
DRAFT SCOPING DOCUMENT

MONTICELLO NUCLEAR GENERATING PLANT

UPRATE PROJECT

PUC No. E002/CN-08-185

PUC Docket No. E002/GS-07-1567

Prepared by the Staff of the



**STATE OF MINNESOTA
Minnesota Department of Commerce**



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1.0 INTRODUCTION

This scoping document is intended to advise the public of the scoping process and the process for the preparation of the Environmental Review document. The scoping decision will identify for the public the issues and alternatives that the Commissioner of the Department of Commerce (Department) has determined are appropriate for inclusion in the environmental review document. The scoping decision will also identify certain issues that will not be included in the environmental review document.

Xcel Energy filed an application for a Certificate of Need (CON) with the Public Utilities Commission (Commission) for the proposed Monticello Nuclear Generating Plant (MNGP) Extended Power Uprate Project on February 14, 2008, in accordance with Minnesota Rules Chapter 7829 and 7849. On April 10, 2008, the Commission accepted the application as complete (April 18, 2008 order).

On May 1, 2008, Xcel Energy submitted a large electric power generating plant (LEPGP) Site Permit application to the Commission for the proposed uprate project. On May 8, 2008, the Commission accepted the application as complete.

2.0 REGULATORY REQUIREMENTS

Determination of Need

This project requires a Certificate of Need (CON) from the Commission. The docket number for the certificate of need is E002/CN-08-185.

The Department of Commerce Office of Energy Security (OES) prepares an Environmental Report (ER) on proposed large electric power generating plants that come before the Commission for a determination of need. The ER must contain information on the human and environmental impacts of the proposed project associated with the size, type, and timing of the project, system configurations, and voltage. The environmental report must also contain information on alternatives to the proposed project and address mitigating measures for anticipated adverse impacts.

In reviewing an application for a CON the Commission must hold at least one public hearing. The public hearing shall be held at a location and hour reasonably calculated to be convenient for the public. An objective of the public hearing shall be to obtain public opinion on the necessity of granting a certificate of need.

In its April 18, 2008, order, the Commission referred the Certificate of Need docket (PUC Docket No. E002/CN-08-185) to the Office of Administrative Hearings to conduct a contested case hearing. The ALJ will issue a report containing findings, conclusions, and a recommendation on whether the Commission should issue a certificate of need for the proposed project.

Site Permit

The proposed uprate of the electrical generating capacity of the MNGP from 585 MW electric to 656 MW electric falls within the definition of a Large Electric Power Generating Plant in the Power Plant Siting

Act and, thus, requires a Site Permit from the Commission prior to construction. There are three different procedures for obtaining a site permit: full review, alternative review, and local review.

The proposed MNGP power uprate qualifies for the alternative review process and Xcel Energy has applied for a site permit following the alternative review process.

Under the Alternative Review Process, an applicant is not required to propose any alternative sites, but must include in the application the same information required under the full process. The OES Energy Facility Permitting (EFP) staff holds a public information/scoping meeting, develops a scoping decision recommendation and prepares an environmental review document called an Environmental Assessment (EA).

The OES may elect to combine the environmental review document (i.e., the ER) required for the certificate of need process with that required for the Siting Permit process (i.e., the EA). If the documents are combined, OES includes in the EA information on the human and environmental impacts associated with the size, type, and timing, and an analysis of alternatives required by the CON rules.

Upon completion of the EA, a public hearing must be held. The hearing examiner is appointed to conduct the hearing, but the examiner need not be an Administrative Law Judge (ALJ). Members of the public have an opportunity to speak at the hearing, present evidence, ask questions, and submit comments. The Alternative Review Process does not include a contested case hearing proceeding.

The review process begins with the determination by the Commission that the application is complete. The Commission has six months to reach a decision under the Alternative Process from the time the application is accepted. The commission must issue a certificate of need prior to issuing a site permit.

