Public Notice of intent to reissue

Air

Permit 03700003-102

General information

Public comment period begins: September 4, 2020
Public comment period ends: October 5, 2020 (4:30 p.m.)
Current permit issued: April 1, 2014
Current permit expiration date: April 1, 2019

The Permittee may continue to operate this facility after the expiration date of the permit, per the provision under Minn. R. 7007.0450, subp. 3. (Title V Reissuance Application was received October 1, 2018).

The Minnesota Pollution Control Agency (MPCA) Commissioner has made a preliminary determination to reissue this permit for a term of approximately five years.

Name and address of Permittee: Northern States Power, a MN Corp dba Xcel
414 Nicollet Mall
Minneapolis, MN 55401-1927

Facility name and location: Xcel Energy - Black Dog Generating Plant
1400 Black Dog Rd
Burnsville, MN 55337-1218
Dakota County
T027N, R24W, Section 024

MPCA contact person:
Robert Little
Industrial Division
Minnesota Pollution Control Agency
520 Lafayette Road N
St. Paul, MN 55155
Phone: 651-757-2705
Email: robert.little@state.mn.us
File manager phone: 651-757-2728 or 1-844-828-0942

A draft permit and supporting documentation are available for review on the MPCA Public Notices webpage at http://www.pca.state.mn.us/publicnotices. Additional materials relating to the issuance of this permit are available for inspection.

Please call the listed MPCA contact person between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday to arrange for this. The MPCA will mail or email a copy of the draft permit upon request. Comments, petitions, and other requests must be received at the MPCA in writing on or before the public comment period end date and time identified above.

Description of Xcel Energy – Black Dog Generating Plant

The permit action is for construction, modification, and operation of the facility. The permit action is the reissuance of the Part 70 Operating Permit with a major amendment authorizing construction/modification being processed at the same time; therefore, the draft permit has been placed on public notice.

Xcel Energy - Black Dog (Xcel) is a major Part 70 source that operates an electric generating plant. The plant is composed of a natural gas-fired combined cycle gas turbine with an associated duct burner, a simple cycle turbine, two emergency generators, one fire pump, and an auxiliary boiler. Additionally, there are two fugitive emission sources that represent natural gas leakage from connections and breakers that serve natural gas throughout the facility. Xcel also has space heaters, a distillate oil forwarding system, a laboratory, a sand blast cabinet, and miscellaneous brazing, soldering, torch-cutting, and welding activities that are considered insignificant activities.

The main pollutants of concern are nitrogen oxides (NOx), carbon monoxide (CO), volatile organic compounds (VOC), formaldehyde, hexane, and carbon dioxide equivalent (CO2e). Xcel uses continuous emissions monitoring systems (CEMS) to monitor NOx emissions from the combined and simple cycle turbines. Xcel is also required to perform ongoing performance tests for particulate matter less than 10 microns (PM10), and VOC from the combined cycle turbine and duct burner. The combined cycle turbine is equipped with low-NOx burners and NOx emissions are controlled by selective catalytic reduction (SCR).

The major amendment is to modify what is defined as normal operation, startup, and shutdown for the combined cycle gas turbine (EQUI 1). This is being done to increase the operational flexibility of EQUI 1 as the facility determined they would be able to operate at lower loads while maintaining compliance with all existing limits due to new software technology. This required modifying Best Available Control Technology (BACT) requirements that defined normal operation as operation over 70% load. The new definition of normal operation will now begin once there has been 15 minutes of continuous compliance with the BACT emission limits and no later than 15 minutes after EQUI 1 reaches 70% load. All other remaining operating time is now considered SUSD.
Additional changes include removing the 1500 hours per year on the associated duct burner EQUI 62, this limit is being replaced with new annual 12-month rolling sum tonnage limits to prevent the modification from becoming major under New Source Review. Changing BACT ppm emission limits from 3-hour block averages to 3-hour rolling averages, and updating the formaldehyde conditions under COMG 10 to clarify what can be used to calculate emissions.

A summary of the Potential to Emit (PTE) and Projected Emissions Increase in tons per year is as follows:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>PM</th>
<th>PM_{10}</th>
<th>PM_{2.5}</th>
<th>SO_{2}</th>
<th>NO_{x}</th>
<th>VOCs</th>
<th>CO</th>
<th>CO_{2}e</th>
<th>Lead</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Facility PTE</td>
<td>70.0</td>
<td>54.0</td>
<td>47.2</td>
<td>22.2</td>
<td>312</td>
<td>637</td>
<td>1429</td>
<td>1,622,482</td>
<td>0.00674</td>
</tr>
<tr>
<td>Projected Emissions Increase from modified emission units</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>2.50</td>
<td>33.3</td>
<td>24.8</td>
<td>80.2</td>
<td>520,002</td>
<td>0.002</td>
</tr>
</tbody>
</table>

PM = Particulate Matter
PM_{10} = PM, 10 microns and smaller
PM_{2.5} = PM, 2.5 microns and smaller
SO_{2} = Sulfur Dioxide
NO_{x} = Nitrogen Oxides
VOCs = Volatile Organic Compounds
CO = Carbon Monoxide
CO_{2}e = Carbon Dioxide Equivalents as defined in Minn. R. 7007.0100

The Permittee is not required to submit a pollution prevention progress report pursuant to Minn. Stat. § 115D.08.

The preliminary determination to reissue this Air permit is tentative.

**Procedure for public participation**

As stated in Minn. R. chs. 7000 and 7001, there are three formal procedures for public participation in the MPCA's consideration of this matter. Interested persons may:

1. Submit written comments on the draft permit.
2. Petition the MPCA to hold a public informational meeting.
3. Petition the MPCA to hold a contested case hearing.

**Submitting written comments**

To submit comments or petitions to the MPCA through the mail or email, you must state:

1. Your interest in the permit application or the draft permit.
2. The action you wish the MPCA to take, including specific references to the section of the draft permit you believe should be changed.
3. The reasons supporting your position, stated with sufficient specificity as to allow the MPCA to investigate the merits of the position.

**Public informational meeting**

A public informational meeting is an informal meeting during which interested persons can ask questions concerning the proposed facility. MPCA staff will be present to provide information. If an interested person would like the MPCA to hold a public informational meeting, the person should include all information identified above and in addition include a statement of the reasons the person desires the MPCA to hold a public informational meeting and the issues that the person would like the agency to address at the public informational meeting.

**Contested Case Hearing**

A contested case hearing is a formal proceeding before an administrative law judge empowered to advise the MPCA regarding issues of fact. As described in Minn. R. 7000.1800, persons who submit petitions for a contested case hearing must also state the issues they propose to address in a contested case hearing, the specific relief requested or resolution of the matter, and the reasons (which may be in the form of proposed findings) supporting an MPCA decision to hold a contested case hearing. Failure to comply with these rules exactly may result in a denial of the request. To the extent known, the petitioner may also submit a list of prospective witnesses to be called at a hearing, a proposed list of publications, references, or studies to be introduced at a hearing and the approximate time required for the petitioner to present the matter at a hearing. The decision whether to hold a contested case hearing will be made under Minn. R. 7000.1900.