

**MINNESOTA DEPARTMENT OF COMMERCE  
ENERGY FACILITY PERMITTING STAFF BRIEFING PAPERS**

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Meeting Date: November 10, 2005

Agenda Item # \_\_\_\_\_

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Company: Great River Energy

Docket No. EQB 05-92-PPS-GRE Cambridge Station/ET2/TR 05-1315

In the Matter of a Site Permit to construct a 170 MW, natural gas-fired, simple cycle combustion turbine generator at GRE's existing peaking plant site near Cambridge in Isanti County, Minnesota.

Issue(s): The Minnesota Public Utilities Commission (PUC) is asked to issue a permit to GRE, identifying a site for the construction of a natural-gas fuel, simple-cycle electric generating facility capable of producing 170 megawatts (MW) in Isanti County. Additionally, the Commission is asked to find that the Environmental Assessment and the record address the issues identified in the scoping decision.

DOC Staff: William Cole Storm .....651-296-9535

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**Relevant Documents** (Enclosed in Commission Packet. See eDockets or the PUC website for these and other documents associated with this docket.)

1. Site Permit Application submitted by GRE, dated March 11, 2005;
  2. Environmental Assessment: GRE Cambridge Station, dated May 2005;
  3. DNR comment letter on the Environmental Assessment, dated August 5, 2005;
  4. Report of Administrative Law Judge, dated October 4, 2005;
  5. Proposed Findings of Fact, Conclusions and Order concerning the LEPGP Siting on (1) Designation of LEPGP Site and Issuance of LEPGP Site Permit and (2) Adequacy Determination of the Environmental Assessment;
  6. Proposed LEPGP Site Permit.
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The enclosed materials are work papers of the Department of Commerce Energy Facility Permitting Staff. They are intended for use by the Public Utilities Commission and are based on information already in the record unless otherwise noted.

This document can be made available in alternative formats (i.e., large print or audio tape by calling (651) 201-2202 (Voice) or 1-800-627-3529 (TTY relay service)).

## **Statement of the Issue**

Should the PUC grant or deny a site permit to GRE for the addition of a 170 Megawatt, simple cycle, natural gas combustion turbine at the Cambridge Station in Isanti County, Minnesota?

## **Regulatory Framework and Background**

Effective July 1, 2005, Article 3 of the recently passed energy bill Senate File 1368 transferred energy facility permitting (power plants, transmission lines, pipeline and wind turbine siting) authority from the Minnesota Environmental Quality Board (EQB) to the PUC.

A site permit from the PUC is required to construct a Large Electric Power Generating Plant (LEPGP), which is any electric power generating equipment and associated facilities designed for or capable of operation at a capacity of 50,000 kilowatts or more. The power plant siting act requirement became law in 1973 in Minnesota Statutes, 116C.51 through 116C.69. The rules to implement the permitting requirement for LEPGP are in Minnesota Rules Chapter 4400.

## **The Applicant**

GRE is a not-for-profit wholesale electric cooperative—Minnesota's second largest electric utility based on generating capacity, serving 28 distribution cooperatives in Minnesota. Those member cooperatives supply electricity to more than 580,000 residential, commercial and industrial customers (a population of 1.5 million people) in Minnesota and Wisconsin. GRE member cooperatives provide service to 60 percent of Minnesota, geographically. The GRE system saw an annual energy growth of 6 percent in 2002, nearly three times the national average.

GRE intends to pursue construction financing and permanent financing from traditional sources including the Electric Program of the United States Department of Agriculture's (USDA) Rural Utilities Service (RUS).

## **Project Location**

The proposed project site is located at GRE's existing Cambridge Station near Cambridge, Minnesota, in Isanti County. The Project Site will consist of two parcels currently owned by GRE. The larger portion of the site is an approximate 11-acre parcel in Section 21, T36N, R23W. The site will also include an approximate 2-acre parcel in Section 16, T36N, R23W that houses a service building across 349<sup>th</sup> Avenue NE, north of the larger parcel. The larger parcel has an existing fuel-oil fired 25-MW (nominal summer capacity) combustion turbine generator and associated substation, which will remain.

