figure 1

The Mdewakanton, “those who were born of the waters,” have lived on Prairie Island for countless generations.¹ Archaeological evidence, including village sites and burial mounds, conclusively demonstrate that Prairie Island has been a place of historical and cultural significance for thousands of years. In more recent times, descendants of those earliest known inhabitants, the members of the Mdewakanton Dakota (Sioux), traditionally used Prairie Island as a summer encampment for fishing, hunting and raising crops. At least by the late 1880s, a small permanent Mdewakanton settlement was established. Congress appropriated funds and purchased land for the Mdewakanton on Prairie Island in the late 1880s. The Prairie Island Indian Community was formally organized under the Indian Reorganization Act of 1934, additional lands were acquired, and a formal reservation established. A tribal constitution and bylaws were approved by the Secretary of the Interior in 1936. The Prairie Island Indian Community is governed by the Community Council (sometimes referred to as the “Tribal Council”), which is comprised of five elected tribal members who each serve a two-year term.

Our community has grown substantially since the plant first went on-line in 1973. There are now 767 enrolled band members; approximately 250 members reside on tribal lands within 2 miles of the PINGP. We expect our enrollment to double over the relicensing period. The Prairie Island Indian Community owns and operates the Treasure Island Resort and Casino, which employs more than 1,500 people. In addition, the Community owns and operates a RV Park and a Marina, which attract many hundreds of visitors during the summer months. On any given day there may be as many as 9,000 visitors to our Community.

General Environmental Report Comments

We understand that the NRC will be developing a Supplemental Environmental Impact Statement (SEIS), as part of its review of the application to renew the operating licenses of the Prairie Island Nuclear Generating Plant (PINGP), Units 1 and 2. The starting point for the SEIS is the Environmental Report (ER) submitted by the Nuclear Management Company (NMC) with the application for license renewal. The Community is deeply

} 15-a-ER

¹ The Prairie Island people are part of a larger group called the “Dwellers of the Spirit Lake,” in the Dakota language the Mde wakan ed otunwahe. Over the years this name has been shortened to Mdewakantonwan or Mdewakanton (pronounced M'DAY-wah-kahn-tahn). The Mdewakanton are one of the seven sub-tribes who make up the alliance called Oceti Sakowin - the Seven Council Fires. Most of the world knows our alliance as the Sioux, which comes from an Ojibwe word nadowessi – “Little snakes.” The French changed it to Nadowesioiux or simply Sioux. We call ourselves Dakota, Lakota, or Nakota, a word that means “allies” or “friends” in all three dialects. The Dakota/Lakota/Nakota have reservations in the states of Minnesota, Nebraska, South Dakota, North Dakota, and Montana, and in the Canadian provinces of Manitoba and Saskatchewan.

concerned about the general lack of attention given to the Community in the ER by NMC and its parent company Xcel Energy.

Overall, the ER minimizes the presence of the Tribe, tribal land-holdings, the tribal population, and tribal resources. For example, Section 2.1 of the ER (General Site Description) makes no mention of the Community but mentions other governmental units. The Community is mentioned in Section 2.1.2, PINGP Site Features. The Prairie Island Indian Community, however, is not a feature of the PINGP. Our lands and people pre-date the existence of the PINGP. Furthermore, no detail is provided on Community land holdings, water supply system, home sites, and population, Figure 2.1-2 does not correctly show the Community's lands. We have included Figure 1 that more accurately identifies the Tribe's land holdings. Other examples of the lack of data on impacts to the Community are the absence of information on Community demographics, including population growth, the tourist population related to the Community's casino, hotel, and marina. The fact that Treasure Island is Goodhue County's largest employer is also overlooked. Moreover, there is no treatment of the Community's land use planning activities, although the land use plans of other governmental units (Goodhue and Dakota Counties in Minnesota and Pierce County in Wisconsin) in the vicinity of the site were evaluated.

15-a-ER
(continued)

Trust Responsibility of the Federal Government

Although it was written in 1996, at a time when most federal agencies had well-developed and well-implemented Indian policies, the Generic Environmental Impact Statement (GEIS, NUREG-1437), the basis of the SEIS, does not recognize or mention Tribes or tribal sovereignty. Federally recognized Indian Tribes are governments, with unique legal and political standing and rights. Indian Tribes enjoy a Government-to-Government relationship with the Federal Government, including the NRC.

In June of this year, the Prairie Island Indian Community entered into a Memorandum of Understanding (MOU) with the NRC that established a cooperating agency relationship for the purpose of preparing the SEIS for the renewal of the licenses for the PINGP, Units 1 and 2. The Community's Cooperating Agency status, as it relates to the development of the SEIS, is limited to four areas: Historic and Archeological Resources; Socioeconomics; Land Use; and Environmental Justice. The tribe recognizes that the agreement is the first of its kind within the NRC and would not have been developed had the NRC not taken its Trust responsibility to the Prairie Island Indian Community seriously.

15-b-LR

Although most of the comments and suggestions in this letter are outside our four areas of the MOU, they are just as important to the Prairie Island Indian Community. We believe that all things are related, "Mitakuye Oyasin,"² and that one cannot separate one

² Mitakuye Oyasin, literally translated, means "to all my relations" or "we are all related." Mitakuye Oyasin is a prayer, an acknowledgement, that honors the sacredness of all people and of all life.

aspect of the environment from another. In other words, our Community's health and well-being are dependent upon the health of the natural environment—the water, the fish, the birds, the air, the plants, are all interrelated as part of an ecosystem that is Prairie Island.

15-b-LR (continued)

We believe that the NRC's SEIS should clearly set forth the scope and role of the NRC's Trust responsibilities to the Community in the license renewal process, including, among other things, and whether and to what extent the NRC believes that the Trust responsibility applies to both Category One and Category Two issues.

15-c-LR

Category One Issues

While Category 1 issues are generally excluded from disclosure by NRC regulations, the Community continues to be concerned about the future impacts of these issues. The Community has provided some "new and significant" information relative to the storage of spent fuel and health impacts.

Human Health and Radiological Exposure

The Community recognizes that radiological exposure is a GEIS Category 1 issue. Nevertheless, community members remain concerned about their chronic exposure to low-level radiation. Many of our community members have been living on Prairie Island since the plant went on-line in 1973. Community members typically do not move in and out of the community. We are concerned about the human health effects from 60 years of low-level exposure (the original licensing period and the extended licensing period).

15-d-HH/EJ

In addition, community members may have exposure pathways (water, food, air) that may be different from typical or "average" population in the area surrounding the plant, thereby placing the tribal population at greater risk. For example, many tribal members consume native plants for traditional purposes (direct consumption, medicines, teas, ceremonies) that are not typically part of Xcel's or the State of Minnesota's monitoring programs.

The ER does not address the issue of tritium contamination of the Community's wells. According to the 2007 Annual Radiological Monitoring Program (REMP) report (for PINGP) submitted to the NRC (May 13, 2008), wells PIIC-02 (1773 Buffalo Slough Rd.) and PIIC-26 (1771 Buffalo Slough Rd.) had Tritium concentrations of 65 pCi/L and 62 pCi/L, respectively (sampled July 2007). Well P-24D (Sueter residence) has tritium concentrations less than 23 pCi/L and all other off-site wells have tritium concentration less than 19 pCi/L.

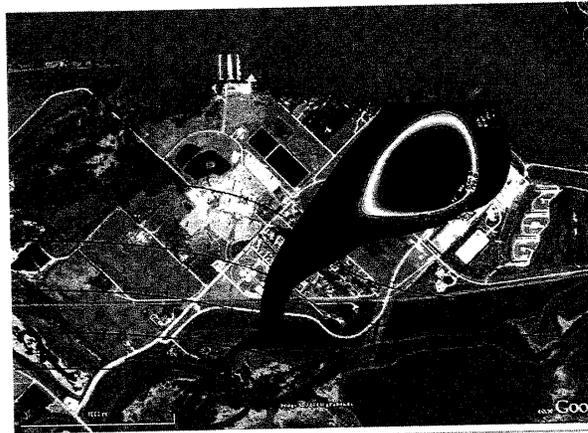
15-e-GW

According to the report, in July 2007, many onsite wells have Tritium concentration greater than 65 pCi/L. We understand that the levels of tritium found in our groundwater are below the US Environmental Protection Agency (EPA) standard of 20,000 pCi/L. Nevertheless, the tritium is there and we did not ask for it to be there.

Figure 2, below, represents a simulated groundwater modeling showing the movement of tritium from the PINGP towards the Prairie Island Indian Community. The Community respectfully demands a full and complete disclosure of the monitoring data for all tritium and other radiological contaminants for each well or other monitoring location, and not simply monthly, quarterly or annual averages for individual wells. This data is critical to identify and baseline accidental and planned releases of tritium and other radiological contaminants, and to facilitate the Community's preparation of exposure scenarios, scenario analysis, and computer modeling of all environmental pathways for tritium contamination.

7

**Scenario 3:
Simulated Geology-Driven Groundwater Contamination**



Mississippi; PI-NGP

Sept. 2008

15-e-GW (continued)

Figure 2.

Other concerns related to site-specific observations and review of past annual REMP reports for the PINGP include the following:

- There was no REMP made available to PIIC for 2006. This was also stated by a participant at the July 30, 2008 evening EIS scoping meeting (see meeting transcript, ADAMS ML0824900514);
- No information on tritium concentrations in the onsite and off-site wells was provided in the years prior to 2007;
- No follow-up sampling of PIIC wells was performed;

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- Proximity of PIIC wells to the plant merits their regular sampling for tritium concentration amongst others;
- Closeness of wells PIIC-02 and PIIC-26 appears to confirm the consistency of the tritium concentration at the order of 100 pCi/L, which is slightly less than the level of tritium concentration found in onsite wells reported in the range of 100 pCi/L to 2200 pCi/L for P-2, P-109, P-7, P-11, PZ-2, SW-4, and especially P-10 reported for every month of 2007 in the range of 390 pCi/L to 2258 pCi/L;
- The lower limit of detection (LLD) for analysis seems to vary from year-to-year (What is the reason for the fluctuation and increase of the LLD? How can it be that as technology improves the LLD would increase?);
- The higher tritium concentration in onsite wells indicate that PINGP is the tritium source of PIIC wells (see Figure 2);
- No explanation was provided for off-site residence well contamination of tritium since 1989;
- Even though the REMP report states that the tritium results are far below the EPA drinking water standard of 20,000 pCi/L, BEIR VII 2006 on radiation health effects state that Linear No Threshold standard should apply to chronic low dose exposure for potential cause of cancer and other radiation-induced diseases;
- Even though the REMP report states that the tritium results are far below the EPA drinking water standard of 20,000 pCi/L, new and significant studies and analysis (discussed more fully below) raise significant concerns about the safety of even low dose exposure, raising the question of what NMC and the NRC are doing to “continuously evaluat[e] the latest radiation protection recommendations from international and scientific bodies to ensure the adequacy of the standards the agency uses,” in accordance with the US NRC Fact Sheet of July 2006;
- The problems of tritium contamination of nearby water reported in the PINGP REMP 2007 may be similar to tritium contamination observed at other aging US nuclear power plants, raising the concern that these tritium leaks will increase in frequency and severity (see “Leaks at nuclear plants a growing trend? Regulators to hear concerns about water tainted by low-level radiation,” Miguel Llanos, April 5, 2006, available at <http://www.msnbc.msn.com/id/11996239/>); and
- Whether and to what extent NMC and the NRC have modified or improved their respective programs and procedures to inspect and assess the equipment and structures at PINGP that have the potential to leak tritium in response to the US NRC Fact Sheet of July 2006;

15-e-GW (continued)

- Whether and to what extent NMC and the NRC have modified or improved their ability to evaluate NMC's abilities to analyze for additional discharge pathways, such as groundwater, as a result of a spill or leak in response to the US NRC Fact Sheet of July 2006.

15-e-GW (continued)

Given the above information, the EIS scope must be expanded to disclose the possible impacts of PINGP to the Community, especially as it relates to health effects, particularly the exposed critical subpopulations such as children and pregnant women.

15-f-HH/EJ

Section 4.2.5 of Appendix E – ER for the PINGP license renewal application must be regarded at best as incomplete at this time pending additional information and further investigation.

15-g-ER

The SEIS must include an accurate quantification of radiological impacts to the members of the Prairie Island Indian Community—from all sources. At a minimum, the SEIS should include all data associated with all tritium and other radiological releases (accidental and planned), and all of the data for each well or other monitoring location (and not simply monthly, quarterly or annual averages for individual wells). This data is critical to identify and baseline accidental and planned releases of tritium and other radiological contaminants, and to facilitate the Community's preparation of exposure scenarios, scenario analysis, and computer modeling of all environmental pathways for tritium contamination.

New and Significant Information – Increased Risk of Cancer

The current and continued operation of the PINGP is one the most, if not the most important environmental and health concerns for the Prairie Island Indian Community. Past and current Tribal Council members have voiced their concerns about health impacts stemming from planned and unplanned radioactive releases. As set forth below, the Community is already conducting its own examination of current peer reviewed studies pertaining to nuclear power plants and health impacts.

15-h-HH

A number of studies have reported elevated rates and/or risks for cancer experienced by populations residing proximal to nuclear facilities. Many of these studies were completed subsequent to the release of the GEIS (NUREG 1437) and can be considered as new and significant information.

In particular, elevated rates of leukemia have been observed among populations in England (Gardner et al, 1987), Spain (Silva-Mato et al, 2003) and Germany (Hoffmann et al, 2007; Spix et al, 2008; Kaatsch P, Spix C, Schulze-Rath R, et al, 2008).

The most recent of the above studies involving populations residing in the vicinity of 16 German nuclear power plants (the Kikk study) are among the methodologically strongest studies that have to date been completed (BFS 2007).

The KiKK study included all 16 large reactor locations where 20 nuclear power plants in Germany were in operation during the 24-year period of study (1980 - 2003).

The distance between the children's homes and the power plants was precisely determined to within 25 meters (or approximately 82 feet). The main questions posed by the study were: "Do children under five years of age more frequently develop cancer when living near a nuclear power plant?" and "is there a negative distance trend?" (In other words: is the risk greater the nearer the child lives to the plant?) The results showed not only a 60% increase in the cancer rate and a 117% increase in leukemia in infants within the 5 km radius (or approximately 3 miles), but also a significant increase in the risk of cancer and leukemia the closer one lived to the nuclear power plant.

In the second part of the study, which covered a shorter period of time and a selection of diagnoses (leukemia, lymphomas and tumors of the central nervous system), it was tested whether other risk factors (confounders) could have had any appreciable effect on the main result of the study - the negative distance trend. This proved not to be the case for any of the studied risk factors. The proximity of residence to the nuclear power plant remains the only plausible explanation at this time.

