

April 8, 2020

Will Seuffert
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
Saint Paul, Minnesota 55101-2147

RE: **Comments of the Minnesota Department of Commerce, Division of Energy Resources**
Docket No. IP7009/CN-19-351

Dear Mr. Seuffert:

Attached are the Comments of the Minnesota Department of Commerce, Division of Energy Resources (Department), in the following matter:

Application of Elk Creek Solar, LLC for a Certificate of Need for the up to 80 MW Elk Creek Solar Project in Rock County, Minnesota.

The Petition was filed on September 13, 2019 by:

Jeremy P. Duehr
Fredrickson and Byron, P.A.
200 South Sixth Street, Suite 4000
Minneapolis, Minnesota, 55402-1425

The Department recommends that the Minnesota Public Utilities Commission (Commission) consider the impacts demonstrated by the environmental report and, if the impacts are acceptable, **approve the petition**. The Department is available to answer any questions that the Commission may have in this matter.

Sincerely,

/s/ DANIEL W. BECKETT
Rates Analyst

DWB/ja
Attachment



Before the Minnesota Public Utilities Commission
Comments of the Minnesota Department of Commerce
Division of Energy Resources

Docket No. IP7009/CN-19-351

I. INTRODUCTION

A. EXEMPTION

On May 28, 2019, Elk Creek Solar, LLC (Elk Creek or the Company) filed a *Request for Exemption From Certain Certificate of Need Application Content Requirements* (Exemption Petition). Specifically, Elk Creek requested that the Minnesota Public Utilities Commission (Commission) grant full or partial exemptions to Minnesota Rules:

1. 7849.0240, subp. 2 (B): Promotional Activities;
2. 7849.0250, subp. B (1) – (5): Description of Certain Alternatives;
3. 7849.0250 (C) (1) – (9): Details Regarding Alternatives;
4. 7849.0250 (C) (7): Effect of Project on Rates System-wide;
5. 7849.0250 (D): Map of Applicant’s System;
6. 7849.0270: Peak Demand and Annual Consumption Forecast;
7. 7849.0280: System Capacity;
8. 7849.0290: Conservation Programs;
9. 7849.0300: Consequences of Delay;
10. 7849.0330: Transmission Facilities; and
11. 7849.0340: No-Facility Alternative.

On June 27, 2019, the Minnesota Department of Commerce (Department) filed comments regarding the Exemption Petition.

On August 19, 2019, the Minnesota Public Utilities Commission (Commission) issued an order (Exemption Order) approving the Exemption Petition with conditions.

B. CERTIFICATE OF NEED PETITION

On September 13, 2019, Elk Creek filed its *Application of Elk Creek Solar, LLC for a Certificate of Need for the up to 80 MW Elk Creek Solar Project in Rock County, Minnesota* (Petition). Elk Creek is an independent power producer (IPP) that proposes to construct, own, and operate an up to 80-MW solar energy conversion system (Project). The Project would be located within Rock County in southwestern Minnesota.

The Project would interconnect at an existing 161-kV transmission line that is adjacent to the Project site. Elk Creek plans to construct the Project on a schedule that facilitates an in-service date as early as 2021.

Elk Creek currently has a power purchase agreement (PPA) with Northern States Power Company d/b/a Xcel Energy (Xcel).

On October 4, 2019, LIUNA Minnesota and North Dakota filed comments on the proposed Project.

On October 4, 2019, the Department filed comments on the completeness of the Petition. On October 11, 2019, Elk Creek filed reply comments regarding completeness.

On December 23, 2019, the Commission issued its *Order Accepting Application, Directing Use of Informal Review Process* (Completeness Order).

On January 9, 2020, the Commission issued a *Notice of Comment Period* (Notice) which established comment and reply comment deadlines of April 8, 2020 and May 8, 2020, respectively, regarding the merits of the Petition. According to the Notice the topics open for comment include:

- Are there any contested issues of fact with respect to the representations made in the application?
- Should the Commission grant a certificate of need for the project?
- Are there other issues or concerns related to this matter?

In response to the Notice, below are the comments of the Department. Overall, as explained in detail below, the Department:

- Has not identified any contested issues of fact with respect to the representations made in the Petition;
- Concludes that the Commission should grant a certificate of need (CN) for the Project; and
- Has not identified any other issues or concerns.

II. DEPARTMENT ANALYSIS

Minnesota Statutes, section 216B.2421, subd. 2 (1) defines a large energy facility (LEF) as:

... any electric power generating plant or combination of plants at a single site with a combined capacity of 50,000 kilowatts or more and transmission lines directly associated with the plant that are necessary to interconnect the plant to the transmission system.

As the proposed Project would have a capacity of up to 80 MW (80,000 kilowatts), it qualifies as an LEF. Minnesota Statutes, section 216B.243, subd. 2 states that “no large energy facility shall be sited or constructed in Minnesota without the issuance of a certificate of need by the Commission...” Therefore, a CN application must be approved by the Commission before the proposed Project can be sited or constructed.

There are several factors to be considered by the Commission in making a determination in CN proceedings. In general, these factors are located in different sections of Minnesota Statutes. Some of the general statutory criteria are reflected in a more specific way in Minnesota Rules, part 7849.0120. However, some statutory criteria do not appear to be reflected in rules. To clarify the analysis, the Department groups all of the statutory and rule criteria into one of five factor categories.¹ The Department addresses each of the statutory and rule criteria below. A cross-index matching the statutory and rule criteria to the section where each is addressed along with a summary of the Department's analysis is provided as Attachment 1.