## **Project Description**

GRE proposes to construct a 170 MW, natural-gas fired, simple cycle combustion turbine generator at its existing peaking plant site near Cambridge in Isanti County, Minnesota. The proposed facility will be located on a current generating site, approximately 13 acres in size, owned by GRE. The site currently has a 25 MW, fuel-oil fired, combustion turbine generator and associated substation.

To supply natural gas to the facility, a ½-mile, 10 inch diameter lateral pipeline will be constructed to connect the Cambridge Station to the Northern Natural Gas Company's (NNG) existing interstate pipeline. The natural gas pipeline will be permitted through a separate process.

Upgrades to the substation and re-conductoring of three transmission lines that enter the Cambridge Station will be required. No change in voltage of the existing three 69 kV transmission lines is planned; therefore, no PUC high voltage transmission line (HVTL) routing permit would be required.

## **Procedural Background**

On February 28, 2005, GRE submitted to the Minnesota Public Utilities Commission (MPUC) a Certificate of Need (CON) application regarding the Cambridge Station. In March, 2005, GRE submitted to the Minnesota Environmental Quality Board (EQB) a site permit application regarding the Cambridge Station.

GRE requested that a joint hearing be held to consider both the CON and Site Permit applications. Joint hearings are permissible under Minn Stat. 216B.243, subd. 4.

On March 14, 2005, the EQB Chair accepted the application as substantially complete and notified the applicant in writing of the decision. The EQB Chair also elected to combine the general environmental review (i.e., Environmental Report) for the PUC with the site-specific environmental review (i.e., Environmental Assessment) for the EQB into one document (Minn Rule part 4410.7060).

On March 17, 2005, the EQB adopted a resolution authorizing the holding of a joint hearing, upon approval of the Public Utilities Commission, on the applications by Great River Energy for a certificate of need and a site permit.

On April 8, 2005 the PUC granted GRE's request for a joint hearing with the EQB on the issues of need and siting.

The Site Permit application was reviewed under the Alternative Permitting Process procedures set forth in Minn Rule 4400.2000. These rules require the preparation of an Environmental Assessment (EA). Chapter 4400 also requires a number of procedural steps in administering the permit application (public notices, public meeting, and a hearing).

The public information and EA scoping meetings were held in the Community Hall Building at the Isanti County Fairgrounds on April 19, 2005. The Scoping Decision was signed by the EQB Chair on May 5, 2005. The EA was completed on May 31, 2005.

A public hearing presided over by Administrative Law Judge Kathleen D. Sheehy was held on July 26, 2005, also at the Isanti County Fairgrounds. The ALJ's report was released on October 4, 2005. The ALJ recommended that a site permit be issued to GRE for the construction of a LEPGP to be installed at the Cambridge Station plant site as proposed in the Site Permit Application.

Additional documents pertaining to this project are available on the PUC webpage:

<http://energyfacilities.puc.state.mn.us/Docket.html?Id=16153>

### **Public Comments**

No public comment letters were received regarding the Scoping Decision or the Environmental Assessment.

The letter from Department of Natural Resources, dated August 5, 2005, is included as document No. 3 in the Commissioner's packet.

### **Issues**

No significant issues were identified during the course of the Minnesota Rules Chapter 4400 proceeding.

### **Record**

A list of the written comments and other documents that are part of the record in this permit proceeding is included as document No. 4 (Exhibit List) in the commissioners' packet. The Department of Commerce's (DOC) Energy Facilities Permitting staff has provided copies of these documents to PUC staff, and copies will be available at the PUC meeting.

### **Findings of Fact**

Staff has prepared Findings of Fact, Conclusions of Law and Order, and they are included as document No. 5 in the commissioners' packet. The Findings address the procedural aspects of the process followed, describe the project, respond to the written comment(s), and address the environmental and other considerations of the project.

### **Standard for Permit Issuance**

Essentially the test for issuing a site permit for a Large Electric Power Generating Plant is to determine whether a project is compatible with environmental preservation, sustainable development, and the efficient use of resources (Minnesota Statute 116C.53).

The Power Plant Siting Act sets standards and criteria and outlines the factors to be considered in determining whether to issue a permit for a LEPGP (Minnesota Statute 116C.66).

Also, the law allows the PUC to place conditions in LEPGP permits (Minnesota Statute 116C.66).