Recently, results were also reported for a comprehensive meta-analysis (Baker and Hoel, 2007) concerning leukemia in children living near nuclear power plants contained in 17 international studies carried out in Germany, Spain, France, Japan and North America during the period between 1984 and 1999. Distance dependent increased risks of 14%-21% for leukemia in children under nine years of age were observed. When age was expanded to include the population up to 25 years of age, an increased probability of morbidity of 7-10% and increased mortality of 2-18% were observed.

Taken together, these studies are consistent with the hypothesis that children who live near nuclear power plants develop cancer and leukemia more frequently than those living further away. If emissions have been correctly measured by monitoring the areas surrounding nuclear installations, as has been claimed by both the plant operators and the regulatory authorities, then either the currently accepted calculation models for determining radiation exposure of local residents are incorrect, or the biological effects of incorporated radionuclides have been badly underestimated, at least for young children and embryos (human fetuses).

The indications over many years that there are increased levels of morbidity near to nuclear power plants are given added support by results of the KiKK study. The possibility of an increased risk for older children and adults living near nuclear power plants cannot be ruled out. It is important to point out that the radiation health standards established by BEIR VII are consistent with the above research findings regarding both cancer and non-cancer health outcomes given any level of low dose exposures. Furthermore, the BEIR VII committee also concludes "that the current scientific evidence is consistent with the hypothesis that there is a linear, no-threshold dose-response relationship between exposure to ionizing radiation and the development of cancer in humans." In other words, there exists general consensus on the radiation health risks by

15-h-HH (continued)

exposure and living near nuclear power plants. Consequently, the most effective mitigation of such risks will rely on either 1) avoiding the area surrounding the plant, or 2) reducing the nuclear energy operational level, or 3) implementing risk management options based on the mechanistic understanding of cancer or non-cancer epidemiology.

A number of studies have observed that risk of leukemia for children under the age of 5 increases with decreasing distance of residence from nuclear power plants in Germany, the United Kingdom and in the United States (Hoffman, et al, 2007 and Kaatsch, et al, 2007).

The KiKK & USC studies are among the strongest methodologically speaking and utilize state-of-the-art epidemiological methods.

The methodology of modeling the continuous distance variables is adequate. Models applied in the studies show good adaptation to the collected data. The models permit an assessment of the incidence risks associated with distance of the home to the nearest nuclear power plant site.

The risk to contract childhood cancer and leukemia significantly and continuously increases with increasing vicinity of the home to a nuclear power plant. The studies are the methodically most elaborate and comprehensive investigation of this interrelation worldwide. The association between vicinity of the home and increased risk of leukemia has been observed repeatedly in well-designed studies in Germany, the USA and UK.

The causal role of ionizing radiation in these studies remains to be investigated using state-of-the-art genomic, molecular and cellular diagnostics and testing technologies that have only recently become available for medical and healthcare research. The estimated exposures are far below those levels that are known to be leukemogenic or carcinogenic. Some of the associations are ecologic in nature, individual dosimetry is lacking and potentially important confounders such as competing risks (exposure and disease), length of residence, etc., are not measured. These factors can be further examined for site-specific information and data to improve on recent research findings concerning the PINGP operations and on-site waste management practice.

Waste and Waste Confidence

The Prairie Island Indian Community remains concerned about the on-going operation of the PINGP and Independent Spent Fuel Storage Installation (ISFSI). We recognize that the NRC licenses these two facilities separately and that spent fuel storage is beyond the scope of the license extension application. We believe that the two issues are, however, linked.

The Commission's GEIS on the License Renewal of Nuclear Plants, NUREG-1437, states that "...the original target date for opening the repository will not be met ...DOE now expects that a geologic repository will be ready no sooner than 2010." (NUREG-1437). This target has, unfortunately, been pushed back considerably. The Commission

15-h-HH (continued)

15-i-RW

has only recently docketed the Department of Energy (DOE) application for a license for the repository. The NRC has three years from the date of docketing, and an additional year if necessary, to evaluate the DOE license application. It is almost certainly going to take this long, given the complexity and controversial nature of the repository licensing decision. If the Commission reaches a favorable decision on the license application, it will be several more years before the repository is constructed and ready to receive shipments of spent fuel for disposal. This assumes that there will not be the substantial delays that often occur in large-scale construction projects. In addition, the upcoming Presidential election could have a significant impact on the project. As DOE noted in its recent Congressional testimony "...significant reductions in appropriated funding for FY2007 and FY2008 had negated DOE's ability to meet the March 2017 best achievable opening date [for the Yucca Mountain repository]." (emphasis added). Testimony of Edward F. Sproat III, Director of DOE's Office of Civilian Radioactive Waste Management (OCRWM), House and Senate Appropriations Hearing, April 9 – 10, 2008.

The end result of all of this uncertainty is that the Community may have to live with the onsite storage of spent fuel at PINGP for decades, especially if the license for PINGP is renewed. It is time for the Commission to revisit its Waste Confidence Decision and to seriously explore whether there other alternatives to Yucca Mountain for removing the spent fuel from PINGP. This falls into the category of "new and significant" information, although it is certainly not "new" anymore. Concerned citizens and governments have been raising this issue for a number of years in regard to many reactor license renewal applications. Both the Waste Confidence Decision and the GEIS conclusions are seriously in question and should be revisited before any Commission decision on whether to renew the license for PINGP.

As the GEIS noted, the total accumulated amount of spent fuel after an additional 20 years of operation at an individual reactor would amount to 50% more fuel than at the end of 40 years of operation. (NUREG-1437) Even with this large increase, the NRC has determined in its Waste Confidence Decision that spent fuel can be stored on-site for at least 30 years beyond the licensed (and license renewal) operating life of nuclear power plants safely and with minimal environmental impact. However, the GEIS also notes that a second repository will be necessary because of the statutory limitation of 70,000 metric tons uranium (MTU) for the first repository. The GEIS concluded that "...[a]ssuming that the first repository is available by 2025, additional disposal capacity would probably not be needed before about the year 2040 to avoid storing spent fuel at a reactor for more than 30 years after the expiration of operating licenses." NUREG-1437). The 2025 date matches the Commission's second finding in the Waste Confidence Decision, i.e., that the Commission finds reasonable assurance that at least one mined geologic repository will be available within the first quarter of the 21st century and that sufficient repository capacity will be available within 30 years beyond the licensed life for operation (which may include the term of a revised or renewed license) of any reactor to dispose of the commercial high-level radioactive waste or spent fuel originating in that reactor and generated up to that time. Given the difficulties associated with docketing the application for the first repository, this finding no longer appears to be reasonable and should be re-examined, either in the EIS for the PINGP license renewal,

15-i-RW (continued)

or in a re-opening of the Waste Confidence Decision. It is conceivable, if the Yucca Mountain repository does not survive the Commission's license evaluation, that a repository may not be available until 2060. This would approach or exceed the "thirty years after the expiration of the operating license" for many plants.

15-i-RW (continued)

If the Commission does not see fit to re-open the Waste Confidence Decision, the Community will take the lead, in coordination with other governmental entities concerned about this issue, in submitting a petition for rulemaking to re-open the Waste Confidence Decision. If the Commission does re-open the Waste Confidence Decision, either on its own, or in response to a Petition for Rulemaking or some similar stimulus, the Community requests that the PINGP license renewal be proceeding be suspended until the Commission issues a new Waste Confidence Decision. It would not be prudent to renew any operating license during the pendency of an evaluation of the Waste Confidence decision that might reach a conclusion apposite to the present findings. If the present findings are re-affirmed, the license renewal proceeding could be re-opened with little impact on the license applicant.

15-j-RW

In addition, the NRC SEIS on the license renewal application must develop alternatives, including a no action alternative, as contingencies, in case NMC either does not receive approval from the Minnesota Public Utilities Commission (PUC) for the expansion of the Independent Fuel Storage Installation (ISFSI), or does not receive approval for an amendment of its license from the NRC for the same purpose. (Note: the needed state-level approvals are discussed later in this letter).

15-k-AS

Avian Mortality and Transmission Lines

Section 3.1.6.3 of the ER discusses avian mortalities that have resulted from the collisions from transmission lines. The ER noted that over a five-year period (1973–1978) 453 bird carcasses, representing 53 species, were found along portions of the transmission lines from the PINGP. Sixty-four percent of those carcasses were found along the 2,500 foot east-west portions of the transmission lines. About one-half of these transmission lines are on the boundary between the Community's land (east-west boundary separating Sections 5 and 32, T113North, R15 West) from Xcel's property. Since there is no information regarding species composition for this time period, nor any data to definitively indicate that avian mortality has not been reduced since the conclusion of the five-year study, it is difficult to ascertain whether the continued operation of the PINGP will not have a negative impact on avian populations.

15-l-TR

No explanation was offered in the ER as to why avian mortality was so high at the PINGP, other than to quote the NRC statement that "no relatively high collision mortality is known to occur along transmission lines associated with nuclear power plants in the United States other than the Prairie Island Plant in Minnesota." (NRC GEIS, 1996). Similarly, there is no information as to whether operations at the PINGP have changed any way, since 1978, to reduce mortalities over the license renewal term. Moreover, there is a disturbing statement on page 3-13 of the ER that "very few bird carcasses have been observed at PINGP or along associated transmission lines since 1978, but

systematic searches or formal avian collision studies have not been conducted.” This statement leads the reader of the ER to believe that PINGP personnel just stopped looked for dead birds.

Because there is no information regarding any past operational changes that have been made (or will be made during the relicensing period) that have resulted in the reduction of avian mortalities, no information to suggest that formal searches or studies of avian mortality are being conducted, and that nowhere else in the country is avian mortality so high (according to NUREG 1437), the Community believes that, for the reasons outlined below, avian mortality should be a Category 2 issue for the PINGP SEIS. The Community is especially concerned about avian mortality as it relates to potential impacts to threatened or endangered avian species, as the PINGP sits in the Mississippi River flyway.

The Mississippi River is recognized as a Globally Important Bird Area and Migratory “Flyway” for birds. The Mississippi flyway is heavily utilized because it is uninterrupted by mountains or hills that would interfere with the movements of migrating birds (Couleeaudubon.org). The Upper Mississippi River and associated ecosystem is very important to birds that are year-round residents and those who are migratory. About 40% of all North American waterfowl use the river as a migratory flyway, and 326 species of birds (about 1/3 of all species in North America) use the river corridor as a flyway in their spring and fall migrations (couleeaudubon.org). The Mississippi River is a well-known migration corridor for millions of waterfowl, including dabbling ducks, canvasbacks, and scaup that pass through this flyway annually. The bottomland forests also provide wintering and migration habitat for mallards, black ducks, wood ducks, northern pintails and Canada geese (Ducks Unlimited). Parts of the Mississippi River also provide habitat for breeding and wintering birds such as the bald eagle (USGS 2007).

The associated floodplain forests and wetlands of the Upper Mississippi River have become increasingly important because of losses of these habitats throughout the upper Midwest. Higher species abundance is found in the floodplain as opposed to adjacent upland, and many species, such as the prothonotary warbler, brown creeper, yellow-billed cuckoo, yellow-bellied sapsucker and great flycatcher, show a clear preference for floodplain forest. A study done in 1993 found 150 species of birds between Pools 4-8 during spring migration and 20% of these were neotropical migratory birds. A few declining species such as the red-shoulder hawk, cerulean warbler, Louisiana waterthrush, northern waterthrush, and prothonotary warbler are dependent on these forests. Because of the importance of the Mississippi flyway, resource management and other human activities within the flyway should be conducted carefully to protect the health of this important ecosystem and the birds and other wildlife that depend on it (USGS 1993).

There is passing reference in the ER to the Mississippi River as a bird migration route and how these particular lines (east-west corridor) are perpendicular to the river and that “studies have found that transmission lines at right angles to avian flight paths are

15-I-TR (continued)

associated with greater collisions.” ER at 3-13. The ER also states, “this section of the (transmission) corridors is perpendicular to the bird migration corridor along the Mississippi River.” The mere mention of the “bird migration corridor along the Mississippi River” understates the importance of the Mississippi River as an annual flyway for millions of migratory birds and the possibility that threatened or endangered species may be affected.

It is interesting to note that NMC/Xcel devoted two paragraphs to the importance of the Mississippi River Flyway in its application to the State of Minnesota Public Utility Commission (PUC) for permission to use additional dry casks and to operate the PINGP at a higher rate (PUC application dated May 16, 2008, page 7-21). (Note these state proceedings are also discussed later in this letter).

Prairie Island and PINGP are also right in the middle of the Vermillion River and Lower Cannon River Important Bird Area. This is an area of high biodiversity significance within Minnesota harboring diverse bird communities unique to the Upper Mississippi River. This is one of the top 4 sites in Minnesota for rare forest birds and it contains the highest number of records for two special concern species—the Red-shouldered Hawk and Cerulean Warbler (Dunevitz 2001).

The ER mentions that Xcel has entered into a Memorandum of Understanding (MOU) with the US Fish and Wildlife Service (FWS) in 2002 to establish policies and procedures for dealing with migratory birds that may be on Xcel property and for the development of an Avian Protection Plan. The ER further states that the Avian Protection Plan is in development, although reports covering activities related to the MOU are submitted to the FWS. Since the plan is still in development, there appears to no current plan to protect birds.

Because of the PINGP’s location within the Mississippi River flyway and the reasons stated above, Avian Mortality impacts should be treated as a Category 2 issue and evaluated in the SEIS. We do not know why the incidence of avian mortality was so high at the PINGP (during the only documented study period), we not know which species had the highest mortality rates, whether these mortalities had an impact on populations, and whether any threatened or endangered species were involved. There simply is not enough information provided.

Category 2 Issues

Archaeological Impacts (National Historic Preservation Act)

One of the most important issues for the Prairie Island Indian Community is the condition of the many archaeological sites within the PINGP.

We have learned that there have been some impacts to at least two archaeological sites within the plant boundaries. One site, 21GD207, a habitation site, is under a service road. Another site, 21GD59, a human burial mound site, impacted by the construction of the

15-l-TR (continued)

15-m-CR

cooling towers, may now be under 12 feet of fill or may have been destroyed. This burial site contains the remains of our ancestors.

We are well aware that the EIS scoping process does not provide a remedy for past damage or disturbance to archaeological sites. The process, however, exists to ensure that the full extent environmental impacts of the proposed action are fully understood and disclosed. It is because of past damage or destruction of archaeological sites that we have concerns about how the steam generator replacement project, and other future construction (such as the expansion of the ISFSI, proposed for 2020) might impact previously unrecorded archaeological resources.