The Department notes that we rely on the Environmental Report (ER) for an analysis of the effects of the proposed Project and the alternatives upon the natural and socioeconomic environments. The Department recommends that the Commission consider the ER in making its determination.

A. NEED ANALYSIS

Overall, the need analysis is governed by Minnesota Rules, part 7849.0120 (A), which states that a CN must be granted upon determining that:

The probable result of denial would be an adverse effect upon the future adequacy, reliability, or efficiency of energy supply to the applicant, to the applicant's customers, or to the people of Minnesota and neighboring states.

The rule lists five distinct criteria. The Department presents the analysis of the need for the proposed Project in two parts. The first part is designed to address the accuracy of the forecast underlying the claimed need. The second is designed to address any broader reliability needs. Each is addressed separately below.

1. Forecast Analysis

a. Accuracy of the Forecast

Elk Creek was granted an exemption to Minnesota Rules, part 7849.0270, which requires an applicant to provide information regarding its system peak demand and annual energy consumption.² Elk Creek was instead required to provide information about regional demand, consumption, and capacity. But in the event that Elk Creek had entered into a power purchase agreement or similar arrangement with a Minnesota utility prior to submitting its CN application, the Company was required to provide relevant information regarding the purchasing utility's system and future resource needs and/or seek an exemption from the CN requirements under Minn. Stat. § 216B.243, subd. 9.

¹ Need Analysis, Link to Planning Process, Alternative Analysis, Socioeconomic Analysis, and Policy Analysis.

² Order point 1 of the Exemption Order.

In the Petition, Elk Creek indicated that, “Elk Creek will sell power generated by the Project to Xcel Energy, or if necessary due to unforeseen circumstances, at wholesale to one of more buyers affiliated with different systems and serving different areas.”³ At this time, the Commission has not yet approved Xcel’s PPA with Elk Creek, thus the Department does not limit its assessment of the forecasted need to Xcel’s need for the Project.⁴ Elk Creek also stated that a review of utilities’ Integrated Resource Plans (IRP), Request for Proposals (RFP), and other similar documents confirms the need for additional renewable generation in the upcoming years. Elk Creek cited recent IRPs for Xcel Energy (Xcel), Minnesota Power (MP), and Otter Tail Power Company (OTP) as an indication of need by Minnesota utilities to purchase more than 1,000 MW of renewable energy by 2020.⁵ Therefore Elk Creek believes that the up to 80 MW provided by the Project will help to meet the need for renewable energy.

The Department agrees with Elk Creek’s assessment of the need for renewable energy in general and solar resources in particular. The Department notes that in MP’s most recent IRP, the Commission indicated the following:⁶

...the Commission finds that up to 100 MW of solar by 2022 is likely an economic resource for Minnesota Power’s system and will require that the Company account for this finding in any competitive acquisition process.

In Docket No. E002/M-19-568, Xcel’s petition for approval of a PPA with Elk Creek, Xcel stated the following regarding its Renewable*Connect (R*C) Program:

In January 2019 we filed a petition to expand the pilot to a full program, subsequent to the pilot being fully subscribed. There are currently over 2,300 customers on the waiting list. As part of the proposed Renewable*Connect expansion, we requested to procure new resources to serve these prospective participating customers, including an estimated total of 80 MW of new solar generation to serve both the Month-to-Month and Long Term Offer options.

As background, on January 7, 2019, Xcel petitioned to expand the R*C pilot program and discontinue the existing Windsource program and move Windsource customers and resources into a full-time, permanent R*C program offering.⁷ In that petition, Xcel stated that the pilot program was fully subscribed and there was significant customer demand for additional capacity and different subscription options. Xcel stated that it planned to acquire new wind and solar resources to meet the needs of the expanded R*C program. Xcel proposed to acquire 150 MW of new wind generation and 50 MW of new solar generation to support

³ Petition, p. 40.

⁴ Xcel, in its *Petition for Approval of a Solar Energy Purchase Agreement with Elk Creek Solar, LLC*, indicated that the PPA was intended to support its Renewable*Connect green pricing program.

⁵ Petition, p. 41.

⁶ Docket No. E015/RP-15-690 IRP Order, p10.

⁷ See *In the Matter of Northern States Power Company, d/b/a Xcel Energy, Petition to Expand its Renewable*Connect Program*, Docket No. E002/M-19-33.

the long-term offerings, and 30 MW of new solar generation to support the month-to-month offering. The Department's February 27, 2019 Comments in Docket No. E002/M-19-33 summarized the current status of Xcel's R*C Program as follows:⁸

Xcel's R*C Pilot program is currently fully subscribed with a waiting list of approximately 400 customers seeking to participate. Xcel proposes to expand its R*C offering with an additional 30 MW of solar for its ongoing Month-to-Month offering, and 150 MW of new wind generation and 50 MW of new solar for its Long Term Offering.

The Commission's August 12, 2019 *Order Approving Petition with Modifications* in Docket No. E002/M-19-33 (R*C Order) approved the Company's R*C proposals with certain modifications that did not affect the need for new solar generation to serve both the Long Term and Month-to-Month Offer options.

The Department's December 13, 2019, response comments in Docket No. E002/M-19-568 recommended approval of the proposed PPA between Xcel and Elk Creek, but questioned the reasonableness of the provisions regarding the existence of two pricing options depending on the extent to which Elk Creek uses union or non-union labor to construct the Project.⁹

The matter came before the Commission at its February 20, 2020 meeting. As there existed details about the contract and terms and conditions related to price and union labor for which there was not sufficient record development, the Commission decided that the parties should re-work the terms and present a modified PPA. As of the date of these Comments in this proceeding, a modified PPA has not been formally submitted into record in Docket No. E002/M-19-568.

