

Staff Briefing Papers

Meeting Date February 1, 2024 **Agenda Item 2****

Company Great River Energy

Docket No. ET2/GS-22-122

In the Matter of a Request for a Minor Alteration to Great River Energy’s 170 MW, Natural Gas-Fired, Simple Cycle Combustion Turbine Generator at its Cambridge 2 Peaking Plant Site near Cambridge, Isanti County, Minnesota

Issues

Should the Commission reconsider its December 07, 2023 Order Approving Minor Alteration Application?

Staff Craig Janezich craig.janezich@state.mn.us 651-201-2203

✓ Relevant Documents **Date**

PUC – Order Approving Minor Alteration Application	12/07/2023
CURE, MCEA, Sierra Club – Petition for Reconsideration	12/27/2023
GRE – GRE Reconsideration Response	1/05/2023

To request this document in another format such as large print or audio, call 651.296.0406 (voice). Persons with a hearing or speech impairment may call using their preferred Telecommunications Relay Service or email consumer.puc@state.mn.us for assistance.

The attached materials are work papers of the Commission Staff. They are intended for use by the Public Utilities Commission and are based upon information already in the record unless noted otherwise.

I. Statement of Issues

Should the Commission reconsider its December 07, 2023 Order Approving Minor Alteration Application?

II. Project Description

Existing Facility Description

The peaking facility consists of two power generation units. Unit 1 is a 29.3 MW distillate fuel-fired combustion turbine, and Unit 2 is a 170 MW natural gas-fired combustion turbine. The existing facility has two aboveground storage tanks (ASTs) for water and fuel, a black-start generator, an emergency diesel pump and generator, an emergency Telecom propane generator, and other facilities. Unit 1 operates approximately 40 hours per year, and Unit 2 operates 400-800 hours per year due to a combination of MISO testing and dispatch.¹

Project Description

In March 2022, Great River Energy (GRE) applied to the Commission for approval of a minor alteration to the existing site permit for its Unit 2 170 MW combustion turbine at its Cambridge Station facility located in Isanti County, Minnesota (the Project). The Project has an anticipated operating life of 30 years and a cost of \$25 million.

The minor alteration consists of replacing existing natural gas burners with dual-fuel burners and installing associated facilities to allow ultra-low sulfur diesel (ULSD) combustion during periods of natural gas curtailment. This would allow for electricity generation, burning either natural gas or ULSD. GRE estimated that the unit will operate on ULSD fewer than 24 hours a year (on average).²

The proposed project will also necessitate the construction of a 500,000-gallon ULSD aboveground storage tank (AST), a 450,000-gallon demineralized water aboveground storage tank, and associated piping, pumps, and controls. All project components will reside within the existing footprint of the Cambridge Station.³

The new ULSD AST would be located on a new impervious surface. Planned modifications will divert any potential ULSD spill to the north into an existing ditch, which leads to an on-site retention basin. Runoff from the building expansion and the demineralized water AST would flow from the catch basin to the retention basin.⁴

¹ Department of Commerce, Energy, Environmental Review and Analysis. Environmental Assessment Worksheet: Cambridge 2 Fuel Conversation - Revised July 2023. eDocket Document ID: [20237-197372-01](#), p. 2-3.

² GRE minor alteration application. March 11, 2022, eDocket ID: [20223-183729-01](#), p. 2.

³ Department of Commerce, Energy, Environmental Review and Analysis. Environmental Assessment Worksheet: Cambridge 2 Fuel Conversation - Revised July 2023. eDocket Document ID: [20237-197372-01](#), p. 3.

⁴ Ibid., p. 4

The applicant stated that the project would support dispatchable generation reliability and resiliency and help insulate GRE customers from potentially exorbitant prices during a natural gas curtailment. GRE defines “curtailment” as when natural gas is unavailable, or ULSD is more economical than natural gas.

III. Statutes and Rules

Under Minn. Stat. § 216B.27 and Minn. R. 7829.3000:

- A party or a person aggrieved and directly affected by a Commission decision or order may file a petition for reconsideration within 20 days of the date the decision or order is served. Other parties to the proceeding may file answers to the petition within 10 days of the petition’s filing. Replies to answers are not permitted unless specifically authorized by the Commission.
- A petition for rehearing, amendment, vacation, reconsideration, or re-argument must specifically set forth the grounds relied upon or errors claimed on which the Commission’s decision is unlawful or unreasonable.
- The Commission has the authority to decide a petition for reconsideration with or without a hearing or oral argument. The Commission may reverse, change, modify, or suspend its original decision if it finds its decision unlawful or unreasonable.
- Any application for rehearing or reconsideration not granted within 60 days from the date of filing shall be deemed denied.
- A second petition for rehearing of a Commission decision or order by the same party or parties and upon the same grounds as a former petition that has been considered and denied will not be entertained.

