BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

COMMENTS AND RECOMMENDATIONS OF THE
DEPARTMENT OF COMMERCE
ENERGY FACILITY PERMITTING STAFF

DOCKET NO. E002/GS-11-307

Meeting Date: June 23, 2011 .....Agenda Item # 7

Company: Xcel Energy

Docket No: **E002/GS-11-307**

In the Matter of the Site and Route Permit Application for the Black Dog Repowering Project in Burnsville, Minnesota.

Issue(s): Should the Minnesota Public Utilities Commission accept the application as substantially complete? If accepted, should the Minnesota Public Utilities Commission authorize the Department of Commerce to appoint a public advisor and an advisory task force?

EFP Staff: Scott E. Ek .....(651) 296-8813

Relevant Documents

Notice of Intent Letter..... April 5, 2011
Site and Route Permit Application ..... May 19, 2011

The enclosed materials are work papers of the Department of Commerce Energy Facility Permitting (EFP) staff. They are intended for use by the Minnesota Public Utilities Commission (Commission) and are based on information already in the record unless otherwise noted.

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Documents Attached

Figure 1 – Proposed Project Layout

Note: Relevant documents and additional information can be found on eDockets (Docket Number 11-307) or the Commission's Energy Facilities Permitting website at: http://energyfacilities.puc.state.mn.us/Docket.html?Id=32056.

Statement of the Issues

Should the Minnesota Public Utilities Commission accept the application as substantially complete? If accepted, should the Minnesota Public Utilities Commission authorize the Department of Commerce to appoint a public advisor and an advisory task force?

Introduction and Background

On May 19, 2011, Xcel Energy filed a site and route permit application under the alternative permitting process for the Black Dog Repowering Project. The Black Dog Generating Plant and the property on which the plant is located are owned by Xcel Energy. Xcel Energy would be named as permittee and will construct, own, and operate the proposed project.

The Black Dog Generating Plant is currently a coal- and natural gas-fired electric generating station. The proposed project would consist of installing natural gas-fired combined-cycle electric generating technology to replace the existing coal-fired electric generating technology in Units 3 and 4. A similar upgrade was completed at the plant in summer of 2002, when Northern States Power converted Units 1 and 2 from coal to natural gas.

Project Location

The proposed project would be constructed within the existing Black Dog Generating Plant property boundaries located in the northern portion of the city of Burnsville, Dakota County, Minnesota (Township 27N, Range 24W, Sections 23 and 24). The generating plant is situated on an 80-acre parcel of land located in the Minnesota River Valley which is bound by the Minnesota River to the north and Black Dog Lake to the south. Interstate 35W is located approximately two miles west of the site, and U.S. Highway 77 is located approximately one mile east of the site (Figure 1).

Project Description

The proposed project consists of installing natural gas-fired combined-cycle electric generating technology to replace the existing coal-fired electric generating technology in Units 3 and 4. The project would be fueled entirely by natural gas with no backup fuel. The project will result in more than 450 megawatts (MW) of additional generating capacity at the plant (current 250 MW).

The major components of the project include:

- Two natural gas combustion turbine – generator sets
- Two heat recovery steam generators
- Two exhaust stacks
- Steam turbine generator, condenser and cooling tower (70 feet in height)
- Natural gas interconnection (to be permitted separately by supplier, as necessary)
- 345 kV onsite substation
- Rebuild 1,000 to 1,500 feet of existing 115 kV transmission lines
- Two 4,000 foot sections of 345 kV double-circuit transmission lines

The project would be constructed onsite in what is now the coal storage yard. This area would be filled with imported soil to bring portions of the proposed site above the 100-year flood elevation. A power generation building will house the two combustion turbine generators, two heat recovery steam generators, and one steam turbine generator. Two exhaust stacks would be located outside each building and are anticipated to be 230 feet in height.

The water supply required for operation of the proposed project would be obtained from the Minnesota River and from the existing onsite well under an existing Department of Natural Resources (DNR) Water Appropriation Permits.

Wastewater generated from the project would be discharged to the Minnesota River via the Black Dog Lake existing discharge points (outfalls) under an National Pollutant Discharge Elimination System (NPDES) permit. Xcel Energy also intends on closing the four existing ash ponds and would install two new ponds, one for treatment of cooling tower blowdown and one for site stormwater management. Some wastewater sources would also be discharged to surface waters under an NPDES permit or the sanitary sewer system under an Metropolitan Council Environmental Services Industrial Discharge permit.