Considering that the Commission approved expansion of Xcel's R*C Program and the Department's recommendation that the Commission approve the PPA between Elk Creek and Xcel, as well as the stated potential need for additional solar resources in the recent IRPs of Xcel, OTP, and MP,¹⁰ the Department concludes that Elk Creek's forecast of the need for renewable energy expected to be produced by the proposed Project is reasonable.

b. Overall State Energy Needs

Minnesota Rules, part 7849.0120 (1) states that the Commission is to consider "the relationship of the proposed facility, or a suitable modification thereof, to overall state energy needs." A review of the most recently approved IRPs indicates that Minnesotans are expected to demand more electricity over time and that most utilities are planning on adding solar generating capacity. The proposed Project could help

⁸ Note that, at the time of writing in the Department's February 27, 2019 Comments, the waiting list for R*C was 400. This number has grown to 2,300, as indicated in Xcel's September 10, 2019 *Petition* requesting Commission approval of a PPA with Elk Creek in Docket No. E002/M-19-568.

⁹ Department Response Comments, pp. 4-6.

¹⁰ See Docket Nos. E002/RP-15-21, E017/RP-16-386, and E015/RP-15-690.

Minnesota meet its energy needs while supporting the state's renewable energy and greenhouse gas emissions-reduction goals (see Minnesota Statutes, §§ 216B.1691 and 216H.02). Therefore, the Department concludes that the proposed Project fits the state's overall energy needs.

Absent an approved PPA, the Department notes that Minnesota Statutes section 216B.1691, subd. 2f requires Xcel, MP and OTP to generate or procure sufficient solar energy to serve at least 1.5% of total retail sales to Minnesota customers by the end of 2020 (the solar energy standard, or SES). Further, subdivision 2fe states:

(e) It is an energy goal of the state of Minnesota that, by 2030, ten percent of retail electric sales in Minnesota be generated by solar energy.

Further, Minnesota Statutes, section 216B.1691, subd. 2a (Minnesota's renewable energy standard, or RES) requires utilities to generate or procure 30% of their retail sales from renewable energy by 2020. Solar energy qualifies for both the SES and RES, however resources procured to meet the SES cannot be used to meet the RES,¹¹ and vice versa. According to the utilities' most recent submissions,¹² the utilities continue to evaluate solar projects that will be used to meet the SES.

2. Reliability Analysis

Minnesota Statutes, section 216B.243, subd. 3 (5) states that, in assessing need, the Commission shall evaluate the "benefits of this facility, including its uses to . . . increase reliability of energy supply in Minnesota and the region." Elk Creek will need to apply to the Midcontinent Independent System Operator (MISO) in order to interconnect to the transmission grid. MISO engineers study the impact on the reliability of the electrical system of each addition to the grid and the Department relies upon MISO's analysis. Therefore, the Department concludes that this criterion has been met.

B. LINK TO PLANNING PROCESS

This section discusses the following aspects of Elk Creek's proposal: size, type, and timing; the State's renewable preference; and an analysis of demand-side management (DSM) as an alternative to the proposed Project.

1. Size, Type, and Timing

Minnesota Rules, part 7849.0120 B (1) states that the Commission is to consider "the appropriateness of the size, the type, and the timing of the proposed facility compared to those of reasonable alternatives."

¹¹ Minnesota Statutes section 216b.1691, subd. 2a.

¹² Docket No. E999/M-19-276.

a. Size

Regarding size, as noted above, in the R*C Order, the Commission determined that Xcel had a need to purchase 80 MW of solar energy. The proposed Project's size would fit Xcel's needs for solar capacity and energy as determined by the Commission.

Although collective information submitted by the utilities subject to the Minnesota RES indicates that there is sufficient capacity in aggregate to meet need through 2030,¹³ this does not consider the potential need for additional renewable resources from individual utilities with insufficient capacity to meet RES. Additionally, utilities in neighboring states may have a need for renewable energy. If the proposed Project is granted a CN and is implemented, it will have to compete with the other renewable energy projects in the solar energy market to fulfill any needs.

Furthermore, the Petition stated that the Project is sized to take advantage of economies of scale while also making efficient use of existing transmission capacity. Based on the discussion above regarding Xcel's solar energy needs as determined by the Commission, the forecasted solar energy needs for the region, and the Applicant's economic incentives, the Department concludes that the proposed Project's size is not excessive and therefore is reasonable.

b. Type

The Commission's Exemption Order granted Elk Creek an exemption to Minnesota Rules, part 7849.0250 (B) (1) – (3), and (5) and a partial exemption to data requirement (4), to the extent that the Rule requires discussion of non-renewable alternatives. As noted above, the Commission's R*C Order determined a need for Xcel to acquire 80 MW of solar resources. Further, the SES and solar resource goals set forth in Minnesota Statutes section 216B.1691 indicate a need for additional solar resources. Given these factors, the Department concludes that the proposed Project's type is reasonable. The Department notes that the Commission's assessment of the reasonableness of the Project's type will be further informed by the information to be contained in the Environmental Report, which will assess the environmental impacts of alternatives, including an 80-MW wind project.

c. Timing

Elk Creek stated that the Project is expected to be in-service and operational by the end of 2021. The timing of the proposed Project generally coincides with the anticipated need for solar additions of multiple utilities as discussed in the forecast section above.

The project could also help a different utility meet Minnesota's RES or SES, but it is important to note that there is unlikely to be a one-to-one relationship between CN applications and Minnesota RES and SES obligations. More specifically, the Department notes that:

¹³ See Chapter 8 of the *Transmission Projects Report 2019*.