Section 3.2 of the ER (Refurbishment Activities) discusses the replacement of Unit 2 steam generator (proposed for September 2013). The ER states that several temporary buildings will be constructed, as well as office space for construction workers and a decontamination building. In addition, warehouses will be built and will remain after the project. It is mentioned that these buildings will be constructed on previously disturbed land. No location information or maps, however, are provided. No mention is made of water systems, sanitation facilities, or other infrastructure for the office space and how these would be constructed.

In the 1960s Northern States Power (NSP), then the owner and operator of the PINGP, contracted with Dr. Eldon Johnson (State Archaeologist) to conduct an archaeological survey of the project area, which included excavations of existing burial mound sites, two of which were well-outside the project area (Birch Lake Mounds and Bartron Village).

A Final Environmental Statement (FES), prepared by the United States Atomic Energy Commission (AEC), for the original operating licenses for the PINGP, was released in May of 1973. In the FES there is some discussion about impacts to archaeological sites. A table lists some of the sites within the PINGP, but not all of the sites within the PINGP. Most notably, there is no discussion regarding the archaeological site near the cooling towers (21GD59). Correspondence from the Advisory Council on Historic Preservation (ACHP) (March 1973) indicated that the AEC's draft environmental statement did not contain sufficient information in order to allow the Council to comment substantively. In response to the ACHP's letter, the FES stated concluded "that only the Barton site is sufficiently close to the plant that an impact is possible." The FES goes on to state that the Barton site is beyond the limits of plant construction and was not disturbed. There is no mention whatsoever of whether a burial mound site much closer to the plant (21GD59) that was impacted in any way. This site was actually outlined on a map provided in the FES. (FES page II-30)

We bring these issues up because that original survey work (late 1960s) appears to be the basis for all other work within the plant boundaries, including the steam generator replacement project. The circa 1990 EA for the ISFSI states that "an archaeological survey was conducted in 1967, and nothing significant in the immediate area of the power plant or ISFSI was found." Past archaeological work (i.e., 1960s investigations by Dr. Johnson) is no guarantee that the area is clear of archaeological sites. In fact, two

15-m-CR (continued)

previously unrecorded sites were discovered subsequent to the early site work, thus demonstrating that it is still possible to identify previously unrecorded sites with the PINGP boundaries. There is no evidence to suggest that Dr. Johnson's original site survey work went beyond previously recorded sites.

Xcel/NMC provided the Community with a copy of the report developed by its contractor, the 106 Group (Boden 2008). The report is concluded with the statement that the study area (the PINGP site) has a high potential to contain intact archaeological remains." This strongly suggests the need to do a field assessment before any "construction" (i.e., steam generator replacement project buildings, etc.) activities occur.

As previously mentioned, the assessment conducted by the 106 Group did not involve any field work, but involved an extensive review of the collected site files, reports, and other literature, aerial photographs, historical plat maps, General Land Survey maps, USGS topographic maps. The study area was the entire area within the boundaries of the PINGP plant and grounds.

Further on the report states "Despite the construction of the PINGP and associated features, there remains undisturbed land within the study area. Because the remaining portions of the study area are in proximity to significant bodies of water and appear to be undisturbed, they are considered to have inherently very high potential to contain intact precontact archaeological sites. Further there is also the potential for finding intact burial because four precontact mound sites, some of which have yielded human remains, have been recorded in the study area." The report is concluded with the statement that "no construction activities are planned under the new 20-year operating license." This leads one to conclude that the 106 Group was not aware that Xcel/NMC planned to construct several temporary buildings, as well as office space for construction workers, warehouses and a decontamination building as part of the steam generator replacement project.

It is the responsibility of the NRC to assure compliance with the National Historic Preservation Act, which states that all Federal agencies are required to give appropriate consideration to the environmental effects of their proposed actions in their decision-making and to prepare detailed environmental statements on recommendations or reports on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment (36CFR805.1).

It was the responsibility of the AEC (predecessor to the NRC) to ensure that the environment (which includes cultural and archaeological resources) would not be adversely impacted by the construction and operation of the PINGP. In fact, in the forward of the FES, it is stated that, according to the National Environmental Policy Act of 1969, it is the responsibility of the Federal government to, among other things:

Preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity and a variety of individual choice.

15-m-CR (continued)

Part of our heritage (and culture) was lost when NSP destroyed burial mounds in the 1970s because no one was protecting these important cultural, historic, and religious monuments.

The scope of the EIS must include a Phase I archaeological site survey to locate any previously unrecorded sites within the steam generator project area and ascertain the current status of all known sites within the boundaries of the PINGP to ensure that all of culturally-significant sites can be protected and respectfully managed. NMC/Xcel should develop a Cultural Resource Management Plan (CRMP) to ensure that all of the archaeological sites within the PINGP will be protected and respectfully managed.

We understand that the Midwest Region of the Bureau of Indian Affairs requested in writing that they be allowed to participate in the EIS process as a Consulting Party, pursuant to 36CFR800.2(c)(5) (letter to Rani Franovich, Branch Chief, from Kevin Bearquiver, Acting Regional Director, BIA, August 18, 2008). We support this request.

Threatened and Endangered Species

Under provisions of section 7(a)(2) of the Endangered Species Act (ESA), a Federal agency that carries out, that permits, licenses, funds, or otherwise authorizes activities must consult with the US Fish and Wildlife Service (USFWS) as appropriate, to ensure that its actions are not likely to jeopardize the continued existence of any listed species. Section 7 of the ESA requires the NRC to ensure that, if it grants a license, its action will not jeopardize the existence of a regulated species.

Section 2.3.3 of the ER (Threatened and Endangered Species) notes the presence of the Higgins eye pearly mussel (*Lampsilis higginsii*), an endangered species listed by both the USFWS and the MN Department of Natural Resources (MN DNR). The ER also notes the efforts of the USFWS and the MN DNR to re-introduce into Pool 3 of the Mississippi River. Because Sturgeon Lake is historic habitat for the Higgins eye pearly mussel, the Community has also been involved in this effort. The re-location area is located just 0.5 miles upstream of PINGP's intake screenhouse (this area is located in tribal waters). In fact over, 5,000 sub-adults have been placed in Sturgeon Lake since 2003.

Section 4.4 of the ER (Entrainment of Fish and Shellfish in Early Life Stages) discusses entrainment of fish species from the condenser cooling system. No mention is made of shellfish, other than to note that entrainment of fish and shellfish in early life stages is "a potential adverse environmental impact that can be minimized by the best available technology." ER at 4-12.

The ER concludes "impacts of entrainment of fish and shellfish at PINGP are SMALL and warrant no mitigation beyond that already in place and required by the current NPDES permit." The NPDES permit is attached, information related to NMC's Clean water Act Section 316 (b) determination is discussed, but the report is not attached. Most importantly, impacts to the Higgins eye pearly mussel is not discussed in this section. The NPDES permit states that NMC must submit the results of a required Impingement

15-m-CR (continued)

15-n-TE

Mortality and Entrainment Study, which shall provide information to support the development of a calculation baseline for evaluating impingement mortality and entrainment consistent with the 316(b) rule. This report was to have been submitted to the Minnesota Pollution Control Agency by October 26, 2006, as required by 10 C.F.R. § 51.53(c)(3)(ii)(B). The required report was not attached to the ER.

Section 4.7 of the ER (Threatened and Endangered Species) discusses the fact that impacts to threatened and endangered species is a Category 2 issue and that site-specific assessment would be required to determine whether continued plant operations of refurbishment would be affected.

As noted in Section 2.3.3, efforts are underway to re-introduce the Higgins eye pearlymussel to Pool 3 (Sturgeon Lake). According to the USFWS:

the current range for the Higgins eye mussel is about 50 percent of its historic distribution, which extended as far south as St. Louis, Missouri, and in several additional tributaries of the Mississippi River. The Higgins eye pearlymussels depend on deep, free-flowing rivers with clean water. Much of their historic habitat was changed from free-flowing river systems to impounded river systems. This resulted in different water flow patterns, substrate characteristics, and host fish habitat and movement that affects how the Higgins eye feed, live, and reproduce. To reproduce, male Higgins eye release sperm into the river current and downstream females siphon in the sperm to fertilize their eggs. After fertilization, the females store the developing larvae (glochidia) in their gills until they're expelled into the river current. Some of the glochidia are able to attach themselves to the gills of host fish, where they develop further. After a few weeks, the juvenile mussels detach from the gills of the fish and settle on the river bottom, where they can mature into adult mussels and possibly live up to 50 years. The sauger, walleye, yellow perch, largemouth and smallmouth bass, and freshwater drum are considered suitable hosts for Higgins eye glochidia. (USFWS 2008)

There is mention of these fish species in the ER, but there is no specific discussion connecting the entrainment of larval Higgins eye or impingement of fish species (the host for the mussel's early life stage, the glochidia) with impacts to the survival of the Higgins eye pearlymussel in Section 4.7, Threatened and Endangered Species. The discussion of impacts to the Higgins eye is simply summed up by stating, "it is conceivable that some larval *higginsii* will be carried downstream into the power plants intake screenhouse." No quantification of losses or further assessment, is provided, as required by 10 C.F.R. § 51.53(c)(3)(ii)(E). These impacts seem to be negated or minimized by the later statement in the paragraph, that even under the best of circumstances, the mortality rate of the early life stages (of the Higgins eye) is very high and the glochidia (early larval stage) that do not attach themselves to a host quickly have a low probability of survival. This does not seem to meet the requirement that "the applicant shall assess the impact of the proposed action on threatened or endangered

15-n-TE (continued)

species in accordance with the Endangered Species Act (10 C.F.R. § 51.53(c)(3)(ii)(E).

NMC contacted the USFWS by letter dated January 25, 2008, requesting information relative to concerns about possible impacts to threatened and endangered species arising from license renewal. No reply was included in the April 15, 2008 ER. The NRC also corresponded with the US FWS on July 22, 2008 regarding the presence of Threatened or Endangered Species in the project. On August 13, 2008 the USFWS responded to the NRC inquiry, stating that the only known endangered species in the project area was the Higgins eye mussel and to also provide information relative to efforts to establish a viable population.

The Community is concerned about how the cooling system in use at PINGP affects survival of the Higgins eye larval stage. According to the ER, the PINGP can operate in one of three modes: 1) open cycle, once through without the cooling towers; 2) helper cycle, once-through with cooling towers; and 3) closed cycle. There is no discussion of the cooling system and its three cycles and how any of them relate to species survival. The matter is summed up by stating that "because current operational practices will be affected by license renewal, NMC concludes that impacts to threatened or endangered species from license renewal would be SMALL and do not warrant mitigation." ER at 4-27.

There was no discussion about how current operational practices are currently impacting the survival of Higgins eye mussel beyond stating, "it is conceivable that some larval *higginsii* will be carried downstream into the power plants intake screenhouse." The EIS must include a disclosure of how a the extended operating period will affect the survival of this endangered species.

Socioeconomic Impacts

Taxes

Section 2.7 of the ER (Taxes) discusses the annual property taxes for the PINGP by Goodhue County, the City of Red Wing, and School District 256. According to Table 2.7-1 of the ER, Goodhue County has received \$26,223,326, Red Wing has received \$27,034,951 and School District 256 has received \$17,041,750 for the time period of 2001 to 2006 (for a total sum of \$70,300,027).

In contrast, Xcel has only paid the Tribe a sum of \$2.3 million annually as a result of a Settlement Agreement between the Community and Xcel/NMC entered into in 2003.

Over the last several years, the tribe was spent several million dollars in legal and consultant fees in order to participate in various Xcel/NMC proceedings, either at the state or federal levels. The money we have spent, in order to participate in these proceedings, is money that we could have used for other community purposes. In addition, the Tribe has also established the Prairie Island Police Department. And although the Tribe receives no funding from Xcel/NMC for its Police Department, PIPD

15-n-TE (continued)

15-o-SE

is and will most likely always be the first responder for any incident at PINGP. The settlement monies paid to the Tribe by Xcel/NMC are far less than the costs and expenses the Community has incurred as a result of the PINGP.

The negative socioeconomic impacts to the Prairie Island Indian Community cannot be overlooked and must be disclosed in the SEIS. As the tax information shows the egregious disparity between the tribe and Red Wing, the school district, and the county. The Community bears the greatest risk and receives the least amount of benefit.

15-o-SE (continued)

Electricity Supply and Transmission

Electricity produced at PINGP is sent out on the highest capacity 345 kV lines right along the PINGP-PIIC property line, directly across the road from several Community residences, and away from the Community. Remarkably, the Community receives its electricity from power generation facilities hundreds of miles away, with the associated problems of delivery and quality.

15-p-OS

Traffic Concerns

Section 2.8.2 of the ER (Transportation) discusses the number of employees traveling to the PINGP and the various routes they might take. The ER states that all employees travel east on Sturgeon Lake Road and then take a right onto the plant access road, just west of the reservation boundary. It is further stated that employees leave the plant via the same roadways. This is not accurate. Many employees exit the plant at 3PM via Wakonade to Sturgeon Lake Road, though the reservation, because they do not want to stop at the intersection of the service road and Sturgeon Lake Road (a 4-lane road) and make a left-hand turn across two lanes of traffic. Again, this serves to underestimate the traffic impacts to the Prairie Island Indian Community from plant activities.

15-q-SE

During the steam generator replacement project, 750 workers (in addition to the 700 or so outage workers and the 685 PINGP permanent and long-term contract staff) will be coming to Prairie Island, using the one primary access road, Sturgeon Lake Road. The SEIS scope should be expanded to disclose how this additional traffic to the PINGP, related to the steam generator project, would impact the Prairie Island Indian Community.

Environmental Justice

Section 2.5.3.1 of the ER (Minority Populations) discusses minority or low-income populations within a 50-mile radius. Section 2.5.3.1 describes how the ER identified minority populations using NRC guidance. The section concludes with the statement that "Except for the Prairie Island Indian Community, the census block groups containing minority populations are[] predominately in the Minneapolis area and more than thirty miles from PINGP." (ER at 2-23)

15-r-EJ

Chapter 2, Site and Environmental Interfaces, is concluded with the statement that "Having evaluated environmental conditions in the vicinity of the PINGP site in this

section and assessed potential impacts of license renewal in Chapter 4, NMC has not identified any obvious cumulative impacts and has not extended the discussion of potential cumulative impacts into Chapter 4, Environmental Consequences of the Proposed Action and Mitigating Actions.” ER at 2-41.