Regulatory Process and Procedures

In Minnesota, no person may construct a large electric power generating plant or high-voltage transmission line without a site permit (Minnesota Statute 216E.03, subdivision 1) and a route permit (Minnesota Statute 216E.03, subdivision 2) from the Commission.

A large electric power generating plant is defined as electric power generating equipment and associated facilities designed for or capable of operation at a capacity of 50 MW or more (Minnesota Statute 216E.01, subdivision 5). A high-voltage transmission line is defined as a conductor of electric energy designed for and capable of operation at a voltage of 100 kV or more and is greater than 1,500 feet in length (Minnesota Statute 216E.01, subdivision 4). The project as proposed would result in approximately 450 MW of additional electrical generating capacity and require construction of two approximately 4,000 foot long sections of 345 kV double-circuit transmission line to provide an outlet for the generating capacity, thus requiring a site permit and route permit from the Commission.

Because the proposed project meets the definition of a large energy facility as defined in Minnesota Statutes 216B.2421, subdivision 2(1), a certificate of need application is required. A certificate of need application (E002/CN-11-184) for this project was filed by Xcel Energy on March 15, 2011, and is currently under review.

In addition, Minnesota Statute 216E.03, subdivision 1, provides that the Commission must incorporate into one proceeding the route selection for a high-voltage transmission line that is directly associated with and necessary to interconnect a large electric power generating plant to the transmission system, and whose need is certified under section 216B.243. The proposed project falls under this category.

Route Permit Application and Acceptance

In accordance with Minnesota Rule 7850.2800, subpart 2, applicants are required to provide a 10-day advance notice of intent to the Commission before submitting a site and route permit application under the alternative permitting process. On April 5, 2010, Xcel Energy filed a letter with the Commission indicating its intent to submit both a site and route permit application for the project under the alternative permitting process.

On May 19, 2011, Xcel Energy filed a site and route permit application under the alternative permitting process for the Black Dog Repowering Project. The project is eligible for consideration under the alternative permitting process because the plant will be fueled by natural gas (Minnesota Rule 7850.2800, subpart 1B) and the proposed transmission lines in excess of 200 kV are less than five miles in length (Minnesota Rule 7850.2800, subpart 1D). Under this process, EFP staff conducts public information and scoping meetings and prepares an environmental assessment, and a public, non-contested case hearing is required.

Route permit applications for high-voltage transmission lines reviewed under the alternative permitting process must provide specific information about the proposed project including, but not limited to, applicant information, description of proposed plant and transmission line route, environmental impacts and mitigation measures as defined in Minnesota Rule 7850.3100. Review under the alternative permitting process does not require the applicant to propose any alternative sites or routes in the permit application. However, if the applicant has rejected alternative sites or routes they must include the rejected routes and reasons for rejecting them in the route permit application (Minnesota Rule 7850.3100).

The Commission may accept an application as complete, reject an application and require additional information to be submitted, or accept an application as complete upon filing of supplemental information. The environmental review process begins on the date the Commission determines that a route permit application is complete (Minnesota Rule 7850.3200) and the Commission has six months to reach a final route permit decision from the date an application is accepted (Minnesota Rule 7850.3900, subpart 1).

Public Advisor

Upon acceptance of an application for a route permit, the Commission must designate a staff person to act as the public advisor on the project (Minnesota Rule 7850.3400). The public advisor is someone who is available to answer questions from the public about the permitting process. In this role, the public advisor may not act as an advocate on behalf of any person. The Commission can authorize Department of Commerce EFP to name a member from the EFP staff as the public advisor or assign a Commission staff member.

Advisory Task Force

The Commission has the authority to appoint an advisory task force (ATF) pursuant to Minnesota Statute 216E.08, subdivision 1 and Minnesota Rule 7850.3600. An ATF may include interested local persons, but requires at least one representative from each of the following local governmental units: regional development commissions, counties and municipal corporations, and one town board member from each county in which a site or route is proposed to be located. An ATF can be charged with identifying additional sites and routes or specific impacts that could be evaluated in the environmental assessment. The ATF terminates upon completion of its charge, upon designation by the Department of Commerce of alternative sites or routes to be included in the environmental assessment, or upon the specific date identified by the Commission in the charge, whichever occurs first.

The Commission is not required to assign an ATF for every project. If the Commission does not name an ATF, the rules allow members of the public to request appointment of an ATF (Minnesota Rule 7850.3600). The Commission would then need to determine if an ATF should be appointed or not.