- There will likely not be a one-to-one match between CN applications based on the regional need for renewable generation and Minnesota utilities' RES and SES compliance levels;
- Additional renewable resources will be needed for certain Minnesota utilities to meet their 2025 RES requirements due to capacity expirations;
- Capacity additions are typically added in "chunks" due to the benefits of economies of scale;
- The solar investment tax credit is reduced from 30% to 26% in 2020 and 22% in 2021, which could lead to earlier solar additions than might otherwise be the case; and
- There are uncertainties involved in accomplishing the associated transmission additions or upgrades needed for integrating the output of previously approved and variously located renewable generation projects.

Finally, the Department notes that Minnesota Rules, part 7849.0400 requires the recipient of a CN to notify the Commission if the proposed in-service date is delayed by more than one year. In summary, the Department concludes that the timing of the proposed Project is reasonable.

2. Renewable Preference

There are two sections of Minnesota Statutes that provide a preference for renewable resources in resource planning and acquisition decisions. First, Minnesota Statutes, section 216B.243, subd. 3a states that:

The Commission may not issue a certificate of need under this section for a large energy facility that generates electric power by means of a nonrenewable energy source, or that transmits electric power generated by means of a nonrenewable energy source, unless the applicant for the certificate has demonstrated to the Commission's satisfaction that it has explored the possibility of generating power by means of renewable energy sources and has demonstrated that the alternative selected is less expensive (including environmental costs) than power generated by a renewable energy source. For purposes of this subdivision, "renewable energy source" includes hydro, wind, solar, and geothermal energy and the use of trees or other vegetation as fuel.

Second, Minnesota Statutes, section 216B.2422, subd. 4 states that:

The Commission shall not approve a new or refurbished nonrenewable energy facility in an integrated resource plan or a certificate of need, pursuant to section 216B.243, nor shall the Commission allow rate recovery pursuant to section 216B.16 for such a nonrenewable energy facility, unless the utility has demonstrated that a renewable energy facility is no in the public interest.

Minnesota Statutes indicate a clear preference for renewable facilities; the proposed Project meets a renewable preference.

3. DSM Analysis

The Commission's Exemption Order exempted the Petitioner from providing information on conservation programs, as required by Minnesota Rules, part 7849.0290, and the potential for reducing the need for this generation project because Elk Creek does not have retail customers and does not operate any conservation programs. However, Elk Creek was required to provide relevant information regarding the purchasing utility's conservation efforts—here Xcel. As previously stated, the Commission has determined in its Order related to Xcel's R*C Program that Xcel has a need for additional solar resources. Therefore, the Department concludes that DSM is not an alternative to the proposed Project.

C. ANALYSIS OF ALTERNATIVES

Overall, the analysis of alternatives is governed by Minnesota Rules, part 7849.0120 B which states that a CN must be granted upon determining that “. . . a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record.” The rule then proceeds to list four distinct criteria. The Department breaks down its analysis of the alternatives to the proposed facility into four broad areas:

- alternatives analysis;
- reliability analysis;
- distributed generation (DG); and
- preference for an innovative energy project (IEP) as defined in Minnesota Statutes.

Each area is addressed separately below.

1. Alternatives Analysis

a. Non-CN Facilities Analysis

Minnesota Rules, part 7849.0120 A (4) states that the Commission is to consider “the ability of current facilities and planned facilities not requiring certificates of need to meet the future demand.” The primary alternatives to the proposed facilities are purchases from renewable facilities outside Minnesota or construction of renewable Minnesota facilities that are small enough not to require certificates of need (less than 50 MW).

As an IPP, Elk Creek is a producer or seller, rather than purchaser, of electric generation. A renewable facility of less than 50 MW would not contribute as substantial an amount of renewable energy towards the Minnesota RES or SES or towards a utility's need for additional solar resources, and would not benefit as much from economies of scale as the proposed Project. Further, the Commission's R*C Order affirmed Xcel's need to acquire an additional 80 MW of solar. In addition, the Petitioner has the incentive to site

generation in an economically efficient manner inside or outside Minnesota. Further, the Department notes that any party wishing to do so may propose an alternative to the proposed facility; at this time, no party filed such a proposal in this proceeding. Therefore, the Department concludes that current and planned facilities not requiring a CN have not been demonstrated to be more reasonable than the proposed Project.

b. Cost Analysis

Minnesota Rules, part 7849.0120 B (2) states that the Commission is to consider “the cost of the proposed facility and the cost of energy to be supplied by the proposed facility compared to the costs of reasonable alternatives and the cost of energy that would be supplied by reasonable alternatives.” In the Exemption Order the Commission granted Elk Creek an exemption to Minnesota Rules, part 7849.0250 (C), which requires an applicant to provide a description of alternatives that could provide electric power at the asserted level of need. Only details regarding renewable alternatives need be provided, including an estimate of the proposed Project’s effect on wholesale rates in Minnesota or the region.

As noted earlier, Xcel filed a petition on September 10, 2019 requesting Commission approval for a PPA with Elk Creek for the output of the proposed Project as one of the projects in Xcel’s R*C resource package. The details of the cost analysis are included in that docket (Docket No. E002/M-19-568). On February 20, 2020, the Commission met to consider the PPA. The Commission discussed the need for more clarity as to the circumstances under which the two prices included in the PPA would be applied. The Commission tabled the item after Xcel and Elk Creek committed to further discussions in order to provide the needed clarity, whether through a PPA amendment or through a separate labor agreement. The Department concludes that the prices themselves were not an issue; rather, the issue involved the lack of clear criteria on which to base the selection of either of the PPA’s pricing provisions.