Minn. Stat. § 216B.25 provides that:

The Commission may at any time, on its own motion or upon motion of an interested party, and upon notice to the public utility and after opportunity to be heard, rescind, alter, or amend any order fixing rates, tolls, charges, or schedules, or any other order made by the commission, and may reopen any case following the issuance of an order therein, for the taking of further evidence or for any other reason. Any order rescinding, altering, amending, or reopening a prior order shall have the same effect as an original order.

IV. Procedural History

On March 11, 2022, Great River Energy (GRE or Applicant) applied to the Minnesota Public Utilities Commission (PUC or Commission) for a minor alteration to its Cambridge 2 Peaking Plant (Project). The Project will replace natural gas with dual-fuel burners, allowing for ultra-low

sulfur diesel (ULSD) during natural gas scarcity or high operational costs.⁵

On March 25, 2022, a notice of comment period on the Great River Energy (GRE) Minor Alteration application was issued.⁶

On April 1, 2022, a notice of an extended comment period was granted at the request of Clean Up the River Environment (CURE), Public Employees for Environmental Responsibility (PEER), and the Sierra Club.⁷

On April 28, 2022, the Department of Commerce Energy Environmental Review and Analysis (DOC-EERA) notified GRE that it needed additional information to make a proper recommendation in determining if the project qualified as a minor alteration.

On May 12, 2022, the Department of Natural Resources (DNR) recommended that GRE continue coordinating with the agency regarding changes to the existing water appropriation permit.⁸

On May 13, 2022, the Minnesota Department of Transportation (MnDOT) commented that GRE might need permits to deliver materials associated with the minor alteration.⁹

On May 13, 2022, the Minnesota Department of Commerce, Division of Energy Resources, Energy Regulation and Planning (DOC-DER) recommended the Commission make no determination regarding Minnesota Rules 7849.0400.¹⁰

On May 20, 2022, a notice of an extended comment period was granted at the request of GRE.¹¹

On May 27, 2022, the Environmental Quality Board (EQB) notified the Commission that it had received a complete petition requesting an Environmental Assessment Worksheet (EAW) be prepared for the project.¹²

On August 1, 2022, the Commission granted the EAW petition. Additionally, the Commission ordered GRE to submit to the DOC-EERA any specific conditions or limitations on GRE's burning of fuel oil for the facility.

On January 18, 2023, the PUC filed an information request regarding a project status update.

⁵ Great River Energy, Initial Filing—GRE Cambridge 2 Minor Alteration Application, 3/11/2022, eDockets ID: [20223-183729-01](#)

⁶ PUC, Notice for Comment Period, 3/25/2022, eDockets ID: [20223-184133-03](#)

⁷ PUC, Notice of Extended Comment Period, 4/1/2022, eDocument ID: [20224-184359-01](#)

⁸ DNR, Comments, 5/12/2022, eDocument ID: [20225-185685-01](#)

⁹ MnDOT, Comments, 5/13/2022, eDocument ID: [20225-185770-01](#)

¹⁰ DOC-ERP, Comments, 5/13/2022, eDocument ID: [20225-185762-01](#)

¹¹ PUC, Notice of Extended Reply Comment Period, 4/20/2022, eDocument ID: [20225-185938-01](#)

¹² Minnesota Environmental Quality Board, *Letter*, 5/31/2022, eDockets No. [20225-186200-01](#)

On January 31, 2023, DOC-EERA filed a project status update.

On March 11, 2023, the Environmental Assessment Worksheet (EAW) was submitted to eDockets.¹³

On March 27, 2023, the Commission extended the comment period at the request of Minnesota Interfaith Power and Light (MNIPL), Minnesota Center for Environmental Advocacy (MCEA), CURE, PEER, and Sierra Club with the agreement of GRE.¹⁴

On June 30, 2023, DOC-EERA submitted a letter stating it needed until August 25, 2023, to file its comments and recommendations concerning the EAW.¹⁵

On July 18, 2023, a new notice of comment period began for the EAW, as the previously submitted EAW needed to include the proper attachments.¹⁶

On August 25, 2023, DOC-EERA requested additional time to file its comments and recommendations concerning the EAW. The PUC issued a notice for an extended comment period.