In Section 4.1.3 of the ER (“NA” License Renewal Issues), states, “the NRC does not require information from applicants, but noted that it will be addressed in individual reviews (10CFR51). Environmental justice demographic information is provided in Section 2.5.3. ER at 4-3

No analysis of impacts to minority populations from license renewal was disclosed in the ER, other than to identify the Prairie Island Indian Community as a minority community. The ER’s very limited discussion of environmental justice does not contain any valuation of impacts on the minority or disadvantaged communities identified in the ER.

Regulatory Guide 4.2S1, Section 4.22 (Environmental Justice) states that the need for and the content of an analysis of environmental justice will be addressed in plant-specific reviews (Table B-1). It is clear from NRC Regulatory Guide 4.2S1 that the NRC expects the ER to analyze environmental justice issues. Therefore, the Community believes that the ER is deficient with regard to environmental justice.

Even though radiation protection in general may be a Category 1 issue, the Category 2 issue of environmental justice is an overarching site specific issue, and if there is a disproportionate impact on a minority group from license renewal activities, including radiation protection, it must be evaluated. In summary, the Community is raising two issues about the adequacy of the ER’s environmental justice analysis. One is the absolute lack of any evaluation of impact in the ER on minority groups. The ER has not disclosed the information the Community believes it is expected to disclose, so that Commission may properly consider, and publicly disclose, environmental factors that may cause harm to minority and low-income populations that would be disproportionate to that suffered by the general population.

The second issue is the absence of any analysis in the ER on the potential impacts of radiation on a potentially predisposed cancer minority group, the Prairie Island Indian Community. In this regard, the Community believes that the proposed action may have significant adverse impacts on the minority group identified in the ER, that is the Prairie Island Indian Community, because the impacts to the Community were not adequately evaluated.

The EIS scope must consider non-radiological health effects. In 2005, we commissioned a public health study (conducted by the University of Minnesota), which documented that many of our youth experience increased levels of stress and anxiety because of health and safety fears related to the power plant. These are the same youth who will be our leaders in the future, the people with whom future Xcel and NRC representatives will be working over the re-licensing period (McGovern, et al. 2006).

15-r-EJ (continued)

15-s-EJ

15-t-HH

Severe Accidents

If a severe accident were to occur, the Prairie Island Indian Community would be financially devastated. The Tribe's primary source of revenue could not be easily replaced and would have a severely detrimental economic impact to the Tribe. The impacts to the Tribe's culture would be immeasurable and irreparable. Because of these concerns, the Community is particularly interested in the sufficiency of the severe accident mitigation alternatives (SAMA) analysis.

According to the NRC GEIS, "the generic analysis of severe accidents applies to all plants and that the probability weighted consequences of atmospheric releases, fallout onto open bodies of water, releases to groundwater, and societal and economic impacts of severe accidents are of small significance for all plants. However, alternatives to mitigate severe accidents must be considered for all plants that have not considered such alternatives."

The ER explains how the SAMA analysis includes modeling to determine which SAMA would be the most cost beneficial. The ER however, does not describe the modeling in sufficient detail for the Community to understand how the benefits of the SAMA were calculated. The Prairie Island Indian Community is very unique and will not readily fit into a conventional model of averted risks. In particular, the lost revenue from the Treasure Island Resort represents a unique "cost" for an averted severe accident that will not fit well in a conventional model of radiological impacts.

We request that the NRC to evaluate site-specific economic data in the SAMA discussion of the SEIS. Prairie Island is our only home; our business (which can only be located on our reservation) is our primary means of providing benefits and services to our Community. If there was a severe accident, the Tribe would lose its primary revenue source, many members would lose their primary income source (that does not include future members), over 1,600 people would lose their jobs, several hundred vendors would lose lucrative contracts, and the Tribe could no longer provide benefits and services to our Community. Our largest business, the Treasure Island, is not easily re-located. Federal laws and regulations govern not only how a Tribal gaming facility operates, but also where a Tribal gaming facility can be located. *See* 25 U.S.C. § 2719 (provisions governing tribal gaming on lands acquired after 1988).

Economic data must also include the value of our Community's buildings, facilities and infrastructure, as well as the value of our tribal members' home sites (1 acre), the value of their homes, and the costs of re-establishing an Indian Tribe (which includes land acquisition, legal costs, and infrastructure development). Since tribal land cannot be sold (or bought) it may be difficult to place a monetary value on tribal members' homes and property. One cannot simply re-establish an Indian Tribe elsewhere; Federal law also governs the transfer of land into Trust for non-gaming purposes. *See* 25 U.S.C. § 465 and 25 C.F.R. § 151.

This issue is of paramount importance to our community.

15-u-PA

Connected Actions and Cumulative Impacts

The Community believes that there are “connected” actions that must be included in the scope of the SEIS, which were not included in the ER. The SEIS must go beyond the narrow scope of the continued operation of the two reactors at the PINGP and the steam generator replacement project to include the extended power uprate and dry cask storage expansion proposed by Xcel/NMC. In addition, the cumulative effects of the actions (proposed action and connected actions) must be included in the SEIS scope. Connected, similar, or cumulative actions generate direct, indirect, and cumulative impacts.

15-v-CI/OS/RW

Dry Cask Storage Expansion and Extended Power Uprate

On May 16, 2008, Xcel/NMC filed a Certificate of Need (CON) application with the Minnesota Public Utilities Commission (PUC) requesting the use of 35 additional dry casks, so the PINGP can operate another twenty years beyond its currently licensed life. In its CON application to the PUC, Xcel/NMC states that the current Independent Spent Fuel Storage Installation (ISFSI), currently licensed by the NRC under a Part 72 site-specific license to use/store up to 48 casks until 2013, would have to be expanded to accommodate the additional casks. It is expected that Xcel will request a license amendment from the NRC to increase the allowed storage beyond 48 casks sometime in 2018. To accommodate the increased number of casks, the storage pad will have to be expanded. Xcel/NMC anticipates constructing two new concrete storage pads, designed for a single row of casks, adjacent to the south side of the existing storage pads. When completed (sometime in 2020), the new storage pad will hold up to 98 casks (license renewal term plus decommissioning).

15-w-OS/RW

In the above-mentioned CON application, NMC/Xcel also requested that the PINGP be allowed to operate at a higher rate (i.e., extended power uprate). The PINGP is licensed by the NRC for an output of 1044 MW (522 MW each unit); the uprate will add 164 MW for a total of 1208 MW.

15-x-ER

The ER for the license renewal application contains no information about the environmental impacts of the uprate. The Safety Analysis Report (SAR) for the license renewal application contains some information about the uprate.

State EIS Scoping

On August 25, 2008 the MN Department of Commerce (DOC) issued a draft environmental scoping document, which describes impacts (i.e., health, safety, and environmental) from both the extended power uprate and dry cask storage expansion that will be evaluated in the state EIS. In addition, the DOC held a public meeting on September 10, 2008 to solicit comments and suggestions regarding the scope of the environmental review that the DOC will conduct.

15-y-ER/LR

According to the CON application, Xcel/NMC, expects that the dry cask storage expansion will increase radiation levels (expected to be 0.36 mrem) and the extended power uprate will increase water use (both surface and ground water) by up to 10 percent, increase the temperature of the circulating water outfall, and also increase radioactive releases by 10 percent. Individually these impacts are expected to be within their respective permitted limits, but there is no information regarding the cumulative impacts.

Cumulative impacts are generally limited to what is foreseeable. The NRC's Regulatory Guide 4.2S1, Preparation of Supplemental Environmental Reports for Applications to Renew Nuclear Power Plant Operating Licenses (Regulatory Guide 4.2S1), requires that Chapter 2 of the ER (Site and Environmental Interfaces) identify and describe "known and reasonably foreseeable Federal and non-Federal projects and other actions in the vicinity of the site that may contribute to the cumulative environmental impacts of license renewal and extended plant operation."

Section 2.11 of the ER (Known or Reasonably Foreseeable Projects in Site Vicinity) discusses the status of industrial facilities in the three counties, such as projects related to Lock and Dam No. 3, Treasure Island Resort and Casino and a couple of hydro-electric plants nearby. There is no disclosure, however, of the Certificate of Need for the extended power uprate, the increase in casks, or the planned expansion of the ISFSI, even though these applications were submitted one month after the PINGP license renewal application was submitted to the NRC. It seems that one month into the future (from the submission of the license renewal application) is both reasonable and foreseeable. Without expanded dry cask storage, the PINGP cannot continue to operate. Although the PINGP does not need to operate at a higher power, it does not seem likely that Xcel/NMC would invest resources in the uprate project unless the company was sure of a favorable decision from the NRC relative to relicensing for an additional 20 years.

There is mention in Chapter 9 (Status of Compliance) of the need to get approval from the MN Public Utilities Commission (PUC) for additional dry cask storage, but there is no disclosure of the extended power uprate proposal or how either relates to cumulative impacts at the PINGP.

According to 40 CFR 1508.25, connected actions are "actions that are closely related and therefore should be discussed in the same impact statement." Furthermore, actions are connected if they "i) automatically trigger other actions which may require environmental impact statements; ii) cannot or will not proceed unless other actions are taken previously or simultaneously; and iii) are interdependent parts of a larger action and depend on the larger action for their justification.

The NRC's EIS scope must include all of these projects—the relicensing of the PINGP, the extended power uprate of the PINGP, the expansion of dry cask storage at the PINGP, and the steam generator replacement activities—and a disclosure of all the related impacts. These projects are all currently proposed by NMC/Xcel and are expected to occur in the very near future.

15-y-ER/LR (continued)

Cumulative Impacts

As mentioned above, connected, similar, or cumulative actions generate direct, indirect, and cumulative impacts. Cumulative effects or impacts are neither discussed nor considered in the ER. According to Regulatory Guide 4.2S1, Chapter 2 of the ER must identify and describe “known and reasonably foreseeable Federal and non-Federal projects and other actions in the vicinity of the site that may contribute to the cumulative environmental impacts of license renewal and extended plant operation.” Also as discussed above, there are pending NMC/Xcel projects that the Community believes contributes to the cumulative impact (i.e., dry cask storage expansion and extended power uprate).

15-z-CI/ER

Chapter 2 of the ER is concluded with the statement “NMC has not identified any obvious cumulative impacts and has not extended the discussion of potential cumulative impacts into Chapter 4, Environmental Consequences of Proposed Actions and Mitigating Actions.” ER at 2-41. To the Community, this seems like a faulty conclusion, given that connected actions are not discussed and that the Prairie Island Indian Community, its land, resources, and people are barely mentioned.

The Prairie Island Indian Community is subjected to a number of impacts that have a potential cumulative effect:

- Health effects (stress, increased cancer vulnerability)
- Operational radiological releases
- Operation of the ISFSI and increased levels of radiation
- High-voltage power lines immediately adjacent to homes
- Disregard of cultural impacts (i.e., burial mounds)
- Emergency preparedness concerns (one entrance/exit road)
- Socio-economic impacts (impacts on the tribe’s culture, traffic, possible water impacts)
- Cost to the tribe of being involved in (or opposing) proceedings
- Cost to tribe to educate members of Congress on PINGP issues, and waste issues

15-aa-EJ

Mitigations measures to eliminate or reduce the level of adverse impacts should be considered for each Category 2 issue. No mitigation was offered or discussed.

As mentioned previously, members of the Prairie Island Indian Community may have exposure pathways (water, food, air) that may be different from typical or “average” consumer, thereby placing the tribal consumer at a greater risk. For example, many

15-bb-EJ

tribal members consume native plants for traditional purposes (direct consumption, medicines, teas, ceremonies) that are not typically part of any monitoring program. Many of our community members have been living on Prairie Island since the plant went on-line. Tribal members typically do not move in and out of the community. We are concerned about the human health effects from 60 years of low-level exposure, as many of our community members already have compromised health.

15-bb-EJ (continued)

The scope of the SEIS Environmental Justice disclosure must include all of these factors.

Alternatives to Relicensing the PINGP

It must be noted that if the “No Action” alternative (i.e., the NRC does not renew the license for the PINGP, PINGP ceases operation and is decommissioned) would have a LARGE POSITIVE impact on the Prairie Island Indian Community. As mentioned previously, our community derives no financial (or other) benefit from the presence of the PINGP, other than provisions outlined in the limited 2003 Settlement Agreement, and yet we bear the greatest risks. This aspect was not evaluated in Chapter 7 of the ER. Therefore the scope of the EIS must also include an evaluation of all the positive impacts that might arise from the No Action alternative.

15-cc-AS

Other Issues

Water Issues

It is noted that the gaging station at Prescott, WI (13 miles away) just south of Hastings, MN, where the St. Croix River enters the Mississippi, is cited and used by the PINGP to show annual mean flow values for the Mississippi River (Section 2.2.1.1). The Prairie Island Indian Community, in coordination with the US Geological Survey (USGS), operates a gaging station just .5 miles north of the plant (at the marina). The tribe’s gaging station may be useful in depicting more accurate mean flow values. The scope of the SEIS and future modeling efforts should utilize data from this closer gaging station, as it more accurately reflects the Mississippi River conditions.

15-dd-SW

Army Corps of Engineers Projects

There is no information about the Army Corps of Engineers (ACE) planned drawdown of Pool 3 in an effort to restore native vegetation in Sturgeon Lake. This must be included in the scope of the EIS, especially with regard to the possibility of low flow or drought conditions, and the proposed uprate (which is expected to draw an additional 10 percent from the Mississippi River).

15-ee-OS/SW

Temperature Increases

As noted above, the proposed extended power uprate will increase the temperature of the PINGP's cooling water discharge water. This temperature increase must be evaluated as it relates to the proposed action (i.e., 20 year extended operation period).

15-ff-OS

Electromagnetic Fields

We understand that there is no consensus among scientists whether the electromagnetic energy emanating from the power lines would have a measurable human health impact. Some studies suggest exposure to EMF's increases the risk for certain diseases.

Since there is no scientific consensus on whether human health is compromised, there is NO assurance that there are NO adverse health effects (i.e., chronic health effects, increased risks to cancer). In fact, the United States EPA's Office of Radiation and Indoor Air offers only two recommendations for people who want to protect themselves from possible risks from power lines to reduce their exposure: "[i]ncreasing the distance between you and the source" and "[l]imiting the time spent around the source." (See "Electric and Magnetic Field (EMF) Radiation from Power Lines," available at www.epa.gov/radtown/power-lines.html). Needless to say, these are severe options for a people whose ancestors have lived on Prairie Island for generations. We recommend that the scope of the EIS include health impacts to members of the Prairie Island Indian Community resulting from exposure to electromagnetic energy and radiation emanating from the PINGP's transmission lines. Members of our community live extremely close to the power lines.