The Petition included a discussion of alternatives to the proposed Project, including, but not limited to hydropower, biomass, solar, and emerging technologies. Elk Creek relied on cost information from the U.S. Department of Energy’s Energy Information Administration.¹⁴ Elk Creek concluded that solar energy resources are cost effective when compared with other renewable resources. The Department concludes that the data provided by Elk Creek is reasonable and demonstrates solar energy’s cost advantages and disadvantages relative to other new, renewable sources.

Elk Creek stated that the proposed Project’s energy production would be modest in comparison to the annual energy consumption of Minnesota and the region. However, because the proposed Project would not be subject to fluctuations in fuel costs, the Project could help stabilize or lower electricity prices in the state and region. For the most part, the Department concurs with Elk Creek’s conclusion. The Department agrees that a solar facility the size of the proposed Project is not likely to have a significant effect on MISO wholesale prices. In aggregate, renewable resources such as wind and solar are dispatched “first” under MISO protocols. Since pricing in the MISO market is based on the last (marginal) resource (typically natural gas or coal), electricity produced by solar facilities in aggregate can decrease the amount of natural gas,

¹⁴ Petition, p. 37, Table 5.2.2.

coal, or whatever resource is on the margin (the highest priced option) at a given time, that is used for generating electricity.

Based on the above, the Department concludes that the cost of the Project and the cost of energy to be supplied by the Project is reasonable compared to the costs of reasonable alternatives and the cost of energy that would be supplied by reasonable alternatives.

c. Natural and Socioeconomic Environments Analysis

Minnesota Rules, part 7849.0120 B (3) states that the Commission is to consider “the effects of the proposed facility upon the natural and socioeconomic environments compared to the effects of reasonable alternatives.” The proposed facility will have relatively minor pollution impacts. In addition, the Petition states that approximately 681 acres of land would be permanently impacted by construction and installation of the proposed Project.

As an emission-free fuel, solar does not result in CO₂, NO_x, etc. Therefore, consideration of the effects on the natural and socioeconomic environments using the Commission-approved externality values would not impact the overall cost analysis against the proposed Project. Therefore, the Department concludes that this sub-criterion has been met; however, and as noted above, the Environmental Report, being conducted concurrently in this proceeding and in the related siting proceeding, will include a full analysis of the effects of the proposed Project and the alternatives upon the natural and socioeconomic environments.

2. Reliability Analysis

Minnesota Rules, part 7849.0120 B (4) states that the Commission is to consider “the expected reliability of the proposed facility compared to the expected reliability of reasonable alternatives.” Elk Creek estimated that the proposed Project will have an availability of about 98 percent, which it stated is consistent with industry standards.¹⁵ Elk Creek estimated a net capacity factor of between approximately 22.2 and 24.0 percent.¹⁶ The Department confirmed that the proposed expected capacity factor is within the National Renewable Energy Laboratory’s *Utility-Scale Energy Technology Capacity Factors* range.¹⁷ Elk Creek stated that the Project would consist of a linear axis tracking system that allows the panels to chase the sun’s position throughout the day.

3. Distributed Generation Analysis

Minnesota Statutes, section 216B.2426 states that:

¹⁵ Petition, p. 39.

¹⁶ *Id.*, p. 31.

¹⁷ Accessed on March 27, 2020 at <https://www.nrel.gov/analysis/tech-cap-factor.html>.

The Commission shall ensure that opportunities for the installation of distributed generation, as that term is defined in section 216B.169, subdivision 1, paragraph (c), are considered in any proceeding under section 216B.2422, 216B.2425, or 216B.243.

Minnesota Statutes, section 216B.169 states:

For the purposes of this section, the following terms have the meanings given them...(c) "High-efficiency, low-emission, distributed generation" means a distributed generation facility of no more than ten megawatts of interconnected capacity that is certified by the commissioner under subdivision 3 as a high efficiency, low- emission facility.

The Department notes, first, that no proposals for distributed generation as an alternative to the proposed Project have been filed in this proceeding. Second, the Department notes the costs to Xcel are under review in a different proceeding. Third, if another buyer (other than Xcel) is an investor-owned utility (IOU) in the state, the Commission will have the opportunity to review the resulting PPA or facility purchase to ensure that the price and terms are reasonable. Other potential, non-IOU buyers of the proposed Project's output should have an incentive to use the lowest cost resource available. Non-IOU generation and transmission utilities are non-profit, compete for distribution utility clients, and therefore have an incentive to reduce costs. Therefore, the Department concludes that a potential buyer of the proposed Project's output has the incentive to consider all resources available, including distributed generation. The Department concludes that the requirement to consider distributed generation has been met.

4. Innovative Energy Project (IEP) Preference

Minnesota Statutes, section 216B.1694, subd. 2 (a) (4) states that an IEP:

... shall, prior to the approval by the commission of any arrangement to build or expand a fossil-fuel-fired generation facility, or to enter into an agreement to purchase capacity or energy from such a facility for a term exceeding five years, be considered as a supply option for the generation facility, and the commission shall ensure such consideration and take any action with respect to such supply proposal that it deems to be in the best interest of ratepayers.

As the proposed Project is not a fossil-fuel-fired generation facility, this statute does not apply.

D. SOCIOECONOMIC ANALYSIS

Overall, the socioeconomic analysis is governed by Minnesota Rules, part 7849.0120 C, which states that a CN must be granted upon determining that:

... by a preponderance of the evidence on the record, the proposed facility, or a suitable modification of the facility, will provide benefits to society in a manner compatible with protecting the natural and socioeconomic environments, including human health.