### **MPUC Decision Options**

- A. Approve and adopt the Findings of Fact, Conclusions and Order which determines (1) that the Environmental Assessment and the record created at the public hearing addresses the issues identified in the scoping decision and (2) designating a site at the current GRE Cambridge Station (Section 21, T36N, R23W and Section 16, T36N, R23W Isanti County, Minnesota) for a 170 megawatt large electric power generating plant and (3) issuing a Site Permit to Great River Energy
- B. Amend the Findings of Fact, Conclusions and Order and Site Permit as deemed appropriate.
- C. Deny the site permit.
- D. Make some other decision deemed more appropriate.

**Department of Commerce Staff Recommendation:** The DOC's Energy Facility Permitting staff recommends that the PUC select item A listed above, adopting the Findings of Fact, Conclusions and Order and issue a Site Permit with the appropriate conditions contained in the staff's suggested permit to GRE to be located in Isanti County.

**STATE OF MINNESOTA  
PUBLIC UTILITIES COMMISSION**

In the Matter of the LEPGP Site Permit  
Application by Great River Energy  
associated with the construction of a  
natural gas combustion turbine at the  
Cambridge Station Generating Plant in  
Isanti County

**FINDINGS OF FACT,  
CONCLUSIONS, AND ORDER**

**EQB Docket No.  
05-92-PPS-GRE Cambridge Station  
PUC Docket No. ET2/TR 05-1315**

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The above-captioned matter came before the Minnesota Public Utilities Commission (MPUC) at a regular meeting on November 10, 2005, pursuant to an application by Great River Energy for a Large Electric Power Generating Plant Site Permit.

**STATEMENT OF ISSUE**

Should Great River Energy be granted a Site Permit to construct and operate a natural-gas fuel, simple-cycle electric generating facility capable of producing 170 megawatts (MW) at the Cambridge Station generating plant?

Based upon all of the proceedings herein, the Minnesota Public Utilities Commission (PUC) makes the following:

**FINDINGS OF FACT**

1. The Summary of Evidence of the Administrative Law Judge in her Report of October 4, 2005, is hereby adopted as Findings of Fact by the MPUC with the inclusion of the following corrections, amendments and additions.
2. A footnote (fn #15) to paragraph 16 of the Judge's report stated that the Minnesota Environmental Quality Board (EQB) sent the notice of EA availability/Public Hearing Notice to Isanti County, the city of Cambridge, and Cambridge Township by regular mail, as opposed to the certified mail requirement of Minnesota Statute 116C.57, subd. 2b. These notices were sent via certified mail and the receipts are within the Department of Commerce (DOC) project files.
3. Paragraph 102 of the Judge's Report is amended to read as follows:

Great River Energy (GRE) would construct a new well on the Project site south of 349<sup>th</sup> Avenue NE. The well would likely withdraw water from the Mt. Simon bedrock aquifer. The estimated annual groundwater appropriation for the Project is 4.7 million gallons, with an estimated withdraw rate of 108 gpm. ~~108 gpm.~~ This is a relatively small amount and is not expected to result in any adverse impacts on the aquifer and regional water supplies. Mt. Simon aquifer wells can produce in excess of 1500 gpm. The City obtains its water from the Mt. Simon aquifer.

4. The MPUC has jurisdiction over the subject matter. Effective July 1, 2005, Article 3 of the recently passed energy bill S.F.1368 transfers power plant and wind turbine siting, transmission line and pipeline routing authority from the EQB to the PUC. The same law transfers the energy facility permitting staff from the EQB to the DOC.
5. The Environmental Assessment and the record created at the public hearing addresses the issues identified in the scoping decision per Minnesota Rule 4400.2950, subp. 3.

Based on the foregoing Findings of Fact, the MPUC makes the following

### **CONCLUSIONS**

1. Any of the foregoing Findings more properly designated as Conclusions are hereby adopted as such.
2. This project qualifies for review under the Alternative Review Process of Minn Statute 116C.575 and Minn Rules 4400.2000 to 4400.2950.
3. The Applicant and the EQB have complied with all procedural requirements required by law.
4. The EQB has completed an Environmental Assessment on this project as required by Minn Statute 116C.575, subdivision 5, and Minn Rule part 4400.2750, and considered all the pertinent factors in determining which site to approve.
5. The conditions included in the Site Permit are reasonable and appropriate and will help to minimize the impacts of this project and are agreed to by the Applicant.