15-gg-HH

Terrorism

Though not mentioned (and certainly not imagined), the 1996 GEIS does not discuss potential environmental and health impacts resulting from a terrorist attack on a nuclear power plant must be part of the EIS scope. This is now a very real and very credible threat to the health and safety of our people, since the PINGP is right next door to us. The Community believes that the scope of the EIS must include an analysis of the environmental impacts from a terrorist attacks to the PINGP.

15-hh-OS

Conclusion

The Prairie Island Indian Community is the largest, most diverse and culturally significant population adjacent to the Prairie Island Nuclear Generating Plant. Since we bear the greatest risks from PINGP operation, with less benefit than other populations in the vicinity, it is our responsibility to ensure that the adverse impacts of continued operation of PINGP on our Community and the surrounding environmental resources are adequately disclosed and mitigated.

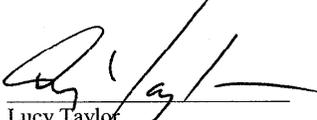
We appreciate this opportunity to provide these comments on the scope of the EIS that will be prepared by the NRC to disclose and evaluate impacts from the relicensing of the PINGP. This issue, the PINGP and its associated waste storage facility is the most important environmental issue for our community.

Respectfully,

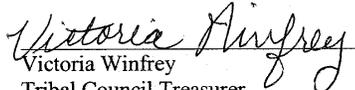


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The following pages contain the comments
made by Michael Schultz during the
NRC public scoping meetings held on July 30, 2008

1 Wing.

2 MICHAEL SCHULTZ: My name is Michael
3 Schultz. I'm a member of the Red Wing City Council.

4 This past week we passed a resolution
5 supporting Prairie Island Nuclear Generating Plant
6 license renewal, and we would like to read into the
7 record our resolution.

8 "Whereas, the Prairie Island Nuclear
9 Generating Plant became operational with the start-up
10 of Unit 1 reactor in December 1973 and Unit 2 reactor
11 in December 1974; and

12 "Whereas, Prairie Island has operated
13 safely and efficiently for more than 30 years,
14 generated a record 8.89 million megawatt hours of
15 electricity in 2007, and its 100 megawatts of
16 electrical generating capacity remain vital to
17 Minnesota's economy; and

18 "Whereas Xcel Energy has continually
19 reinvested in the Prairie Island facility to assure
20 the continued safe, clean, reliable and affordable
21 production of electricity for Minnesota's homes,
22 businesses, and factories; and

23 "Whereas, the 700 permanent jobs at
24 Prairie Island and the extensive use of contractors

16-a-SR

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1 for ongoing maintenance and special projects are
2 recognized as vitally important to the economies of
3 the City of Red Wing and Goodhue County; and

4 "Whereas, Xcel Energy announced in the
5 fall of 2004 that it intended to renew the license of
6 both units at Prairie Island for an additional 20
7 years; and

8 "Whereas, Xcel Energy submitted an
9 application to renew Prairie Island's operating
10 licenses for its two units to the United States
11 Nuclear Regulatory Commission on April 15, 2008; and

12 "Whereas, Nuclear Regulatory Commission
13 is the Federal agency charged with oversight of our
14 nation's nuclear facilities and encourages public
15 input and comment on license renewal proceedings; and

16 "Whereas, the Prairie Island Nuclear
17 Generating Plant has been a good neighbor to the
18 communities located in Goodhue County and Pierce
19 County for more than three decades;

20 "Now, therefore, be it resolved that the
21 City of Red Wing City Council supports the renewal of
22 the licenses for the nuclear generating facilities at
23 Prairie Island to assure their continued operation of
24 safe, affordable and integrally important component

16-a-SR (continued)

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1 of Minnesota's electric power supply system for
2 another 20 years; and

3 "Be it further resolved that the City of
4 Red Wing will present a copy of this resolution to
5 the Nuclear Regulatory Commission."

6 Thank you.

7 MR. RAKOVAN: Thank you, sir.

8 Next we'll go to Ron Johnson, followed by
9 Katie Himanga and Scott Arneson.

10 RON JOHNSON: Good afternoon. My name is
11 Ron Johnson. I'm president of the Prairie Island
12 Tribal Council and the Prairie Island Indian
13 Community.

14 I've represented my community for several
15 years, and as president I have the obligation to
16 ensure the health and welfare of the community, which
17 includes also the environment down there.

18 I'm here today as the continuing
19 operation of the Prairie Island Nuclear Generating
20 Plant is one of our most important issues for our
21 community. In fact, most community members have had
22 concerns about the plant since it went online in
23 1973.

24 The Prairie Island Indian Community is a

16-a-SR (continued)

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The following pages contain the comments
made by Andrija Vukmir during the
NRC public scoping meetings held on July 30, 2008

1 we're certainly not going to say you can't just
2 because you didn't fill out a yellow card, but we're
3 going to start with the yellow cards that we have.

4 The first card that I have is Andi
5 Vukmir. From there we'll be going to Michael Schultz,
6 and then, third, Ron Johnson.

7 So Andy?

8 ANDRIJA VUKMIR: Good afternoon, the NRC,
9 Xcel, and also public concerned.

10 I've lived here in Red Wing for the past
11 25 years. I'm a strong advocate in support of the
12 nuclear energy.

17-a-SN

13 At this time I urge you, the NRC, and
14 support from the public to support both a license
15 renewal process for existing nuclear plants as well
16 as to work putting policies in place to support
17 building of new power plants in the future.

17-b-SR

18 Nuclear energy keeps American business
19 competitive, and the plants themselves are incredible
20 job resources for the Red Wing and the neighboring
21 communities.

17-c-SN

22 As a nation, the U.S. Department of
23 Energy projects that the U.S. electrical demand will
24 rise about 25 percent by the year 2030. This means

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1 that our nation will need hundreds of new power
2 plants to provide electricity for homes and continued
3 economic growth here in Red Wing and the neighboring
4 communities, and of course Goodhue County is included
5 there, in all.

6 Nuclear power plants are the lowest-cost
7 producers of electricity by providing a reliable and
8 affordable source of electricity, and nuclear energy
9 helps to keep American businesses competitive.

10 Nuclear plants are sources of local job
11 growth here in Red Wing.

12 And nuclear power plants, which do not
13 emit any carbon dioxide, account for the majority of
14 voluntary reduction in greenhouse gas emissions in
15 the electrical power sector, according to a 2007
16 report from Power Partners, a partnership between the
17 electric power industry and the U.S. Department of
18 Energy.

19 The nation's nuclear power plants are
20 among the safest, secure individual facilities in the
21 United States. Multiple layers of physical security
22 together with high levels of operating performance
23 protect plant workers, the public, and the
24 environment.

17-c-SN (continued)

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1 The recent Bird Island Nuclear Plant
2 emergency drill conducted last week was a successful
3 exercise and part of the support team.

4 The primary concern of Xcel is the health
5 and safety of the public. The spent fuel is not a
6 threat to the public. Under an integrated management
7 approach, spent fuel remains safely stored in the
8 nuclear power plants until being moved to consolidate
9 in long-term storage facilities.

10 Eventually the United States will follow
11 France, Japan, England, and other places and will
12 recycle the spent fuel to extract the energy there
13 and place the remaining usable end product at a
14 repository at Yucca Mountain, Nevada.

15 And in closing, I am thankful for the
16 opportunity of having clean nuclear power to produce
17 electricity. I urge the NRC and the public, working
18 together as a team with Xcel, to support the license
19 renewal process for Prairie Island's Units 1 and 2
20 and to put policies in place to promote building new
21 power plants in order to meet the projected
22 electrical demands.

23 MR. RAKOVAN: Thank you, sir.

24 Michael Schultz from the city of Red

17-d-RW

17-e-SR

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The following pages contain the comments
made by Mike Wadley during the
NRC public scoping meetings held on July 30, 2008

1 collaboration up to this point, and we believe that
2 the necessity of energy to our community has
3 certainly been recognized by the plants that we've
4 had here up to this time.

5 And I believe the County Board will be
6 considering the full impact of the relationship and
7 offering their opinions on the future and also their
8 opinions on any concerns that may be identified, and
9 we will be reporting back to them on the comments
10 that we're hearing here today as well.

11 Thank you.

12 MR. RAKOVAN: Thank you, gentlemen.

13 The last person that I have in terms of
14 filling out the yellow cards is Mike Wadley from Xcel
15 Energy.

16 MIKE WADLEY: Thank you.

17 Good afternoon. My name's Mike Wadley.
18 I'm the site vice president for the Prairie Island
19 Nuclear Generating Plant, and I'm here today to
20 provide Xcel Energy's support and perspective of our
21 request for renewal of the operating license for
22 Prairie Island Units 1 and 2.

23 The mission of everyone that works at
24 Prairie Island is clear: It's safe, clean, reliable,

18-a-SR

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1 and affordable operation with the health and safety
2 of the public and our employees being number one
3 priority.

4 Two of our key values include being a
5 good neighbor and a steward of the environment in
6 which we operate.

7 Our 700 employees are highly experienced,
8 well-trained, committed to the safe and continuing
9 operation of Prairie Island. All of our employees go
10 through a rigorous training to continuously hone
11 their skills and learn new procedures and
12 information.

13 We continuously improve our training
14 based on advances in technology, best practices
15 learned through benchmarking of the industry and
16 feedback from our employees as they identify better
17 ways to gain the skills and knowledge that are needed
18 to operate the plant safely.

19 An example of this high-quality training
20 is our control room simulator that is used to train
21 and update our operators and staff members.

22 The NRC, Nuclear Regulatory Commission,
23 requires that employees undergo extensive
24 qualification programs utilizing this simulator to

18-a-SR (continued)

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1 receive a Nuclear Regulatory Commission operator
2 license, which qualifies an employee to work in the
3 plant's control room.

4 Once an operator receives their initial
5 license, they are required to spend five to six weeks
6 each year maintaining that qualification.

7 We also have extensive processes and
8 detailed procedures that are continuously reviewed
9 and modified to cover every aspect of our operation.
10 We have an exhaustive set of procedures that cover
11 operation, maintenance, engineering, training,
12 security, and emergency response.

13 Our emergency response procedures and
14 drills, for example, examine just how well our
15 employees react to an event of an emergency. The
16 emergency plan focuses on health and safety, health
17 and safety of the public, health and safety of our
18 employees, and safety of the plant.

19 Emergency response drills are conducted
20 several times a year to test our abilities and to
21 carefully analyze areas in which we can improve.

22 The rigorous standards we abide by are
23 set and reviewed through both the Nuclear Regulatory
24 Commission and the Federal Emergency Management

18-a-SR (continued)

18-b-NS

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1 Agency.

2 We have a collaborative approach to
3 emergency planning at Prairie Island which results in
4 a team effort between employees, Goodhue and Dakota
5 Counties of Minnesota, Pierce County in Wisconsin,
6 and the states of Minnesota and Wisconsin, the
7 Nuclear Regulatory Commission, and other federal
8 agencies.

9 All told, more than 2,000 people are part
10 of the emergency response teams throughout these
11 organizations.

12 We have consistently demonstrated our
13 ability to protect the health and safety of the
14 public and our employees. We will continue to do so
15 as we partner with the NRC to maintain the highest
16 standards of safety excellence.

17 The Prairie Island plant has been well
18 maintained over its lifetime. Approximately every 18
19 months we perform refueling outages on each unit.
20 During these outages, the plant staff, with the help
21 of hundreds of contractors, complete more than 1300
22 maintenance activities and replace one-third of the
23 plant's reactor core fuel, this in addition to
24 ongoing maintenance, inspection, and regular testing

18-b-NS (continued)

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1 activities that are performed during the period in
2 which the plant is operating at full power.

3 Over the years we've continued to make
4 capital improvements to a wide range of equipment to
5 take advantage of technology and improve materials to
6 ensure safe and reliable operation.

7 For example, Unit 1's steam generators
8 were replaced in the fall of 2004, and both reactor
9 vessel heads were replaced as well.

10 As computer training methods evolve,
11 we're able to broaden the range of training to our
12 work force. As we move forward, we continue to
13 upgrade and improve equipment and technology at the
14 Prairie Island Nuclear Generating Plant.

15 Since the plant began operating Unit 1 in
16 1973 and Unit 2 in 1974, there have been many changes
17 showing the nuclear industry's dedication and
18 commitment to an improved record of safety and
19 security.

20 I would add that the regulations set
21 forth by the Nuclear Regulatory Commission that we
22 abide by and which we're held accountable to are the
23 most stringent of any industry, and the inspections
24 are more rigorous to maintain this record of safe and

18-b-NS (continued)

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1 reliable operation.

2 One example is security at all U.S.
3 nuclear plants. Security at nuclear plants across
4 the nation has received increased emphasis and
5 scrutiny since the tragic events of September 11th,
6 2001.

7 Security at Prairie Island is no
8 exception, and we have taken extensive precautions
9 and implemented new policies and procedures to ensure
10 the safety and well being of the community and our
11 employees is maintained. This includes several
12 million dollars in additional resources and new
13 equipment.

14 We continue to work with the Nuclear
15 Regulatory Commission to review and evaluate our
16 security procedures to make certain that the most
17 effective methods are being utilized.

18 Prairie Island is a strong supporter of
19 the environment. We take great care in our daily
20 activities to ensure that the environment is well
21 protected.

22 Our employees feel fortunate that the
23 location of the Prairie Island plant rests on the
24 banks of the Mississippi River. The site is home to

18-c-NS

18-d-SR

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1 numerous wildlife, aquatic species, and plant life.
2 Our efforts have made Prairie Island a safe and sound
3 habitat for many years and will continue in the
4 future.

18-d-SR (continued)

5 On a different note, Prairie Island is
6 more than a power plant operated by highly-skilled
7 workers; it is part of the community. Not only does
8 the plant rely upon local companies for goods and
9 services, but our employees live in and contribute to
10 the surrounding communities.

11 We are very proud of our participation
12 and our willingness to give back to the community in
13 a variety of ways, including serving on city and town
14 boards, leaders in civic and community organizations,
15 as sports coaches, on church committees, boards, and
16 councils as well as members of charitable
17 organizations.

18-e-SR

18 Our employees also raise money for local
19 United Way campaigns, American Cancer Society as well
20 as Make-A-Wish of Minnesota, to name a few.

21 In conclusion, the Prairie Island plant
22 has been a productive contributor to the energy needs
23 in Minnesota and a valuable asset and good neighbor
24 to the surrounding communities. We remain committed

18-f-SR

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1 to operating safely, reliably, economically and
2 focused on being a good neighbor and a steward to the
3 environment.

4 I and the employees of Prairie Island
5 look forward to serving you and meeting the needs of
6 the community for many years to come.

7 Thank you.

8 MR. RAKOVAN: At this point that is all
9 the yellow cards that I had filled out for people who
10 knew that they wanted to make a comment when they
11 first came into the meeting.