Elk Creek stated that the proposed Project would provide a large amount of renewable energy with minimal environmental impact, which will help meet the RES, SES, and other needs for solar energy resources. Further, Elk Creek stated that the Project would benefit the local economies through landowner lease and purchase payments, production taxes, jobs (both temporary construction and permanent operations and maintenance jobs), and other local spending. Finally, Elk Creek noted that the amount of agricultural land expected to be used by the proposed Project would equal less than one quarter of one percent of the total agricultural land in Rock County.

As noted above, the Department relies on its ER for its socioeconomic analysis in a CN proceeding. The ER provides information related to:

- Minnesota Rules 7849.0120 A (5) – the effect of the proposed facility, or a suitable modification thereof, in making efficient use of resources;
- Minnesota Rules 7849.0120 C (2) – the effects of the proposed facility, or a suitable modification thereof, upon the natural and socioeconomic environments compared to the effects of not building the facility;
- Minnesota Rules 7849.0120 C (3) – the effects of the proposed facility, or a suitable modification thereof, in inducing future development; and
- Minnesota Rules 7849.0120 C (4) – the socially beneficial uses of the output of the proposed facility, or a suitable modification thereof, including its uses to protect or enhance environmental quality.

The Department recommends that the Commission consider the ER filed by the Department's Energy Environmental Review and Analysis staff in the Commission's decision in this matter.

E. POLICY ANALYSIS

There are several remaining criteria in statutes and rules that are applicable to a CN but do not closely fit into the need, planning, alternatives, and socioeconomic categories discussed above. Therefore, these criteria are grouped into a final category of policy consideration. In this policy section, the Department addresses criteria related to:

- Policies of other states and federal agencies;
- Promotional practices;
- RES compliance;
- Environmental cost planning;
- Transmission planning compliance; and
- CO₂

1. Other State and Federal Agencies

Minnesota Rules, part 7849.0120 D states that a CN must be granted on determining that:

the record does not demonstrate that the design, construction, or operation of the proposed facility, or a suitable modification of the facility, will fail to comply with relevant policies, rules, and regulations of other state and federal agencies and local governments.

Elk Creek indicated that the proposed Project serves overall state and regional energy needs and addresses federal and state renewable energy policies. Elk Creek further stated that the proposed Project would meet or exceed the requirements of all federal, state, and local environmental laws and regulations.¹⁸ Elk Creek provided a table listing the potential permits and approvals needed for the proposed Project (see Table 12.3 in the Petition). The Department has no reason to believe that Elk Creek will fail to comply with the requirements of the listed federal, state, and local governmental agencies.

Further, the Department notes that state agencies authorized to issue permits for the proposed Project are required to present their position and participate in the public hearing process (see Minnesota Statutes, § 216B.243, subd. 7). The Department observes that the Commission has consistently considered state agency input in its final CN decisions. Therefore, the Department concludes that the record at this time does not demonstrate that the design, construction, or operation of the proposed Project, or a suitable modification of the facilities, will fail to comply with relevant policies, rules, and regulations of other state and federal agencies and local governments.

2. Promotional Practices

Minnesota Rules, part 7849.0120 A (3) states that the Commission is to consider “the effects of promotional practices of the applicant that may have given rise to the increase in the energy demand, particularly promotional practices which have occurred since 1974.” In the Exemption Order, the Commission granted Elk Creek an exemption to Minnesota Rules, part 7849.0240, subp. 2 (B), with the understanding that Elk Creek would provide the relevant information from the purchaser. In its Petition, Elk Creek stated that it has not engaged in promotional activities that could have given rise to the need for the electricity to be generated by the Project.¹⁹ The Department’s October 4, 2019 comments on the completeness of the Petition noted that the Petition failed to provide the required information regarding Xcel’s promotional practices. Elk Creek’s October 11, 2019 reply comments indicated that Xcel entered into a PPA in order to fulfill customer demand for Xcel’s voluntary R*C Program, a program expansion that was approved by the Commission.

The Department concludes that this sub-criterion has been met.

¹⁸ Petition, p. 26.

¹⁹ Petition, p. 14.

3. RES Compliance

Minnesota Statutes § 216B.243, subd. 3 (10) states that the Commission shall evaluate “whether the applicant or applicants are in compliance with applicable provisions of sections 216B.1691” Minnesota Statutes § 216B.1691 relates to Minnesota’s requirements regarding the provision of renewable energy to retail customers. Given that Elk Creek has no retail customers in Minnesota, the Department concludes that this statute does not apply.

4. Environmental Cost Planning

Minnesota Statutes § 216B.243, subd. 3 (12) states that the Commission shall evaluate “if the applicant is proposing a nonrenewable generating plant, the applicant’s assessment of the risk of environmental costs and regulation on that proposed facility over the expected useful life of the plant, including a proposed means of allocating costs associated with that risk.” In this case, Elk Creek is proposing a renewable generation facility. Therefore, this statute does not apply.

5. Transmission Planning Compliance

Minnesota Statutes § 216B.243, subd. 3 (10) states that the Commission shall evaluate:

whether the applicant or applicants are in compliance with applicable provisions of section 216B.1691 and 216B.2425, subdivision 7, and have filed or will file by a date certain an application for certificate of need under this section or for certification as a priority electric transmission project under section 216B.2425 for any transmission facilities, or upgrades identified under section 216B.2425, subdivision 7.

Regarding transmission for the proposed Project, Elk Creek stated that:²⁰

The Project would interconnect into existing ITC 161-kV Magnolia Substation, but a key consideration in the selection process was the Project’s proximity to existing electrical and transportation infrastructure, including the Magnolia Substation and existing transmission lines.