Based on the Findings of Fact and Conclusions contained herein and the entire record of this proceeding, the MPUC hereby makes the following

### **ORDER**

A Site Permit is issued to Great River Energy for construction of a natural-gas fuel, simple-cycle electric generating facility capable of producing 170 megawatts (MW) in Isanti County at GRE's current Cambridge Station generating plant. The Permit shall be issued in the form attached hereto, with a map showing the approved site.

Approved and adopted this 10<sup>th</sup> day of November, 2005

BY ORDER OF THE COMMISSION

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Burl W. Haar,  
Executive Secretary

**SITE PERMIT**  
**FOR CONSTRUCTION OF A**  
**LARGE ELECTRIC POWER GENERATING PLANT**  
**IN**  
**ISANTI COUNTY, MINNESOTA**  
**ISSUED TO**  
**GREAT RIVER ENERGY**  
**DOC DOCKET NO. 05-92-PPS-GRE CAMBRIDGE STATION**  
**PUC DOCKET NO. ET2/TR 05-1315**

In accordance with the requirements of Minnesota Statute 116C.57 and Minnesota Rules Chapter 4400, this Site Permit is hereby issued to:

**GREAT RIVER ENERGY**

Great River Energy (GRE) is authorized by this permit to construct a new natural-gas fuel, simple-cycle electric generating facility capable of producing 170 megawatts (MW) on the site of the Cambridge Station Generating Plant in Isanti County, Minnesota, identified in this Permit and in compliance with the conditions specified in this Permit.

Approved and adopted this 10<sup>th</sup> day of November, 2005

BY ORDER OF THE COMMISSION

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Burl W. Haar,  
Executive Secretary

Issued: November 10, 2005

## **I. SITE PERMIT**

The Minnesota Public Utilities Commission (MPUC) hereby issues this Site Permit to Great River Energy, pursuant to Minnesota Statute 16C.57 and Minnesota Rules Chapter 4400, to construct a new natural-gas fuel, simple-cycle electric generating facility capable of producing 170 megawatts (MW) on the site of the Cambridge Station Generating Plant in Isanti County, Minnesota.

## **II. PROJECT DESCRIPTION**

The project consists of adding one natural gas-fired, simple-cycle combustion turbine generator to GRE's existing Cambridge Station near Cambridge, Minnesota in Isanti County. The project will have a nominal summer generating capacity of 170 MW and is expected to be operated during periods when GRE's member demand is the highest (e.g. the air conditioning season).

The project location and site layout is shown in the attached figure.

The project description is more specifically described in the Site Permit Application and in the Environmental Assessment.

## **III. DESIGNATED SITE**

The project site consists of two parcels currently owned by GRE. The larger portion of the site is an approximately 11-acre parcel in Section 21, T36N, R23W. The site will also include an approximately 2-acre parcel in Section 16, T36N, R23W that houses a service building across 349<sup>th</sup> Avenue NE, north of the larger parcel. The larger parcel has an existing fuel-oil fired 25-MW (nominal summer capacity) combustion turbine generator and associated substation, which will remain.

The site is more specifically described in the Site Permit Application and in the Environmental Assessment.

## **IV. PERMIT CONDITIONS**

The following conditions shall apply to the construction of the facility.

**A. Site Plan.** The Permittee shall submit to the MPUC three (3) copies of a work/site plan at least fourteen (14) days prior to the commencement of construction activity. This plan will include the cut/fill/grading diagrams, the location and placement of the various structures to be constructed, including all electrical equipment, pollution control equipment, roads, and other associated facilities. The Permittee shall have the right to move or relocate any of these structures after construction commences, but the Permittee shall file an amended site plan with the MPUC at least twenty-four (24) hours prior to implementation.

## **B. Construction Practices**

**1. Application.** The Permittee shall follow those specific construction practices and material specifications described in the Site Permit Application, unless this Permit establishes a different requirement in which case this Permit shall prevail.