12 At this point I just want to make sure
13 that there's nobody else who wanted to come give
14 comments or if anybody else has a question that they
15 would like to ask in a public forum.

16 (No response.)

17 Okay. Just keep in mind pretty much
18 anybody with one of these name tags on is probably an
19 NRC employee. We're all going to be hanging around
20 after the meeting, so if you have a question or a
21 topic that you'd like to address with them, grab one
22 of them; and if they're not the right person to have
23 that conversation, they can hopefully find the person
24 who is the right person.

18-f-SR (continued)

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**Prairie Island Nuclear Generating Plant,
Units 1 and 2
Public Scoping Process
Comments and Responses**

A.1. Alternative Energy Sources

The following comment pertains to the no-action alternative outlined by NEPA:

15-cc-AS

The NRC staff will address alternatives to the continued operation of PINGP 1 and 2, including the no-action alternative (not renewing the licenses) in Chapter 8 of the SEIS.

The following comments pertain to the scope of alternatives to be discussed in the DSEIS:

13-i-AS;15-k-AS

The NRC staff will evaluate environmental impacts associated with various reasonable alternatives to the continued operation of PINGP 1 and 2 in Chapter 8 of the SEIS.

The following comments pertain to using either natural gas or a combination of wind and natural gas to power an alternative to PINGP 1 and 2:

4-a-AS; 5-s-AS; 14-b-AS

The NRC staff will evaluate environmental impacts associated with various reasonable alternatives to the continued operation of PINGP 1 and 2 in Chapter 8 of the SEIS.

The following comment pertains to using the PINGP site for an alternate industrial purpose:

5-t-AS

The comment describes the potential conversion of the PINGP 1 and 2 site to an energy and research facility that would produce hydrogen in addition to providing electricity. The NRC staff's examination of alternatives in Chapter 8 of the SEIS will be limited to energy alternatives that can replace or offset the capacity currently provided by PINGP 1 and 2. As PINGP 1 and 2 do not currently produce hydrogen or provide a site for energy research and development efforts, alternatives to continued operation of PINGP 1 and 2 will not need to fulfill these roles.

The following comment pertains to the greenhouse gas emissions and efficiency of energy generation technologies:

4-a-AS

The NRC staff will provide a comparison of greenhouse gas emissions from a variety of energy generation technologies in Chapter 6 of the SEIS. The NRC staff analysis of alternatives in Chapter 8 will also address relative levels of greenhouse gas emissions for alternatives.

The following comment pertains to policy or planning considerations in meeting future energy needs:

4-a-AS

The NRC does not play a role in energy planning or energy policy development, though the NRC staff does take into account existing policies and regulations when evaluating energy alternatives.

A.2. Aquatic Resources

The following comment pertains to the impacts to aquatic resources from the impingement and entrainment of fish and shellfish:

11-a-AR

The comment is related to aquatic ecology, specifically impingement, entrainment, and heat shock analysis. As part of its environmental review process and SEIS, NRC will review and assess pertinent information regarding impingement, entrainment, and heat shock in Chapters 2 and 4 of the SEIS.

The following comment pertains to fish kills related to the cooling and intake systems of PINGP 1 and 2:

11-c-AR/SW

The comment is related to operation of the plant's cooling system, and its effects in terms of fish kills and other thermal impacts. Potential impacts associated with the plant's cooling system will be discussed in Chapter 4 of the SEIS. Additionally, NRC will identify potential mitigation measures to limit fish kill impacts in Chapter 4 of the SEIS. The State, not the NRC, manages thermal impacts through the National Pollutant Discharge Elimination System (NPDES) permitting process.

The following comments pertain to impacts from thermal discharges of the PINGP 1 and 2 cooling systems:

4-b-AR/SW; 7-a-AR/RW/SW; 7-b-AR/CR/SW; 7-d-AR/CR/SW

These comments are related to operation of the plants cooling system, specifically the effects of the thermal discharge on aquatic and other resources. NRC will discuss the potential impacts associated with the plant's thermal discharge will be presented in Chapter 4 of the SEIS. The State, not the NRC, regulates thermal discharges through the NPDES permitting process.

The following comment pertains to impacts to aquatic resources from exotic species:

11-e-AR

The comment is related to aquatic ecology. Invasive and exotic species as well as other impacts will be discussed in Chapters 2 and 4 of the SEIS. The State, not the NRC, regulates discharge contaminants through the NPDES permitting process. Additionally, Chapter 2 will provide a description of measures undertaken to control biofouling at PINGP 1 and 2.

The following comments pertain to the area of consideration for the aquatic ecology review and analysis provided in the SEIS:

5-e-AR; 8-a-AR/PA/SW

Issues pertaining to the area of consideration for review of aquatic ecology impacts are site specific, or Category 2 issues, and will be discussed in Chapters 2 and 4 of the SEIS.

The following comment pertains to potential releases of radioactive materials into the water:

4-d-AR/HH

All nuclear plants were licensed with the expectation that they would release small quantities of radioactive material to both the air and water during normal operation. Airborne and liquid releases of radionuclides from nuclear power plants must meet radiation dose-based limits specified in 40 CFR Part 190, 10 CFR Part 20, and the as low as is reasonably achievable (ALARA) criteria in 10 CFR Part 50, Appendix I. Regulatory limits are placed on the radiation dose that members of the public might receive from all of the radioactive material released by the nuclear plant combined. Licensees are required to report liquid, gaseous, and solid effluent releases as well as the results of their radiological environmental monitoring program annually to the NRC. The annual effluent release and radiological environmental monitoring reports submitted to the NRC are available to the public through the ADAMS electronic reading room through the NRC website. The NRC routinely inspects all licensees to ensure their compliance with these regulatory limits.

Additionally, in the spring of 2006, the National Research Council of the National Academies published, "Health Risks from Exposure to Low Levels of Ionizing Radiation, BEIR VII Phase 2." The major conclusion of the report is that current scientific evidence is consistent with the hypothesis that there is a linear, no-threshold dose response relationship between exposure to ionizing radiation and the development of cancer in humans. This conclusion is consistent with the system of radiological protection that the NRC uses to develop its regulations. The NRC evaluated the BEIR VII report and discussed its findings in a report to the Commission (SECY 05-0202; Accession Number ML052640532). The NRC concluded that the BEIR VII report does not support the need for fundamental revision to the International Commission on Radiological Protection recommendations. Therefore, it is the NRC's position that the NRC's regulations continue to be adequately protective of public health and safety and the environment and that none of the findings in the BEIR VII report warrant changes to the NRC regulations. The BEIR VII report does not say there is no safe level of exposure to radiation; it does not address "safe versus not safe." It does continue to support the conclusion that there is some amount of cancer risk associated with any amount of radiation exposure and that risk increases with exposure and exposure rate. It does conclude that risk of cancer induction at the dose levels in NRC's and EPA's radiation standards is very small. Similar conclusions have been made in all of the associated BEIR reports since 1972 (BEIR I, III, and V). The comment does not provide any new and significant information and will not be evaluated further.

A.3. Cultural Resources

The following comments pertain to issues regarding potential impacts to cultural resources surrounding the PINGP 1 and 2 site and compliance with the National Historic Preservation Act:

7-b-AR/CR/SW; 7-d-AR/CR/SW; 10-a-CR; 15-m-CR;

The comments are related to the potential impacts to cultural, archaeological, and historical resources. NRC staff is aware of the Prairie Island Indian Community's concern for the archaeological sites both on and within the vicinity of the PINGP 1 and 2 facilities. The comments are noted, and the impacts of extended operation of the PINGP 1 and 2 on cultural, archaeological, and historical resources will be assessed and discussed in Chapters 2 and 4 of the SEIS. Additionally, the PIIC is a cooperating agency and will assist the NRC staff in its review. Several other tribes, the Bureau of Indian Affairs, and the Minnesota State Historic Preservation Office have been contacted by, and may provide their views to, the NRC under Section 106 of the National Historic Preservation Act.

A.4. Cumulative Impacts

The following comments pertain to the assessment of a cumulative impacts analysis in the SEIS:

5-g-CI/LR; 5-h-CI; 5-r-CI/LR; 5-q-CI/LR; 5-w-CI; 5-x-CI; 11-f-CI; 15-z-CI/ER

As part of the environmental review process, the NRC evaluates the potential for cumulative impacts of operations (as defined in 40 CFR 1508.7) during the renewal term. Chapter 4 of the SEIS will analyze the impacts of the proposed action in conjunction with other past, present, and reasonably foreseeable future actions at PINGP 1 and 2 and the activities of other industrial facilities and/or Federal agency actions in the area. As part of NRC's environmental review and SEIS, all pertinent information pertaining to cumulative impacts will be reviewed and assessed.

The following comments pertain to the cumulative impacts of spent fuel storage and spent fuel waste:

5-m-CI/RW; 5-o-CI/RW; 15-v-CI/OS/RW

Onsite storage of spent nuclear fuel is a Category 1 issue. Additionally, waste management issues were evaluated in the GEIS and determined to be a Category 1 issue. Issues classified as Category 1 in Table B-1 of 10 CFR Part 51 have been determined in the GEIS to have similar impacts across all sites and are, therefore, not reevaluated in the SEIS unless new and significant information is identified that would lead the NRC staff to reevaluate the GEIS's conclusions. During the environmental review, the NRC staff makes a concerted effort to determine whether any new and significant information exists for the specific site being evaluated that would change the generic conclusion for a Category 1 issue into a Category 2 issue. Category 2 issues are site specific issues which must be thoroughly analyzed by the applicant as part of its submittal and included in detail in its environmental report. The NRC staff then independently evaluates the issue as part of its SEIS.

While cumulative impacts are site specific issues for some resources, these comments pertaining to cumulative impacts of spent fuel storage and spent fuel waste are not within the scope of the environmental review and will not be evaluated further.

The following comments pertain to establishing a baseline for cumulative impacts in the areas of groundwater and hydrologic resources, human health, and aquatic resources:

5-r-CI/LR

Cumulative impacts on each of these resource areas are a Category 2 issue and will be addressed in Chapter 4 of the SEIS under cumulative impacts.

A.5. Environmental Justice

The following comments pertain to the analysis of environmental justice within the SEIS:

6-b-EJ/UR; 6-f-EJ/RW/UR; 11-d-EJ/SW

The comments are noted. Environmental justice is an issue specific to the plant and will be addressed in Chapter 4 of the SEIS. To perform a review of environmental justice in the vicinity of the nuclear power plant, the NRC staff examines the geographic distribution of minority and low-income populations within 50 miles (80 km) of the site being evaluated. The staff uses the most recent census data available. Once the locations of minority and low-income populations are identified, the staff determines the extent to which these populations may be disproportionately affected.

The environmental impacts of various individual operating uranium fuel cycle facilities are outside the scope of license renewal but are addressed in separate EISs prepared by NRC. These documents include analyses that address human health and environmental impacts to minority and low-income populations. Electronic copies of these EISs are available through the NRC's public Web site under Publications Prepared by NRC Staff document collection of the NRC's Electronic Reading Room at <http://www.nrc.gov/reading-rm/doc-collections/>; and the NRC's Agency wide Documents Access and Management System (ADAMS) at <http://www.nrc.gov/reading-rm/adams.html>.

The following comments pertain specifically to the Prairie Island Indian Community (PIIC), and the inclusion of the PIIC in the analysis of environmental justice within the SEIS:

5-f-EJ/RW; 15-d-HH/EJ; 15-f-HH/EJ; 15-r-EJ; 15-s-EJ; 15-aa-EJ; 15-bb-EJ;

The PIIC is a minority population living within the 50 mile (80 km) radius of PINGP 1 and 2. PIIC will be included in the environmental justice analysis in Chapter 4 of the SEIS. Additionally, the PIIC is a cooperating agency and will assist the NRC staff in its review of environmental justice issues.

A.6. Environmental Report

The following comments raise concerns pertaining to the information included within the Environmental Report submitted by the applicant:

3-c-ER/HH; 5-a-ER; 6-i-ER/HH;13-c-ER/LR; 15-a-ER;15-g-ER; 15-x-ER; 15-y-ER/LR; 15-z-CI/ER

The comments assert that the Environmental Report failed to include information regarding the impacts of routine releases of radioactive effluents, the effects of continued operations on the health and on the Prairie Island Indian Community, the effects of the plant's requested power uprate, the expansion of dry cask storage, and the replacement of the steam generator. The comments will be considered, as appropriate, during the environmental review for the license renewal of PINGP 1 and 2.

A.7. Groundwater

The following comments pertain indirectly and cumulatively to impacts to the groundwater resources, mostly from tritium, surrounding PINGP 1 and 2:

5-b-GW/SW; 15-e-GW

Groundwater is a Category 2 issue and discussed in Chapters 2 and 4 of the SEIS. The comments, in general, are related to the public concerns regarding potential leaks at PINGP 1 and 2 and the PIIC's as well as the public's request for additional information and monitoring data on the level and extent of potential environmental impacts. The requirement to obtain additional data and information on known leaks is part of the ongoing operating license and is currently being addressed by NRC and the applicant. The comments, as they pertain to requiring additional environmental data, are not within the scope of the environmental review. However, the environmental impacts of identified leaks are within the scope of the environmental review and will be addressed in Chapters 2 and 4 of the SEIS.

In addition, NRC regulations require licensees to make surveys, as necessary, to evaluate the potential hazard of radioactive material released in order to assess doses to members of the public and workers, recent discoveries of releases at other plants indicate that undetected leakage to groundwater from facility structures, systems, or components can occur resulting in unmonitored and unassessed exposure pathways to members of the public. The NRC has identified several instances of unintended tritium releases, and all available information shows no threat to the public. Nonetheless, the NRC is inspecting each of these events to identify the cause, verify the impact on public health and safety, and review licensee plans to remediate the event. The NRC also established a lessons learned task force to address inadvertent, unmonitored liquid radioactive releases from U.S. commercial nuclear power plants. This task force reviewed previous incidents to identify lessons learned from these events and determine what, if any, changes are needed to the regulatory program. Detailed information and updates on these liquid releases can be found on the NRC public website at <http://www.nrc.gov/reactors/operating/ops-experience/grndwtr-contam-tritium.htm>.