Regarding new transmission, Elk Creek “has no plans to become involved in owning or operating transmission lines beyond the collection and feeder lines that will be needed for interconnection of the Project.” Since Minnesota Statutes § 216B.2425 is applicable only to entities that own or operate electric transmission lines in Minnesota, the Department concludes that this statute does not apply.

²⁰ *Id.*, p. 27.

6. Carbon Dioxide Emissions

Minnesota Statutes § 216H.03, subd. 3 states that “on and after August 1, 2009, no person shall: (1) construct within the state a new large energy facility that would contribute to statewide power sector carbon dioxide emissions.” The Department notes that the proposed Project will not contribute to statewide power sector CO₂ emissions.

III. CONCLUSION AND RECOMMENDATIONS

Based upon the above analysis, the Department recommends that the Commission determine that Elk Creek has shown that:

- the probable result of denial would be an adverse effect upon the future adequacy, reliability, or efficiency of energy supply to the applicant, to the applicant’s customers, or to the people of Minnesota and neighboring states;
- a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence in the record; and
- the record does not demonstrate that the design, construction, or operation of the proposed facility, or a suitable modification of the facility, will fail to comply with relevant policies, rules, and regulations of other state and federal agencies and local governments.

Should the Commission find, after consideration of the ER, that the proposed facility “will provide benefits to society in a manner compatible with protecting the natural and socioeconomic environments, including human health,” the Department recommends that the Commission issue a CN to Elk Creek.

/ja

Docket No. IP7009/CN-19-351

Attachment No. 1

Rules and Statutes Addressed in the Comments		
Statute or Rule Citation	Department Comment	Location
7849.0120 CRITERIA. A certificate of need must be granted to the applicant on determining that:		
A. the probable result of denial would be an adverse effect upon the future adequacy, reliability, or efficiency of energy supply to the applicant, to the applicant's customers, or to the people of Minnesota and neighboring states, considering:		
(1) the accuracy of the applicant's forecast of demand for the type of energy that would be supplied by the proposed facility;	Elk Creek's forecast of the need for the renewable energy expected to be produced by the proposed Project is reasonable	II.A.1.a
(2) the effects of the applicant's existing or expected conservation programs and state and federal conservation programs;	DSM is not an alternative to the proposed Project	II.B.3
(3) the effects of promotional practices of the applicant that may have given rise to the increase in the energy demand, particularly promotional practices which have occurred since 1974;	Elk Creek does not have captive retail customers	II.E.2
(4) the ability of current facilities and planned facilities not requiring certificates of need to meet the future demand; and	current and planned facilities not requiring a CN have not been demonstrated to be more reasonable	II.C.1.a
(5) the effect of the proposed facility, or a suitable modification thereof, in making efficient use of resources;	addressed in environmental report	II.D
B. a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record, considering:		
(1) the appropriateness of the size, the type, and the timing of the proposed facility compared to those of reasonable alternatives;	the proposed Project's size is not excessive and therefore is reasonable; the proposed Project's type is reasonable; the timing of the proposed Project is reasonable	II.B.1.a, II.B.1.b, & II.B.1.c
(2) the cost of the proposed facility and the cost of energy to be supplied by the proposed facility compared to the costs of reasonable alternatives and the cost of energy that would be supplied by reasonable alternatives;	Review of Xcel's cost analysis is under review in a separate docket; the data provided by Elk Creek is reasonable and demonstrates solar energy's cost advantages and disadvantages relative to other renewable sources	II.C.1.b

(3) the effects of the proposed facility upon the natural and socioeconomic environments compared to the effects of reasonable alternatives; and	consideration of the ... the Commission-approved externality values would not impact the overall cost analysis	II.C.1.c
Rules and Statutes Addressed in the Comments cont'd.		
(4) the expected reliability of the proposed facility compared to the expected reliability of reasonable alternatives;	this sub-criterion has been met	II.C.2
C. by a preponderance of the evidence on the record, the proposed facility, or a suitable modification of the facility, will provide benefits to society in a manner compatible with protecting the natural and socioeconomic environments, including human health, considering:		
(1) the relationship of the proposed facility, or a suitable modification thereof, to overall state energy needs;	the proposed Project fits the state's overall energy needs	II.A.1.b
(2) the effects of the proposed facility, or a suitable modification thereof, upon the natural and socioeconomic environments compared to the effects of not building the facility;	addressed in environmental report	II.D
(3) the effects of the proposed facility, or a suitable modification thereof, in inducing future development; and	addressed in environmental report	II.D
(4) the socially beneficial uses of the output of the proposed facility, or a suitable modification thereof, including its uses to protect or enhance environmental quality; and	addressed in environmental report	II.D
D. the record does not demonstrate that the design construction, or operation of the proposed facility, or a suitable modification of the facility, will fail to comply with relevant policies, rules, and regulations of other state and federal agencies and local governments.	the record at this time does not demonstrate that ... the proposed Project ... will fail to comply	II.E.1
Minnesota Statutes § 216B.243 subd. 3 (9) with respect to a high-voltage transmission line, the benefits of enhanced regional reliability, access, or deliverability to the extent these factors improve the robustness of the transmission system or lower costs for electric consumers in Minnesota	this statute does not apply	N/A
Minnesota Statutes §§ 216B.243 subd. 3a & 216B.2422, subd. 4 The Commission may not issue a certificate of need under this section for a large energy facility that generates electric power by means of a nonrenewable energy source, or that transmits electric power generated by means of a nonrenewable energy source, unless the applicant for the certificate has demonstrated to the Commission's satisfaction that it has explored the possibility of generating power by means of renewable energy sources and has demonstrated that the alternative selected is less expensive (including environmental costs) than power generated by a renewable energy source	the proposed Project meets a renewable preference	II.B.2
Minnesota Statutes § 216B.2426 The Commission shall ensure that opportunities for the installation of distributed generation, as that term is defined in section 216B.169, subdivision 1, paragraph (c), are considered	the requirement to consider distributed generation has been met	II.C.3