Environmental Review

An application for both a site and route permit is subject to environmental review conducted by EFP staff. The staff will provide notice and conduct a public information and environmental assessment scoping meeting to solicit public comments on the scope of the environmental assessment. The Department of Commerce may include a suggested alternative site or route in the scope of the environmental assessment only if it is determined that evaluation of the proposed site or route will assist in the Commission's ultimate decision on the route permit. Any person may also suggest specific human or environmental impacts that should be addressed in the environmental assessment. The environmental assessment will be completed and made available prior to the public hearing (Minnesota Rule 7850.3700).

Public Hearing

Applications for high-voltage transmission line route permits under the alternative permitting process require a public hearing upon completion of the environmental assessment. The hearing is held in the area where the proposed project would be located and is conducted in accordance with Minnesota Rule 7850.3800.

Joint Proceedings

The Department of Commerce EFP staff prepares an environmental report on a proposed large electric power generating plant or high-voltage transmission line that comes before the Commission for a determination of need (Minnesota Rule 7849.1200); as previously stated, the proposed Black Dog Repowering Project falls within this definition.

The environmental report 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.

Minnesota Rule 7849.1900, subpart 1, provides that in the event an applicant for a certificate of need for a large electric power generating plant or high-voltage transmission line applies to the Commission for a site or route permit prior to the time the EFP completes the environmental report, the EFP may elect to prepare an environmental assessment in lieu of the required environmental report. If combining the processes would delay completion of the environmental review, the applicant and the Commission must agree to the combination. If the documents are combined, EFP includes in the environmental assessment the analysis of alternatives required by part 7849.1500, but is not required to prepare an environmental report under parts 7849.1000 to 7849.2100.

The applicant, in its site and route permit application, requested that the site and route permit review of the proposed project be combined with the certificate of need review.[1]

Minnesota Statute 216B.243, subdivision 4, require a public hearing be held for the certificate of need to obtain public comments on the necessity of the project. EFP staff believes that efficiencies may be achieved by combining the required public hearings in the certificate of need and site/route permit processes.

Staff Analysis and Comments

EFP staff conducted a completeness review of the site and route permit application. Staff concludes that Xcel Energy has met the procedural requirement of Minnesota Rule 7850.2800, subpart 2, by providing the Commission written notice of its intent to submit a route permit application under the alternative permitting process at least 10 days prior to submitting the application. Staff also concludes that the proposed project is eligible for the alternative permitting process and that the application meets the content requirements of Minnesota Rule 7850.3100 and is complete. The Commission's acceptance of the application will allow EFP staff to commence and conduct the public participation and environmental review processes. The applicant has indicated that any additional information deemed necessary for processing the application can and will be provided to EFP staff in a prompt manner, upon request.

[1] Xcel Energy, Application to the Minnesota Public Utilities Commission for a Generating Plant Site Permit and a Transmission Line Route Permit Black Dog Repowering Project (SRPA), May 13, 2011, Docket E002/GS-11-307, Page 1.2.

Advisory Task Force

In analyzing the merits of establishing an ATF for the project, staff considered four characteristics: project size, complexity, known or anticipated controversy, and sensitive resources.

Project Size. The proposed project would be constructed on Xcel Energy-owned land that is already part of the existing Black Dog Generating Plant site. The plant site is approximately 80 acres in size and is buffered by 1,900 acres of land. The proposed project would not increase the existing plant footprint and would be located on 35 acres within the existing plant site footprint on what is now the coal yard for the plant. In addition, the two proposed sections 345 kV transmission are short in length (4,000 feet each) and would also be located within the existing plant site footprint.

Complexity. The proposed project is simple and straight forward; existing coal-fired electric generating Units 3 and 4 would be retired and replaced with natural gas-fired, combined cycle generation to be located in what is now the coal storage yard at the plant site. A similar upgrade was completed at the plant in summer of 2002, when Northern States Power converted Units 1 and 2 from coal to natural gas. There have also been similar and successful conversions performed in past years at Xcel Energy's High Bridge Power Generating Plant and its Riverside Power Plant.

In addition, the project would take advantage of existing infrastructure available for use at the plant site, such as transmission lines, water and wastewater systems, and transportation infrastructure.

Known or Anticipated Controversy. EFP staff anticipates only a moderate level of public interest with this project. The Black Dog Repowering Project takes advantage of an existing site on land owned by Xcel Energy and does not create new land use impacts. The Project would be constructed entirely on land already used for electric power production. Xcel Energy indicates in its site and route permit application that no easements will be required from private landowners. The project would also provide a number of environmental benefits by retiring the coal-fired generation and replacing it with more efficient and cleaner natural gas-fired technology.