A.8. Human Health

The following comments pertain to the assessment of human health impacts in the SEIS:

3-c-ER/HH; 4-d-AR/HH; 6-a-HH; 6-c-HH; 6-d-HH; 6-e-HH; 6-h-HH/LR; 13-a-HH; 13-j-HH; 15-d-HH/EJ; 15-f-HH/EJ; 15-h-HH

The NRC staff will address the radiological impacts to human health during its evaluation of the PINGP 1 and 2 license renewal application. However, this issue is a Category 1 issue. Issues classified as Category 1 in Table B-1 of 10 CFR Part 51 have been determined in the GEIS to have similar impacts across all sites and are, therefore, not reevaluated in the SEIS unless new and significant information is identified that would lead the NRC staff to reevaluate the GEIS's conclusions. During the environmental review, the NRC staff makes a concerted effort to determine whether any new and significant information exists for the specific site being evaluated that would change the generic conclusion for a Category 1 issue into a Category 2 issue. Category 2 issues are site specific issues which must be thoroughly analyzed by the applicant as part of its submittal and included in detail in its Environmental Report. The NRC staff then independently evaluates these issues as part of its SEIS.

The following comments pertain to the monitoring of radioactive effluents:

3-b-HH; 3-c-ER/HH 4-e-HH; 6-a-HH; 6-c-HH; 6-d-HH; 6-e-HH; 6-h-HH/LR; 6-i-ER/HH; 13-j-HH; 15-h-HH

The applicant's current operating license requires it to conduct environmental monitoring programs. Upon identification of a new pathway of potential radiological release, the applicant is required by 10 CFR Part 20 to perform radiological surveys to evaluate the radiological hazard from the release. While current operating issues are outside of the scope of the environmental review of this license renewal application, the NRC staff will consider the radioactive effluents monitoring and release points as part of its evaluation of the PINGP license renewal application. The staff will perform a historical review of the radioactive effluents released from the plant and of the data from the applicant's radiological environmental monitoring program to determine if there are any significant or unusual trends that warrant additional evaluation. NRC's environmental review is confined to environmental matters relevant to the extended period of operation requested by the applicant. Radiological data relevant to the environmental review will be discussed as appropriate in Chapters 2 and 4 of the SEIS.

This issue is a Category 1 issue. Issues classified as Category 1 in Table B-1 of 10 CFR Part 51 have been determined in the GEIS to have similar impacts across all sites and are, therefore, not reevaluated in the SEIS unless new and significant information is identified that would lead the NRC staff to reevaluate the GEIS's conclusions. During the environmental review, the NRC staff makes a concerted effort to determine whether any new and significant information exists for the specific site being evaluated that would change the generic conclusion for a Category 1 issue into a Category 2 issue. Category 2 issues are site specific issues which must be thoroughly analyzed by the applicant as part of its submittal and included in detail in its Environmental Report. The NRC staff then independently evaluates these issues as part of its SEIS.

NRC regulations require licensees to control and limit releases to the environment (the air and water) to very small amounts. As part of the NRC requirements for operating a

nuclear power facility, licensees must keep releases of radioactive material to unrestricted areas during normal operation as low as is reasonably achievable (as described in the NRC's regulations in 10 CFR Part 50.34a) and comply with radiation dose limits for the public as given in the regulations in 10 CFR Part 20.

In addition, NRC regulations require licensees to have various effluent and environmental monitoring programs so that the impacts from plant operations are minimized and the extent of releases are accurately recorded and reported. The NRC requires licensees to report plant discharges and results of environmental monitoring around their plants to ensure that potential impacts are detected and reviewed. Licensees must also participate in an interlaboratory comparison program, which provides an independent check of the accuracy and precision of environmental measurements. Licensees are required to keep accurate records on releases to the air and water. In annual reports, licensees identify the amount of liquid and airborne radioactive effluents discharged from plants and calculate associated doses. Licensees also must report environmental radioactivity levels around their plants annually. These reports, which are available to the public, include sampling from thermoluminescent dosimeters (which measure radiation dose levels); airborne radioiodine and particulate samplers; samples of surface, groundwater, and drinking water and downstream shoreline sediment from existing or potential recreational facilities; and samples of ingestion sources such as milk, fish, invertebrates, and broad-leaf vegetation. The NRC conducts periodic onsite inspections of each licensee's effluent and environmental monitoring programs to ensure compliance with NRC requirements. The NRC documents licensee effluent releases and the results of their environmental monitoring and assessment effort in inspection reports that are available to the public.

The following comments pertain to exposure from electromagnetic fields (EMF):

15-gg-HH

The NRC staff will evaluate the actions taken by PINGP to ensure that the impacts from acute electromagnetic fields from their power lines adhere to safety standards issued by the National Electrical Safety Code. These safety standards are designed to ensure that any impacts remain within acceptable limits. This is a Category 2 issue that every plant seeking license renewal must address in its Environmental Report. The NRC staff will include a discussion of PINGP 1 and 2's program to manage acute electromagnetic fields in Chapters 2 and 4 of the SEIS.

For impacts related to the chronic exposure to electromagnetic fields, biological and physical studies of 60-Hz electromagnetic fields have not found consistent evidence linking harmful effects with field exposures. There is currently no scientific consensus on this issue. Therefore, the NRC staff will not perform a specific health assessment for chronic exposure to EMF in the SEIS.

The following comments pertain to human health issues generically associated with nuclear power generating facilities:

3-b-HH; 3-c-ER/HH; 15-h-HH

The GEIS evaluated human health issues and determined them to be a Category 1 issue. The amount of radioactive material released from nuclear power facilities is well measured, well monitored, and known to be very small. The doses of radiation that are received by members of the public as a result of exposure to nuclear power facilities are so low that resulting cancers have not been observed and would not be expected. A number of studies of cancer incidence in the vicinity of nuclear power facilities have been conducted and there are no studies to date that are accepted by the scientific community that show a correlation between radiation dose from nuclear power facilities and cancer incidence in the general public. The comments are noted but provide no new and significant information and will not be evaluated further.

The following comments pertain to added risk due to proximity to PINGP 1 and 2:

4-e-HH; 15-d-HH/EJ

Human health issues were evaluated in the GEIS and were determined to be Category 1 issues. The GEIS evaluated radiation exposures to the public for all plants including PINGP 1 and 2, and concluded that the impact was small. The information regarding increases in the population around PINGP 1 and 2, possible changes in the age distribution of that population, and increased radio-sensitivity of older people and other sensitive populations does not change this evaluation. The maximum dose to any member of the public living or working near PINGP 1 and 2 is well below one millirem per year, which is well below the radiation standards set by EPA and NRC. These comments provide no new and significant information regarding human health issues and therefore will not be evaluated further.

The following comment pertains to the BEIR VII Phase 2 report:

3-c-ER/HH

In the spring of 2006, the National Research Council of the National Academies published, "Health Risks from Exposure to Low Levels of Ionizing Radiation, BEIR VII Phase 2." The major conclusion of the report is that current scientific evidence is consistent with the hypothesis that there is a linear, no-threshold dose response relationship between exposure to ionizing radiation and the development of cancer in humans. This conclusion is consistent with the system of radiological protection that the NRC uses to develop its regulations. The NRC evaluated the BEIR VII report and discussed its findings in a report to the Commission (SECY 05-0202; ADAMS No. ML052640532). The NRC concluded the BEIR VII report does not support the need for fundamental revision to International Commission on Radiological Protection recommendations. Therefore, the NRC's regulations continue to be adequately protective of public health and safety and the environment. None of the findings in the BEIR VII report warrant changes to the NRC regulations. The BEIR VII report does not say there is no safe level of exposure to radiation; it does not address "safe versus not safe." It does continue to support the conclusion that there is some amount of cancer risk associated with any amount of radiation exposure and that risk increases with exposure and exposure rate. It does conclude that risk of cancer induction at the dose levels in NRC's and EPA's radiation standards is very small. Similar conclusions have

been made in all of the associated BEIR reports since 1972 (BEIR I, III, and V). The comment does not provide any new and significant information and will not be evaluated further.

The following comment pertains to non-radiological human health concerns:

15-t-HH

The GEIS evaluated human health issues related to plant operations during the period of extended operations and determined that the issues are generic Category 1 issues. These issues include both radiological and non-radiological health effects. The comment is noted but because it provides no new and significant information, it will not be evaluated further.

A.9. License Renewal and its Processes

The following comments pertain to the MOU between the NRC and the PIIC:

9-a-LR; 15-b-LR; 15-c-LR

The NRC and the PIIC signed an MOU pursuant to which the PIIC is a cooperating agency and the NRC is the lead agency in four specific resource areas: environmental justice, land use, cultural resources, and historic and archeological resources. The MOU can be accessed through the NRC's Electronic Reading Room via ADAMS at accession number ML081710160. These scoping comments are general in nature and do not provide new information. Therefore, the comments will not be evaluated further.

The following comments pertain to the public's ability to provide public comments and the time allotted for the public to do so:

3-a-LR; 5-g-CI/LR; 6-g-LR; 9-a-LR; 14-c-LR

The NRC has established an open process to permit all members of the public to participate in the environmental scoping process. The NRC published a Federal Register Notice (FRN) of its intent to conduct environmental scoping pertaining to the PINGP 1 and 2 license renewal application on July 22, 2008. The environmental scoping period lasted for two months and closed on September 22, 2008. In this time, the NRC staff held two public meetings on July 30, 2008, to receive comments on the scope of the environmental review. These meetings were advertised on the NRC public website, in local newspapers, on notices posted throughout Red Wing, and by letter to individuals and groups on the NRC's most current distribution list.

The NRC makes every effort to inform interested persons or parties of their opportunity to be involved in the NEPA process. After the draft SEIS is published, the NRC staff will issue a FRN of the availability of the document, and this FRN will also open a 75-day period to comment on the draft SEIS. Additionally, the NRC staff will hold a public meeting to receive comments on the draft SEIS. Comments can be provided to the NRC in person, by mail, and by e-mail. These scoping comments identified above are general in nature and do not provide new information. Therefore, the comments will not be evaluated further.

The following comments pertain to the regulations and procedures regarding NRC staff's review of information, assessment, and analysis during the environmental review process, as well as the availability of information to the public:

5-q-CI/LR; 6-h-HH/LR; 13-b-LR

Pertaining to the staff's regulations on the environmental review process under NEPA, 10 CFR 51 contains the NRC regulations that implement NEPA. These regulations define the NRC staff's scope of review and its analysis of information in the SEIS. Regarding the availability of information to the public, the NRC is required to protect information deemed sensitive. Before any NRC- or licensee-generated materials can be released for public inspection, the NRC must complete a sensitivity review to ensure the documents do not contain information that should be designated sensitive.

The following comments pertain to the environmental review process, how it determines impacts on the environment, and how NRC staff should prepare its SEIS:

5-c-LR; 5-r-CI/LR; 5-u-LR; 5-v-LR; 15-y-ER/LR

As part of the environmental review process, the NRC evaluates site-specific data provided by the applicant, other Federal agencies, State agencies, tribal and local governments, as well as information from members of the public. In addition, the NRC performs independent reviews of the plant-specific environmental impacts of license renewal in accordance with NEPA and the NRC's requirements in 10 CFR Part 51. The following technical areas are commonly included in the review: land use, ground and surface water use, ground and surface water quality, air quality, aquatic resources, terrestrial resources, threatened and endangered species, radiological impacts, socioeconomic factors, environmental justice issues, historical and archaeological resources, related federal project activities, postulated accidents, uranium fuel cycle and solid waste management, decommissioning, alternatives to license renewal, and irreversible or irretrievable resource commitments. Site specific Category 2 impacts will be discussed in Chapter 4 of the SEIS. Other areas may be included as a result of information obtained during the NRC staff's review or from public comments during or following meetings that are held in the vicinity of the nuclear power reactor.

The following comments pertain to the availability of the applicant's license renewal application:

13-c-ER/LR; 13-d-LR; 14-a-LR

10 CFR 51.66 specifies the requirements for availability and distribution of the applicant's environmental reports required by the applicant. In addition to providing copies to the NRC, applicants must maintain the capability to generate additional copies of the environmental report for distribution to Federal, State, and local officials, and any affected Indian tribes. Applicants are not required to provide copies of the application to other interested persons or parties. However, once a license renewal application is accepted for review by the NRC, the publicly available portions of the application are included on the NRC's website on the license renewal webpage at <http://www.nrc.gov/reactors/operating/licensing/renewal.html> under the link entitled, "Status of Current Applications and Industry Initiatives." Applications are also available for public inspection in the NRC Public Document Room (PDR), located at One White Flint North, 11555 Rockville Pike, Rockville, Maryland, 20852, or from the NRC's

ADAMS. The ADAMS Public Electronic Reading Room is accessible at <http://www.nrc.gov/reading-rm/adams/web-based.html>. Copies of the application are also available at the Red Wing public library.

A.10. Nuclear Safety

The following comments pertain to nuclear safety, the safety of operations at PINGP 1 and 2, and the safety of fuel storage:

5-z-NS; 11-b-NS; 18-b-NS; 18-c-NS

The NRC's environmental review is confined to environmental matters relevant to the 20-year period of extended period of operation requested by the applicant. Operational safety issues and issues related to the safety of fuel storage are outside the scope of 10 CFR Part 51 and Part 54 and will not be evaluated further in the SEIS. The comments provide no new information and, therefore, will not be evaluated further in the context of the environmental review.

A.11. Outside of Scope

The following comment pertains to general background information about the NEPA process:

5-l-OS

The comment provides general background information and is outside of the scope of the environmental review process and, therefore, will not be evaluated further.

The following comments pertain to a proposed license amendment request regarding transition to a new fuel type at PINGP 1 and 2:

5-y-OS/RW; 13-f-OS

License amendment requests completed during the original 40 year term or during the term of extended operation if the license renewal is granted are reviewed by the NRC for any environmental or safety concerns at the time of the amendment. These comments are outside of the scope of the environmental review process and, therefore, will not be evaluated further.

The following comments pertain to the extended power uprate proposal by NSP and issues of electricity supply:

5-i-OS; 5-k-OS/RW; 5-y-OS/RW; 15-p-OS; 15-v-CI/OS/RW; 15-w-OS/RW; 15-ee-OS/SW; 15-ff-OS

The purpose and need for the proposed action (renewal of an operating license) is to provide an option that allows for power generation capability beyond the term of the current nuclear power plant operating license to meet future system generating needs, as such needs may be determined by State, utility, and where authorized, Federal (other than NRC) decisionmakers. The NRC does not assess the need for power as part of its license renewal environmental review, and 10 CFR 51.95(c)(2) provides that the SEIS is not required to discuss such need.

With respect to power uprates or any modifications made to increase power, these actions are not within the scope of license renewal and they require a separate licensing action. The NRC staff would prepare an Environmental Assessment (EA), or an EIS, if needed, for the power uprate application. These comments provide no new and significant information and will not be evaluated further.