Minnesota Statutes § 216B.1694, subd. 2 (a) (4) An innovative energy project...shall, prior to the approval by the commission of any arrangement to build or expand a fossil-fuel-fired generation facility, or to enter into an agreement to purchase capacity or energy from such a facility for a term exceeding five years, be considered as a supply option for the generation facility, and the commission shall ensure such consideration and take any action with respect to such supply proposal that it deems to be in the best interest of ratepayers;	this statute does not apply	II.C.4
Rules and Statutes Addressed in the Comments Cont'd		
Minnesota Statutes § 216B.243 subd. 3 (10) Compliance with § 216B.1691 whether the applicant or applicants are in compliance with applicable provisions of sections 216B.1691 and 216B.2425, subdivision 7...	this statute does not apply	II.E.3
Minnesota Statutes § 216B.243, subd. 3 (12) if the applicant is proposing a nonrenewable generating plant, the applicant's assessment of the risk of environmental costs and regulation on that proposed facility over the expected useful life of the plant, including a proposed means of allocating costs associated with that risk	this statute does not apply	II.E.4
Minnesota Statutes § 216B.243, subd. 3 (10) Compliance with § 216B.2425, subd. 7 whether the applicant or applicants are in compliance with applicable provisions of sections 216B.1691 and 216B.2425, subdivision 7...	this statute does not apply	II.E.5
Minnesota Statutes § 216H.03 on and after August 1, 2009, no person shall construct within the state a new large energy facility that would contribute to statewide power sector carbon dioxide emissions	the proposed Project will not contribute to statewide power sector CO ₂ emissions	II.E.6

CERTIFICATE OF SERVICE

I, Sharon Ferguson, hereby certify that I have this day, served copies of the following document on the attached list of persons by electronic filing, certified mail, e-mail, or by depositing a true and correct copy thereof properly enveloped with postage paid in the United States Mail at St. Paul, Minnesota.

Minnesota Department of Commerce
Comments

Docket No. IP7009/CN-19-351

Dated this **8th** day of **April 2020**

/s/Sharon Ferguson

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Jordan B	Burmeister	jordan@geronimoenergy.com	Geronimo Energy, LLC	8400 Normandale Lake Blvd Ste. 1200 Bloomington, MN 55437	Electronic Service	No	OFF_SL_19-351_CN-19-351
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1400 St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_19-351_CN-19-351
Jeremy	Duehr	jduehr@fredlaw.com	Fredrikson & Byron, P.A.	200 South Sixth Street Suite 4000 Minneapolis, Minnesota 55402-1125	Electronic Service	No	OFF_SL_19-351_CN-19-351
Kate	Fairman	kate.frantz@state.mn.us	Department of Natural Resources	Box 32 500 Lafayette Rd St. Paul, MN 551554032	Electronic Service	No	OFF_SL_19-351_CN-19-351
Annie	Felix Gerth	annie.felix-gerth@state.mn.us		Board of Water & Soil Resources 520 Lafayette Rd Saint Paul, MN 55155	Electronic Service	No	OFF_SL_19-351_CN-19-351
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 280 Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_19-351_CN-19-351
Kari	Howe	kari.howe@state.mn.us	DEED	332 Minnesota St, #E200 1ST National Bank Bldg St. Paul, MN 55101	Electronic Service	No	OFF_SL_19-351_CN-19-351
Ray	Kirsch	Raymond.Kirsch@state.mn.us	Department of Commerce	85 7th Place E Ste 500 St. Paul, MN 55101	Electronic Service	No	OFF_SL_19-351_CN-19-351
Karen	Kromar	karen.kromar@state.mn.us	MN Pollution Control Agency	520 Lafayette Rd Saint Paul, MN 55155	Electronic Service	No	OFF_SL_19-351_CN-19-351
Susan	Medhaug	Susan.medhaug@state.mn.us	Department of Commerce	Suite 280, 85 Seventh Place East St. Paul, MN 551012198	Electronic Service	No	OFF_SL_19-351_CN-19-351

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Jessica	Palmer Denig	jessica.palmer-Denig@state.mn.us	Office of Administrative Hearings	600 Robert St N PO Box 64620 St. Paul, MN 55164	Electronic Service	No	OFF_SL_19-351_CN-19-351
Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	Yes	OFF_SL_19-351_CN-19-351
Stephan	Roos	stephan.roos@state.mn.us	MN Department of Agriculture	625 Robert St N Saint Paul, MN 55155-2538	Electronic Service	No	OFF_SL_19-351_CN-19-351
Melissa	Schmit	melissa@geronimoenergy.com	Geronimo Energy, LLC	8400 Normandale Lake Blvd Ste. 1200 Bloomington, MN 55437	Electronic Service	No	OFF_SL_19-351_CN-19-351
Will	Seuffert	Will.Seuffert@state.mn.us	Public Utilities Commission	121 7th PI E Ste 350 Saint Paul, MN 55101	Electronic Service	Yes	OFF_SL_19-351_CN-19-351
Cynthia	Warzecha	cynthia.warzecha@state.mn.us	Minnesota Department of Natural Resources	500 Lafayette Road Box 25 St. Paul, Minnesota 55155-4040	Electronic Service	No	OFF_SL_19-351_CN-19-351