**2. Field Representative.** At least fourteen (14) days prior to commencing on-site activity, the Permittee shall advise the MPUC in writing of the person or persons designated to be the field representative for the Permittee with the responsibility to oversee compliance with the conditions of this Permit. This person's address, phone number, and emergency phone number shall be provided to the MPUC, who may make the information available to local residents and public officials and other interested persons. The Permittee may change its field representative at any time upon written notice to the MPUC.

**3. Roads.** At least fourteen (14) days prior to commencing on-site activity, the Permittee shall advise the MPUC and other appropriate governing bodies having jurisdiction over roads, of all state, county, and city roads that will be used during that phase of the project. Where practical, existing roadways shall be used for all activities associated with construction of the facility. Wherever practical, all-weather roads shall be used to deliver heavy components to and from the project site. The Permittee shall, prior to construction activities, make satisfactory arrangements with the appropriate state, county, and local governmental bodies having jurisdiction over the roads to be used for construction, for any repair and maintenance of those roads resulting from the transportation of equipment and materials. The Permittee shall notify the MPUC of such arrangements prior to the start of construction activities.

## **C. Completion of Construction.**

**1. Plans and Specifications.** Within one hundred twenty (120) days after completion of construction of the facility, the Permittee shall submit to the MPUC the "as built" site layout.

**2. GPS Data.** Within one hundred twenty (120) days of completion of construction, the Permittee shall submit to the MPUC, in the format requested by the MPUC, geo-spatial information (GIS compatible maps, GPS coordinates, etc.) for the power plant and associated facilities.

**D. Other Requirements.** The Permittee shall comply with all applicable state rules and statutes. The Permittee shall obtain all required permits for the project and comply with the conditions of these permits. The anticipated permits and approvals required for the project are listed in Section 1.4.2 Other Project Permits of the Application for a Generating Plant Site Permit and in Table 3 of the Environmental Assessment.

**E. Delay in Construction.** If the Permittee has not commenced construction or improvement of the project within four (4) years from the date of issuance of this Permit, the MPUC shall consider suspension of the Permit in accordance with Minn Rule 4400.3750.

## **V. PERMIT AMENDMENT**

This permit may be amended at any time by the MPUC. Any person may request an amendment of this permit pursuant to Minn Rule 4400.3840, by submitting a request to the Commission in writing describing the amendment sought and the reasons for the amendment. The Commission will mail notice of receipt of the request to the Permittee. The MPUC may amend the permit after affording the Permittee and interested persons such process as is required.

## **VI. TRANSFER OF PERMIT**

The Permittee may request at any time that the MPUC transfer this permit to another person or entity. The Permittee shall provide the name and description of the person or entity to whom the permit is requested to be transferred, the reasons for the transfer, a description of the facilities affected, and the proposed effective date of the transfer. The person to whom the permit is to be transferred shall provide the MPUC with such information as the MPUC shall require in determining whether the new permittee can comply with the conditions of the permit. The MPUC may authorize transfer of the permit after affording the Permittee, the new permittee, and interested persons such process as is required.

## **VII. REVOCATION OR SUSPENSION OF THE PERMIT**

The MPUC may initiate action to revoke or suspend this permit at any time. The MPUC shall act in accordance with the requirements of Minnesota Rule part 4400.3950 to revoke or suspend the permit.



-  Section Lines
-  Property Boundary

Proposed Features

1. CTG and Related Equipment
2. Exhaust Stack
3. On-site Natural Gas Town Border Station
4. Raw and Treated Water Tanks
5. Retention Basin

Existing Features

- A. Existing Substation
- B. Existing Peaking Plant
- C. Existing Crew and Storage Buildings

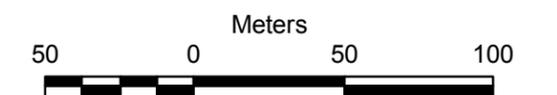
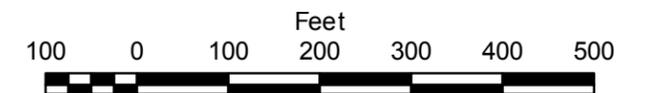


Figure 2-1

Project Layout  
Cambridge Station  
Great River Energy

March 2005