On September 22, 2023, DOC-EERA submitted its comments and recommendations concerning the EAW.¹⁷

On December 7, 2023, the Commission issued an Order Approving Minor Alteration Application.¹⁸

On December 8, 2023, the Commission submitted a Negative Declaration on the need for an Environmental Impact Statement to the EQB.

On December 27, 2023, CURE, MCEA, and the Sierra Club (Petitioners) petitioned the Commission for reconsideration of its December 7, 2023 Order.¹⁹

V. Petition for Reconsideration

¹³ PUC, Other-Cambridge EAW, 4/11/2023, eDocket No. [20234-194679-01](#)

¹⁴ PEER, MCEA, CURE, MNIPL (4/18/2023), *Extension Variance Request*, eDocket No. [20234-194900-01](#). GRE (4/19/2023), *Reply Comments*, eDocket No. [20234-194978-01](#). Sierra Club (4/27/2023), *Public Comment – Sierra Club*, eDocket No. [20234-195296-01](#). PUC (4/27/2023), *Notice of Extension Variance*, eDocket No. [20234-195277-01](#)

¹⁵ DOC-EERA, Letter, 6/30/2023, eDocument No: [20236-197068-01](#)

¹⁶ PUC, Notice of Comment Period – EAW, 7/18/2023, eDocument No: [20237-197574-01](#)

¹⁷ DOC-EERA, *Comments*, 9/22/2023, eDocket No. [20239-199087-01](#)

¹⁸ PUC, Order Approving Minor Alteration Application, 12/07/2023, eDocket No. [202312-201052-01](#)

¹⁹ CURE, MCEA, Sierra Club, *Petition for Reconsideration*, 12/27/2023, eDocket Nos. [202312-201592-01](#), [202312-201592-02](#)

CURE, MCEA, and the Sierra Club (Petitioners) petitioned the Commission to reconsider its December 7, 2023 Order. The Petitioners argued that the written order was inconsistent with Minnesota Law and the Commission's regulations. As a result, a rehearing is needed to fix the errors in the Commission's Order.²⁰

In stating that the Commission should correct its Order, the petitioners argued that the project will significantly change the human and environmental impact. Their predominant concern is the emissions the modified Project may create if it burns fuel oil for 1,282 hours, the maximum time allowed under its air permit. Petitioners also highlighted their concerns regarding the impact of large oil delivery trucks and referred to the size of the 500,000-gallon fuel oil tank and 450,000-gallon water tank. They argued, "...despite having the authority to place conditions on the operation of the plant that could help keep this alteration minor..." the Commission did not place a hard limit on the project.²¹

Petitioners cited a decision made in *Smart Growth Minneapolis v. City of Minneapolis* as a reason to reconsider. The Court of Appeals determined that the environmental effects of the City of Minneapolis' 2040 plan must be based on the full build-out of the project. Similarly, petitioners argued that this project should be based on the presumption of the total runtime of 1,282 hours allowed under the air permit, not the hopes of the Commission's less damaging scenario.²²

Petitioners further argued that the minor alteration process was never intended for the kind of changes proposed by the applicant. They cited the Statement of Need and Reasonableness (SONAR)²³ prepared by the EQB regarding the power plant siting rules that describe a change in fuel as a significant change if the proposed change resulted in the reopening of a closed power plant. They also stated that the SONAR requires more analysis when a project burns more environmentally impactful fossil fuels. The Petitioners asserted that the SONAR suggested fuel switching cannot be a minor alteration. They wrote that, while the Commission retained some discretion to apply the standard, the rules were written so that a more environmentally impactful fuel would require a more serious review.²⁴

The Petitioners also asserted the legislature exempted the conversion of natural gas from the requirements of a new Certificate of Need but has not provided a similar exemption for gas to combined gas and diesel fuel sources. They argued that legislative intent shows the promotion away from fuel switching towards natural gas. When looking at the SONAR and legislative intent, the Petitioners argued this project should not be considered a minor alteration or be given authorization without the full participation of the public in a standard permitting process.²⁵

²⁰ CURE, MCEA, Sierra Club, *Petition for Reconsideration*, 12/27/2023, eDocket Nos. [202312-201592-01](#), p. 1.