The DOC OES EFP staff has concluded that combining the ER and EA into a single environmental review document is warranted in this case. It is anticipated that the EA will be completed by the end of July, 2008. Additionally, the public hearing portions of the CON and the Site Permit processes will be combined.

Copies of the CON application and the Site Permit Application can be viewed on the EFP website:

<http://energyfacilities.puc.state.mn.us/Docket.html?Id=19542>

3.0 PROJECT DESCRIPTION

The MNGP utilizes a boiling water reactor (BWR). In a boiling water reactor, a nuclear reaction in the reactor core generates heat, which boils water to produce steam inside the reactor vessel, which in turn is directed to turbine generators to produce electrical power. The steam is cooled in a condenser and returned to the reactor vessel to be boiled again. The cooling water is force-circulated by electrically powered feedwater pumps. Emergency cooling water is supplied by other pumps, which can be powered by onsite diesel generators.

Xcel Energy proposes to uprate the electrical generating capacity of MNGP from 585 megawatts electric to 656 megawatts electric (MWe). The uprate will occur in two phases – the first completed by 2009, the second by 2011. The 71 MWe uprate will be achieved by increasing the steam output of the nuclear reactor and capturing this additional output with improved electrical generation equipment and systems. Steam output will be increased through an increase in the number of new fuel assemblies replaced in the reactor core at each refueling. Equipment and systems modifications include:

- Replacement of the high pressure turbine
- Replacement of the low pressure turbine
- Replacement of condensate pumps, motors, and demineralizers
- Upgrades of electrical power supplies and power cooling systems

All modifications, except for limited power supply upgrades, will occur within the current physical footprint of MNGP. No new structures are proposed.

The proposed MNGP uprate is part of Xcel Energy's 2007 Resource Plan to meet projected base load energy and capacity needs.

4.0 ENVIRONMENTAL REVIEW DOCUMENT

As discussed in Section 2.0 the Department will be combining its environmental review responsibilities under the Certificate of Need process with the environmental review procedures under the siting process. The result will be a single environmental review document, an Environmental Assessment (EA), covering the requirements of Minn. Rules 7849.7100, and the requirements of Minnesota Rules 7849.5700.

Certificate of Need

The environmental review document under the certificate of need procedures must include the following:

- A. A general description of the proposed project and associated facilities;
- B. A general description of the alternatives to the proposed project; these shall include:
 - The no-build alternative,
 - Demand side management;
 - Purchased power;
 - Facilities of a different size or using a different energy source;
 - Upgrading of existing facilities;
 - Transmission rather than generation; and
 - Use of renewable energy sources.
- C. An analysis of the human and environmental impacts of a project of the type proposed and of the alternatives identified;
- D. Analysis of the potential impacts that are project specific;
- E. An analysis of mitigative measures that could reasonably be implemented to eliminate or minimize any adverse impacts identified for the proposed project and each alternative;

- F. An analysis of the feasibility and availability of each alternative considered;
- G. A list of permits required for the project; and
- H. A discussion of other matters identified by the Chair.

Site Permit

The environmental review document under the siting and routing permit procedures must include the following:

- A. A general description of the proposed project;
- B. A list of any alternative sites or routes that are addressed;
- C. A discussion of the potential impacts of the proposed project and each alternative site or route on the human and natural environment;
- D. A discussion of mitigative measures that could reasonably be implemented to eliminate or minimize any adverse impacts identified for the proposed project and each alternative;
- E. An analysis of the feasibility of each alternative site or route considered;
- F. A list of permits required for the project; and
- G. A discussion of other matters identified in the scoping process.

5.0 EA SCOPING PROCESS

The purpose of the scoping process is to provide information to the public about the proposed project, to answer questions, and to allow the public an opportunity to suggest alternatives and impacts that should be considered during preparation of the environmental review document.