The following comment pertains to issues surrounding security and terrorism:

15-hh-OS

Security issues such as safeguards planning are not tied to license renewal, but are considered to be issues that need to be dealt with constantly as a part of the current operating license. Security issues are periodically reviewed and updated (and extended) at every operating plant. These reviews will continue throughout the period of any extended license. If issues related to security are discovered at a nuclear plant, they would be addressed immediately, and any necessary changes reviewed and incorporated under the operating license, rather than waiting for the period of extended operation. The NRC's environmental review is confined to environmental matters relevant to the extended period of operation requested by the applicant. Appropriate safeguards and security measures have been incorporated into the site security and emergency preparedness plans. Any required changes to emergency and safeguard contingency plans related to terrorist events will be incorporated and reviewed under the operating license. The comments provide no new information and do not pertain to the scope of license renewal as defined under 10 CFR Part 51 and 54. Therefore, the comment will not be evaluated further.

A.12. Postulated Accidents

The following comments pertain to the severe accident mitigation alternatives (SAMA) analysis:

8-a-AR/PA/SW; 15-u-PA

The comments are related to the impacts of design basis accidents and severe accidents. The impacts of design basis accidents and severe accidents were evaluated in the GEIS and determined to be small for all plants; therefore, they are Category 1 issues. Technical issues classified as Category 1 in Table B-1 of 10 CFR Part 51 have been generically evaluated in the GEIS and are not reevaluated in the SEIS unless new and significant information is identified that would lead the NRC staff to reevaluate the GEIS's conclusions. During the environmental review, the NRC staff makes a concerted effort to determine whether any new and significant information exists for the specific site being evaluated that would change the generic conclusion for a Category 1 issue into a Category 2 issue. Category 2 issues are site specific issues which must be thoroughly analyzed by the applicant as part of its submittal and included in detail in its environmental report. The NRC staff then independently evaluates the issue as part of its SEIS.

However, alternatives to mitigate severe accidents must be considered for all plants that have not considered such alternatives. During the plant-specific environmental review of PINGP 1 and 2, the NRC will determine whether there is any new and significant information bearing on the previous analysis in the GEIS. The applicant provided a

severe accident mitigation alternatives (SAMA) analysis as part of the license renewal application for PINGP 1 and 2. The NRC staff's review of the SAMA analysis will be discussed in Chapter 5 and Appendix F of the SEIS for PINGP 1 and 2.

Concerning the potential for accidental drawdown at Lock and Dam 3, this scenario is outside the scope of the environmental review and will not be considered further.

Concerning the effects of a severe accident on the Prairie Island Indian Community specifically, socioeconomic issues, including disproportionate effects to minority or low-income communities, will be discussed in Chapters 2 and 4 of the SEIS.

A.13. Radioactive Waste

The following comments pertain to long term storage of spent fuel:

5-j-RW; 5-k-OS/RW; 5-m-CI/RW; 5-n-RW; 5-o-CI/RW; 5-p-RW; 5-y-OS/RW; 5-aa-RW; 6-f-EJ/RW/UR; 7-a-AR/RW/SW; 7-c-RW; 12-a-RW; 13-h-RW; 15-i-RW; 15-j-RW; 15-v-CI/OS/RW; 17-d-RW

Onsite storage of spent nuclear fuel is a Category 1 issue and the safety and environmental effects of long-term storage of spent fuel onsite has been evaluated by the NRC in the Waste Confidence Rule. The Commission believes there is reasonable assurance that at least one mined geologic repository will be available within the first quarter of the twenty-first century, and sufficient repository capacity will be available within 30 years beyond the licensed life for operation of any reactor to dispose of the commercial high-level waste and spent fuel originating in such reactor and generated up to that time. In its Statement of Considerations for the 1990 update of the Waste Confidence Rule (55 FR 38472), the Commission addressed the impacts of the disposal of spent fuel discharged from the current fleet of reactors operating under existing and renewed licenses and from a new generation of operating reactors. The rule was last reviewed by the Commission in 1999 when it reaffirmed the findings in the rule (64 FR 68005). The rule is currently the subject of a notice of proposed rulemaking (73 FR 59547) that proposes to simplify the rule to state that spent fuel can be "stored safely and without significant environmental impacts beyond the licensed life for operation (which may include the term of a revised or renewed license) of that reactor at its spent fuel storage basin or at either onsite or offsite ISFSIs until a disposal facility can reasonably be expected to be available." Because the issue of spent fuel storage is a Category 1, generic issue, comments regarding spent fuel storage are not within the scope of the environmental review and will not be evaluated further.

The following comments pertain to the Independent Spent Fuel Storage Installation (ISFSI) system in place at PINGP 1 and 2:

5-f-EJ/RW; 5-k-OS/RW; 5-y-OS/RW; 15-i-RW; 15-v-CI/RW; 15-w-OS/RW

The comments relate to spent fuel management and storage issues specifically those regarding the PINGP 1 and 2 independent spent fuel storage installation (ISFSI). Waste management issues and on-site storage of spent nuclear fuel were evaluated in the GEIS and determined to be a Category 1 issue. In addition, the safety and environmental effects of long-term, on-site, storage of spent fuel onsite was addressed by the NRC, in the Waste Confidence Rule (10 CFR 51.23). In the Waste Confidence

Rule, Finding 4, the Commission determined that spent fuel can be stored onsite for at least 30 years beyond the licensed operating life, which may include the term of a renewed license. At or before the end of that period, the rule asserts that spent fuel will be moved to a permanent repository. In October 2008, the NRC proposed to revise Finding 4 in the Waste Confidence Decision so that it reads as follows: "The Commission finds reasonable assurance that, if necessary, spent fuel generated in any reactor can be stored safely without significant environmental impacts for at least 60 years beyond the licensed life for operation (which may include the term of a revised or renewed license) of that reactor in a combination of storage in its spent fuel storage basin and either onsite or offsite independent spent fuel storage installations."

The GEIS is based on the assumption that storage of the spent fuel onsite is not permanent. The SEIS for PINGP 1 and 2, is based on the same assumption.

With respect to the PINGP 1 and 2 ISFSI, specifically, any modifications to the ISFSI pad or containers themselves may require separate licensing actions. NRC regards these actions as part of the current operating licenses and thus they fall outside of the scope of license renewal. These comments provide no new and significant information and will not be evaluated further.

A.14. Shutdown and Decommissioning

The following comment pertains to how much time is budgeted for relicensing, and whether or not PINGP 1 and 2 should be decommissioned:

13-e-SD

The NRC makes its decision whether or not to renew the license based on safety and environmental considerations. The final decision on whether or not to decommission the nuclear plant will be made by the utility, state, and federal (non-NRC) decision makers. This final decision may be based on economics, energy reliability goals, environmental considerations and potential impacts, and other objectives over which the other entities may have jurisdiction.

The environmental review generally takes 22 months to complete if no hearing is granted and 30 months if a hearing is granted.

Environmental impacts from the activities associated with the decommissioning of any reactor before or at the end of an initial or renewed license are evaluated in the GEIS and in NUREG-0586, Generic Environmental Impact Statement for Decommissioning Nuclear Facilities, Supplement 1, Regarding the Decommissioning of Nuclear Power Reactors, published in 2002. The findings from these two documents are used to support the findings in the SEIS by the use of tiering. Tiering is a process by which agencies eliminate repetitive discussions and focus on the more pertinent issues. The effect of license renewal on the impacts of decommissioning will be discussed in Chapter 7 of the SEIS.

A.15. Socioeconomics

The following comments pertain to NRC staff's assessment of socioeconomics:

4-c-SE; 5-d-SE; 15-o-SE; 15-q-SE

The comments are related to the socioeconomic impacts associated with the continued operation or closure of PINGP 1 and 2. Socioeconomic impacts such as housing, transportation, taxes, employment, and land use are Category 2 issues. These issues will be addressed in Chapters 2 and 4 of the SEIS.

A.16. Support for License Renewal

The following comments pertain to the support of PINGP 1 and 2 license renewal:

16-a-SR; 17-b-SR; 17-e-SR

The comments are in support of license renewal of PINGP 1 and 2, and are general in nature. In addition, 10 CFR 51.95(c)(2) discussed the need for power, which is outside of the scope of license renewal. These comments provide no new and significant information and will not be evaluated further.

The following comments pertain to the support of Xcel Energy and NMC:

1-a-SR; 2-a-SR; 16-a-SR; 18-a-SR; 18-d-SR; 18-e-SR; 18-f-SR

The comments are in support of Xcel/NSP (formerly NMC/Xcel) and/or their philanthropic activities. The comments are outside of the scope of the staff's environmental review and will not be evaluated further.

A.17. Support for Nuclear Power

The following comments are in support of nuclear power, generally:

17-a-SN; 17-c-SN

The need for power is outside of the scope of license renewal and pursuant to 10 CFR 51.95(c)(2), need not be addressed in this SEIS. The purpose and need for the proposed action (renewal of the PINGP 1 and 2 operating license) is to provide an option that allows for power generation capability beyond the term of the current operating licenses and thereby meet future system generating needs, as such needs may be determined by State, utility, and where authorized, Federal (other than NRC) decisionmakers. These comments are outside the scope of the staff's environmental review and will not be evaluated further.

A.18. Surface Water

The following comments pertain to the effects of thermal discharge on the Mississippi River and other surface waterbodies:

4-b-AR/SW; 4-f-SW; 7-a-AR/RW/SW; 7-b-AR/CR/SW; 7-d-AR/CR/SW; 11-c-AR/SW; 11-d-EJ/SW

The comments are related to operation of the plants' cooling system, specifically the effects of thermal discharge on surface water, and aquatic and other resources. A discussion of the potential impacts associated with the plants thermal discharge will be presented in Chapter 4 of the SEIS.

The following comments pertain to protecting the surface water resources as well as assessing impacts to surface water resources near PINGP 1 and 2:

4-b-AR/SW; 5-b-GW/SW; 15-dd-SW

Water use and water quality issues are Category 2 issues and will be addressed in Chapters 2 and 4 of the SEIS.

The following comments pertain to Lock and Dam 3, a U.S. Army Corps of Engineers owned and operated facility and associated erosion impacts:

8-a-AR/PA/SW; 15-ee-OS/SW

Issues pertaining to the construction and safety of Lock and Dam 3 are not within the scope of review for license renewal. However, concerns relating to the Mississippi River and other surface waterbodies near PINGP 1 and 2 will be addressed in Chapter 4 of the SEIS. Issues pertaining to water use and quality, including erosion, are Category 2 issues and will be addressed in Chapters 2 and 4 of the SEIS.

A.19. Terrestrial Resources

The following comment pertains to impacts to avian mortality within the transmission line corridors surrounding PINGP 1 and 2:

15-I-TR

Impacts from bird collisions with transmission lines was determined to be a Category 1 issue in the GEIS. Technical issues classified as Category 1 in Table B-1 of 10 CFR Part 51 have been generically evaluated in the GEIS and are not reevaluated in the SEIS because the conclusions reached would be the same as in the GEIS, unless new and significant information is identified that would lead the NRC staff to reevaluate the GEIS's conclusions. During the environmental review, the NRC staff makes a concerted effort to determine whether any new and significant information exists for the specific site being evaluated that would change the generic conclusion for a Category 1 issue into a Category 2 issue. This study, as well as other pertinent information concerning this issue, will be discussed in Chapter 4 of the SEIS. However, this issue will remain Category 1 unless the NRC staff finds new and significant information during the environmental review.

Impacts to terrestrial ecology and non-threatened and endangered species are a Category 1 issue. Impacts to threatened and endangered species, including any protected avian species, is a Category 2 issue and will be addressed in Chapters 2 and 4 of the SEIS.

A.20. Threatened and Endangered Species and Essential Fish Habitat

The following comment pertains to the threatened and endangered Higgins eye pearlymussel:

15-n-TE

The potential impacts of the continued operation of PINGP 1 and 2 on threatened and endangered species is a site specific, or Category 2 issue and will be addressed in Chapters 2 and 4 of the SEIS under aquatic resources. Further, NRC staff will issue a Biological Assessment on the Higgins eye pearlymussel, which can be found in Appendix D of the draft SEIS.

A.21. Uranium Fuel Cycle

The following comments pertain to the uranium fuel cycle and waste management:

6-b-EJ/UR; 6-f-EJ/RW/UR; 13-g-UR

The NRC evaluated the impacts of the uranium fuel cycle which comprises uranium mining and milling, the production of uranium hexafluoride, isotopic enrichment, fuel fabrication, reprocessing of irradiated fuel, transportation of radioactive materials and management of low level wastes and high level wastes related to uranium fuel cycle activities. The wide range of activities associated with the uranium fuel cycle are geographically located throughout the United States and affect a diverse population. The impacts on the environment of the uranium fuel cycle is a Category 1 issue. Technical issues classified as Category 1 in Table B-1 of 10 CFR Part 51 have been generically evaluated in the GEIS and are not reevaluated in the SEIS because the conclusions reached would be the same as in the GEIS, unless new and significant information is identified that would lead the NRC staff to reevaluate the GEIS's conclusions. During the environmental review, the NRC staff makes a concerted effort to determine whether any new and significant information exists for the specific site being evaluated that would change the generic conclusion for a Category 1 issue into a Category 2 issue. Category 2 issues are site-specific issues which must be thoroughly analyzed by the applicant as part of its submittal and included in detail in its Environmental Report. The NRC staff then independently evaluates the issue as part of its SEIS.

The NRC has conducted several transportation studies to evaluate the risk of transportation of radioactive material. NUREG-0170 (NRC 1977b), supported NRC's 10 CFR Part 71, "Packaging and Transportation of Radioactive Material" rulemaking. Based on this study, the Commission concluded that the transportation regulations are adequate to protect the public against unreasonable risks from the transportation of radioactive materials, including spent fuel. The NRC sponsored another study in the 1980s entitled, "Shipping Container Response to Severe Highway and Railway Accident Conditions," NUREG/CR-4829 (Fischer et al. 1987), or the "Modal Study." Based on the results of this study, the NRC staff concluded that NUREG-0170 overestimated spent fuel accident risks by about a factor of three. In March 2000, the NRC initiated another spent fuel study, "Reexamination of Spent Fuel Shipment Risk Estimates," NUREG/CR-6672 (Sprung et al. 2000). This study focused on risks of a modern spent fuel transport campaign from reactor sites to possible interim storage sites and/or permanent geologic repositories. This study concluded that accident risks were much less than those

estimated in NUREG-0170 and that more than 99 percent of transportation accidents are not severe enough to damage NRC-certified spent fuel casks. While very severe accidents could cause cask damage, the studies show that releases of material would be small and pose little risk to the local population/public. The most severe accidents might cause greater releases, but their likelihood is so remote that the NRC considers the risk to public health to be low. The comments are noted. However, they do not provide any new and significant information and will not be evaluated further.