²¹ *Ibid.*, p.3.

²² *Ibid.*, p. 4.

²³ SONAR, eDoceks: [202312-201592-02](#)

²⁴ CURE, MCEA, Sierra Club, *Petition for Reconsideration*, 12/27/2023, eDocket Nos. [202312-201592-01](#), p. 5.

²⁵ *Ibid.* p. 5.

Petitioners suggested the legislature pushed the Commission to decarbonize the electrical grid rapidly by 2040. They argued the decision on this docket was contrary to their command. They wrote that the Commission should not rush to approve new fossil fuel plants without a full permitting process. Only through the full permitting process should the Commission review a fossil fuel project, given the legislative action to decarbonize the electrical grid.²⁶

Petitioners referred to the comments submitted by MCEA in June of 2023. MCEA argued that this docket is unique and that minor alterations have never been previously used to alter a large electric generating plant. The previous decisions, the petitioners state, are consistent with the original intent of the regulation as described in the SONAR for these rules. They wrote the SONAR never contemplated a project switching to a fossil fuel that is more perilous to be considered a minor alteration.²⁷

Petitioners stated that the Environmental Assessment Worksheet (EAW) did not consider alternatives and shortchanged the public. It did this by not holding a public hearing, offering an opportunity to offer alternatives, and including an administrative law judge in the process. They are also critical of the Commission's decision on how it processed this application. They wrote that had the Commission rejected the project as a minor alteration, the applicant could have had the application processed in one year or six months. Instead, "...the Commission has wasted time without achieving the intent of the rulemaking process..." They are also critical of the Commission and the Department of Commerce's staff for assuming the project is necessary without vetting the applicant's claims regarding reliability through the Certificate of Need process.²⁸

Petitioners argued the Commission "...failed to correctly assess the potential for significant environmental impacts of the Project." They argued that an EIS should have been ordered due to the concerns on the record for air, water, and climate. They asserted the EAW did not adequately consider the cumulative impacts of additional emissions for the project. As a result, an EIS is required.²⁹

By approving the project, the Petitioners asserted the Commission risks violating MEPA. They cite a portion of the Order that states the applicant considered but rejected the alternative of increasing energy storage, but it was cost-prohibitive, which they write is not a valid reason when reviewing environmental costs. While the SONAR prepared by the EQB stated that costs are part of the application, it does not supplant MEPA.³⁰

The Petitioners argued that the statutory requirements for Minn. Stat. § 216B.2422, Sub. 3, have also not been met. The statute required the Commission to establish environmental cost

²⁶ Ibid., p. 5

²⁷ Ibid., p. 6

²⁸ Ibid., p. 7

²⁹ Ibid., p. 8

³⁰ Ibid., p. 9

values when evaluating this project.³¹

VI. Applicant Response to Reconsideration

In response to the petition, GRE argued the rehearing request should be denied. GRE argued the Petitioners' concerns about the Commission using the minor alteration rules to authorize the Project were misplaced. GRE wrote the Commission considered these concerns and rejected them. They wrote the Commission also correctly found that the EAW showed human and environmental impacts of the project were insignificant as required to qualify as a minor alteration under 7850.4800.³²

When the rules for 7850.4800 were released, the Petitioners cited the associated SONAR as showing the rules were not intended to change the fuel source of the power plant. GRE argued that the primary fuel for the Project is not changing; backup fuel is being added. GRE cited the SONAR on pages 50 – 51 which states, "Natural gas plants always have a backup source of fuel. It is common for such plants to have a supply of fuel oil available as backup. Relying on another source of fuel as a backup will not disqualify a proposed natural gas plant from review under the alternative form of review." GRE also quoted Minn. R. 7850.1500, allowing the project to qualify for a minor alteration under 7850.4800. GRE argued that neither the SONAR nor the language of the Commission's siting rules supports the Petitioners' petition.³³

GRE recommended the Commission reject the Petitioners' assertion that it failed to consider the Project's environmental impact. The Applicant stated the Environmental Assessment Worksheet (EAW) studied a wide range of potential operational futures for the Project, and the Commission did consider the maximum impacts of Cambridge Unit 2 correctly, determining it would not have significant impacts.³⁴