The public information/scoping meeting will be held beginning at 7 p.m. at the following location:

Thursday, May 29, 2008 – 7:00 PM

**River City Extreme
3875 School Boulevard
Monticello, MN 55362**

<http://www.rivercityextreme.com/>

Please submit written comments on the content of the application or on the scope of the environmental document to my attention no later than close of business on Monday, June 9, 2008.

A scoping decision will be made by the Commissioner of the Department. That decision will be made shortly after the close of the comment period. Persons who want to be advised of the Commissioner's scoping decision can register their names with the Department at the public meeting, on the EFP website or contact Bill Storm at (651) 296-9535. The final scoping decision will also be posted on the EFP website.

6.0 DRAFT SCOPE FOR COMPLETION OF EA

The following is a draft outline of the EA scope and contains those areas to be addressed within the EA document.

- 1.0 OVERVIEW
- 2.0 INTRODUCTION
 - 2.1 Project Description
 - 2.1.1 Description of Power Generating Equipment and Processes
 - 2.1.2 Air Emission Control Equipment
 - 2.1.3 Water Use
 - 2.1.4 Wastewater
 - 2.1.5 Solid and Hazardous Waste Generation
 - 2.1.6 Fuel Supply
 - 2.1.7 Electrical Interconnection
 - 2.2 Purpose
 - 2.3 Sources of Information
- 3.0 REGULATORY FRAMEWORK
 - 3.1 Certificate of Need
 - 3.2 Site Permit Requirement
 - 3.2.1 Environmental Assessment
 - 3.2.2 Public Hearing
 - 3.3 Other Permits
 - 3.4 Issues Outside DOC OES EFP Authority
- 4.0 ALTERNATIVE SITES
 - 4.1 No-build Alternative
 - 4.2 Demand Side Management
 - 4.3 Purchase Power
 - 4.3.1 Long term Purchase Power
 - 4.3.2 Short term Purchase Power
 - 4.4 Alternative Fuels
 - 4.4.1 Fossil Fuel Technologies
 - 4.4.2 Renewable Resource Technologies
 - 4.5 Up-grading Existing Facilities
 - 4.6 New Transmission
- 5.0 ENVIRONMENTAL SETTING
- 6.0 HUMAN AND ENVIRONMENTAL IMPACTS
 - 6.1 Air Quality
 - Potential to Emit
 - Criteria Pollutants
 - Air Emissions Risk Analysis
 - 6.2 Biological Resources
 - Flora
 - Fauna

Rare and Unique Natural Resources

- 6.3 Culture, Archeological and Historic Resources
- 6.4 Geology and Soils
- 6.5 Health and Safety
- 6.6 Land Use
 - Zoning
 - Displacement
 - Recreational Areas
- 6.7 Noise
- 6.8 Socioeconomics
- 6.9 Transportation
- 6.10 Visual Impacts and Aesthetics
- 6.11 Water Resources
 - Surface Water
 - Groundwater
 - Wetlands
- 6.12 Waste Management and Disposal
 - Wastewater
 - Solid Waste
 - Hazardous Waste
- 7.0 SUMMARY OF MITIGATIVE MEASURES
- 8.0 FEASIBILITY

The above guide is not intended to serve as a “Table of Contents” for the EA document, and as such, the organization (i.e., structure of the document) of the information and the data may not be similar to that appearing in the EA.

7.0 SCHEDULE FOR COMPLETION OF EA

The Environmental Assessment will be completed by July 31, 2008.

Upon completion of the EA, the DOC will notify those persons who have asked to be notified of the completion. In addition, the DOC will publish notice of the availability of the EA in the EQB Monitor (the bi-weekly newsletter of the agency). The EA will be made available for review and will be posted on the EFP webpage. The Department will hold a public hearing in Monticello to provide an opportunity for the public to ask questions and to comment on the Site Permit application. The public will also have a period of time (at least 10 days) after the meeting to submit written comments.

Comments on the EA shall become part of the record in the proceeding, but the Commission shall not be required to revise or supplement the EA document.