The only comment letter received on the proposed project was the city of Burnsville, the same letter that was sent to Commission staff during the certificate of need application acceptance comment period.[2] In its letter, the city of Burnsville raises a number of issues that it would like to see addressed during the permit review processes, including FEMA flood plain ordinances, stormwater management, wetland conservation, transportation, noise and visual. Nearly all the issues raised by the city of Burnsville are factors that are considered during the siting/routing permit review process. There would also be future opportunities during the review process for the city of Burnsville to provide comments with regard to the project.

[2] City of Burnsville Comment Letter, Docket E002/GS-11-307, eDocket ID 20115-62408-01.

Sensitive Resources. The project site is adjacent to the Minnesota River Valley National Wildlife Refuge. However, as indicated in the site and route permit application, the proposed project would be constructed within the footprint of the existing Black Dog Electric Generating Plant Site. Based on the information in the Natural Heritage Information System and the comments from the DNR included in the application, no impacts to rare or unique species are expected.

Information in the application collected from the Minnesota State Historic Preservation Office revealed no archaeological site or inventoried historic structures within the immediate project area.

Based on the analysis above, EFP staff concludes that an ATF is not warranted in this case and that the alternative permitting process provides adequate opportunities for citizens to identify issues and route alternatives to be addressed in the environmental assessment. Staff can also assist governmental public citizens and governmental units in understanding the siting and routing process and identifying opportunities for participating in further development of alternative routes or permit conditions. Therefore, staff recommendation is to take no action on a task force at time.

Environmental Review

EFP staff has concluded that combining the environmental report and environmental assessment into a single environmental review document is warranted in this case. The site and route permit application was filed prior the completion of the environmental report required for the certificate of need and prior to initiation of the scoping process for the environmental report. Thus, preparing an environmental assessment in lieu of the environmental report will achieve process efficiencies. It will enable staff to solicit comments important to the scoping of both the environmental report (certificate of need process) and the environmental assessment (siting and routing process) at a single public informational meeting. EFP staff will then develop one scoping document and one environmental document for both applications. Combining the processes will not delay completion of the environmental review.

In addition, the Commission acknowledged the likelihood of combined environmental review in its April 12, 2011, Order varying Minnesota Rule 7849.0200, subpart 5, to extend the time line for determining whether the application is substantially complete and varying Minnesota Rule 7849.1400, subpart 3, to extend the time line for holding a public meeting.[3] The applicant, in its site and route permit application, also requested that the siting and routing review process be combined with the certificate of need review process.[4]

[3] Commission Order Varying Time, April 12, 2011, Docket E002/CN-11-184, eDocket ID 20114-61236-01.
[4] SRPA at p. 1.2.

Public Hearing

Because the HVTL route permit application was filed so early in the certificate of need process, efficiencies could be gained by coordinating the public hearing of the certificate of need proceeding with the public hearing required in the alternative permitting process.

Commission Decision Options

A. Application Acceptance

1. Accept the Xcel Energy site and route permit application for the Black Dog Repowering Project as complete, and authorize the EFP staff to process the application under the alternative permitting process pursuant to Minnesota Rules 7850.2800 to 7850.3900.
2. Reject the site and route permit application as incomplete and issue an order indicating the specific deficiencies to be remedied before the application can be accepted.
3. Find the site and route permit application complete upon the submission of supplementary information.
4. Make another decision deemed more appropriate.

B. Public Advisor

1. Authorize EFP staff to name a public advisor in this case.
2. Appoint a Commission staff person as public advisor.
3. Make another decision deemed more appropriate.

C. Advisory Task Force

1. Authorize EFP staff to establish an advisory task force and develop a proposed structure and charge for the task force.
2. Determine that based on the available information an advisory task force is not necessary at this time.
3. Make another decision deemed more appropriate.

EFP Staff Recommendation: Options A1, B1, and C2.

0 200 400 Feet

1 inch = 400 feet

Transmission Line
New Plant Site
New Substation
New Cooling Towers
Xcel Energy Property Boundary

FIGURE 1
PROJECT LAYOUT

Black Dog Generating Plant
Xcel Energy
Burnsville, Minnesota

Source: FSA 2010 Aerial Imagery
Barr Engineering Company
This information is for review purposes only.
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