GRE stated that Cambridge Unit 2 is highly unlikely to operate on ULSD more than 24 hours per year on average compared to the 1,282 hours cited by the Petitioners. The Applicant quoted the Order, which stated, GRE's "entire combustion turbine fleet of 10 turbines averaged ULSD operation from 6 to 16 hours annually over a 10-year period. The highest annual ULSD operation was 51 hours, which occurred during Winter Storm Uri."³⁵ Additionally, the Commission took steps in its Order to require GRE to file a report when Cambridge 2 is deployed on ULSD over 24 hours a year.³⁶

The Applicant asserted that despite the claims made by the Petitioners, the Commission considered the cumulative impacts of the Project. GRE stated that the EAW addressed the potential impacts and found them not significant. GRE argued that the Minnesota Pollution

³¹ Ibid., p. 9

³² GRE, GRE Reconsideration Response, 01/05/2024, eDocket No. [20241-201884-01](#), p. 1

³³ Ibid., p. 2

³⁴ Ibid., p. 3

³⁵ Ibid., p. 3

³⁶ Ibid., p. 3

Control Agency's Air Emissions Risk Analysis and Risk Assessment Screening Spreadsheet tool (RASS) considers cumulative impacts through a risk guideline value. GRE stated, "Given that the results for the Project even under the most conservative operations scenarios fall far below the risk guideline value, cumulative potential effects are not expected." As a result, the Applicant argued the Commission properly considered the cumulative potential effects.³⁷

In response to the Petitioners' claim that the Commission risks violating MEPA by approving the project, GRE stated that this misconstrues the purpose of the EAW. GRE also believed the relevant rules do not support their assertion. An EAW must evaluate the need of the project only if a government unit will carry it out. Additionally, GRE contended that the Petitioners' reliance on MEPA ignored Minn. Stat. § 116D.04, Subd. 6. "Specifically, an action or permit is prohibited only if it (1) "significantly affect[s] the quality of the environment" or "materially adversely affects . . . the environment" and (2) "there is a feasible and prudent alternative." The EAW demonstrated that the Project does not have the potential for significant environmental effects, obviating the need for the Commission to fully analyze alternatives to the Project in its Order."³⁸

The Applicant's concluding remarks argued that the Petition for Rehearing should be denied as the petition does not introduce any new points that the Commission has not considered.³⁹

VII. Staff Analysis

Most of the Petition filed does not provide new information that the Commission had not considered during the Agenda Meeting or in its Order released on December 7, 2024. The two new areas that the Petitioners raised were related to the SONAR and the decision in Smart Growth Minneapolis v. City of Minneapolis.

SONAR

Staff believes the issues brought forward by the Petitioners related to the SONAR do not materially change the record the Commission considered.

Smart Growth Minneapolis vs City of Minneapolis

Petitioners cite to the Minnesota Court of Appeals case Smart Growth Minneapolis v. City of Minneapolis in arguing that the Commission was required to consider the maximum hours of use of the alternative fuel. GRE noted that the EAW did in fact consider the maximum allowed use and found insignificant health impacts. Also, in Smart Growth the only evidence in the record was based on the maximum build out of the comprehensive plan, which supported the presumption; here we have actual evidence (i.e. not a presumption) regarding use presented by GRE based on their track record: the entire combustion turbine fleet of 10 turbines has averaged ULSD operation from 6 to 16 hours annually over a 10-year period. This track record is consistent with the Cambridge plant's status as a peaker plant. Finally, the Commission will be

³⁷ Ibid, p. 4

³⁸ Ibid., p. 5

³⁹ Ibid., p. 5

monitoring use of ULSD fuel and has the authority to revisit the permit conditions as necessary should any estimates about expected use prove to be misplaced. In this context, use of a presumption of maximum use is arguably misplaced.

Overall, the petition fails to identify an error warranting reconsideration at this time.

VIII. Decision Options

Should the Commission grant the petition for reconsideration?

1. Grant CURE, MCEA, and Sierra Club's petition to reconsider the December 7, 2023 Order. *[And, if reconsideration is granted, select one of the following]*
 - A. Deny GRE's request for authorization to add ultra-low sulfur diesel generation backup capabilities to the Cambridge 2 Peaking Plant as a minor alteration under Minn. R. 7850.4800.

or

- B. Grant a rehearing, and authorize the Executive Secretary to issue a notice of comment period on the issues raised in the petition of CURE, MCEA, and Sierra Club.

or

2. Deny CURE, MCEA, and Sierra Club's petition to reconsider the December 7, 2023 Order. (GRE)

Staff Recommendation: 2