COMMERCE DEPARTMENT

August 24, 2020 **PUBLIC DOCUMENT**

Will Seuffert
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, Minnesota 55101

RE: **Public Comments of the Minnesota Department of Commerce, Division of Energy Resources**
Docket No. E002/M-20-614

Dear Mr. Seuffert:

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

> Approval of a Power Purchase Agreement (PPA) between Xcel Electric and the City of St. Cloud for 8.5 MW Hydroelectric Generation.

The Department requests that Xcel Electric provide additional information in reply comments. The Department will make a final recommendation after review of the reply comments, and is available to answer any questions that the Minnesota Public Utilities Commission may have.

Sincerely,

/s/SAMIR OUANES
Public Utilities Rates Analyst

SO/ja
Attachment

Before the Minnesota Public Utilities Commission

Public Comments of the Minnesota Department of Commerce
Division of Energy Resources

Docket No. E002/M-20-614

I. SUMMARY

On July 23, 2020, Northern States Power Company, doing business as Xcel Energy (Xcel or the Company), filed a petition (Petition) for approval by the Minnesota Public Utilities Commission (Commission) of a 20-year, 8.5 MW of hydroelectric power purchase agreement (PPA) with the City of St. Cloud (the City or the Seller). The Petition stated that the facility (St. Cloud Hydro) satisfies the conditions of a qualifying facility (QF) as a small power production facility that has less than 80 MW of capacity and uses renewable resources as the primary energy source.

On August 10, 2020, Xcel filed the First Amendment to the PPA to correct for clerical errors. In the following sections, the Department refers to the proposed PPA and its First Amendment as the proposed PPA.

II. BACKGROUND INFORMATION

The Public Utility Regulatory Policy Act of 1978 (PURPA) as amended, and related regulations, are intended to promote U.S. energy independence by requiring electric utilities to accept and distribute electricity from independent power producers and co-generators.[1] When a QF makes a viable offer to sell its electricity to a specific electric utility, the offer may establish a legally enforceable obligation (LEO) on the part of the utility to purchase the electricity at either the utility's avoided cost or a negotiated rate.[2]

PURPA directs states to adopt state policies implementing its provisions.[3] Minnesota has implemented PURPA through the adoption of Minn. Stat. § 216B.164 (Cogeneration and Small Power Production) and Minn. R. Chap. 7835. Accordingly, under PURPA's statutory scheme, states play the primary role in calculating avoided costs and in overseeing the contractual relationship between QFs and utilities operating under the regulations promulgated by the Federal Regulatory Energy Commission (FERC).

To implement PURPA, Minnesota adopted Minn. Stat. § 216B.164. Subdivision 4(b), which provides the following guidance on the determination of avoided cost under the statute:

[1] Public Utility Regulatory Policies Act of 1978 § 210(b), 16 U.S.C. § 824a-3 (2012).
[2] 16 U.S.C. § 824a-3(d). Avoided costs are defined as the cost to the utility that, but for the purchase from the qualifying facility, would be incurred by the utility in generating the electricity itself or purchasing the electricity from another source.
[3] 16 U.S.C. § 824a–3(f).

> The utility to which the qualifying facility is interconnected shall purchase all energy and capacity made available by the qualifying facility. The qualifying facility shall be paid the utility's full avoided capacity and energy costs as negotiated by the parties, as set by the commission, or as determined through competitive bidding approved by the commission. The full avoided capacity and energy costs to be paid a qualifying facility that generates electric power by means of a renewable energy source are the utility's least cost renewable energy facility or the bid of a competing supplier of a least cost renewable energy facility, whichever is lower, unless the commission's resource plan order, under section 216B.2422, subdivision 2, provides that the use of a renewable resource to meet the identified capacity need is not in the public interest.

The Commission also promulgated rules to implement PURPA in Minn. R. Ch. 7835. Minn. Rule 7835.4019, which states that:

> A qualifying facility with capacity of 1,000 kilowatt capacity or more must negotiate a contract with the public utility to set the applicable rates for payments to the customer of avoided capacity and energy costs.

Finally, Commission rules require each utility to file tariffs containing the operational and financial information necessary for a baseline calculation of avoided costs, to update the tariffs annually, and to file annual reports on all transactions with qualifying facilities over the course of the prior year (Annual Avoided Cost Filing).[4]

III. DEPARTMENT ANALYSIS

Consistent with past PPA reviews, the Department determines whether the proposed PPA is in the public interest, and hence whether the Commission should approve the PPA, by answering the following questions:

- Is the purchase price to be paid by Xcel for hydro energy reasonable?
- Are ratepayers reasonably protected from the financial and operational risks?
- Are the curtailment payment provisions reasonable?

The price of the proposed PPA (labelled as the Energy Payment Rate) was set at **[TRADE SECRET DATA HAS BEEN EXCISED]**.[5]

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[4] As stated by the May 31, 2018 Order (2018 Order) in Docket Nos. E017/CG-16-1021 and 17-464 at page 4. See also Minn. R. 7835.0300, 7835.0500 (referring to “incremental cost”) and 7835.0600 (referring to “net annual avoided capacity cost stated in dollars per kilowatt-hour”).

[5] Source: Article 8 of the proposed PPA, and a minor Department correction of the Company’s calculation of the combined levelized cost, based on the same spreadsheet used by Xcel in response to discovery.

In support of the reasonableness of the proposed PPA price, the Company stated:[6]

> Since St. Cloud Hydro qualifies as a QF, we negotiated the attached PPA with City of St. Cloud pursuant to Minn. Rule 7835.4019 at avoided energy and capacity cost.
>
> …
>
> We believe the pricing negotiated for the St. Cloud Hydro PPA is reasonable for several reasons that are specific to the nature of hydropower and this facility. The levelized cost of **[PROTECTED DATA HAS BEEN EXCISED]** aligns with our recent offers for solar PPAs, but hydroelectric generation provides more reliable and steady power production year round and each hour of the day, including at night and during winter. As compared to wind generation, hydroelectric generation typically receives a higher MISO capacity accreditation. The PPA pricing also reflects the fact that St. Cloud Hydro is located within the city limits close to load and therefore does not take up significant transmission capacity. Further, the 20-year term of the St. Cloud Hydro PPA is significantly longer than some other recent hydroelectric PPA extensions we have either contemplated or executed. Similarly, St. Cloud Hydro has a relatively high average capacity factor compared to some other hydroelectric facilities, providing more reliable production. We believe there are additional factors that support the reasonableness of the PPA, such as using an existing renewable resource that does not require new interconnection and continuing to purchase power since 1986 from a local government for an additional 20 years.

The Department notes that Subdivision 4(b) of Minn. Stat. § 216B.164 provides more specific guidance on Commission options in determining what the utility must pay a QF for energy and capacity: "[t]he qualifying facility shall be paid the utility's full avoided capacity and energy costs as negotiated by the parties*,* as set by the commission, or as determined through competitive bidding approved by the commission. The full avoided capacity and energy costs to be paid a qualifying facility that generates electric power by means of a renewable energy source are the utility's least cost renewable energy facility or the bid of a competing supplier of a least cost renewable energy facility, whichever is lower…"

As a result, the Department requested Xcel through discovery to show and support that its proposed PPA price is in compliance with Subdivision 4(b) of Minn. Stat. § 216B.164. In response, the Company stated in a relevant part:[7]

> Before addressing sub-parts 1 through 7 of this IR, however, we need to provide some important background. The Commission has interpreted the requirements of Minn. Stat. § 216B.164, subd 4(b) and Minn. R. Ch. 7835

[6] Source: Petition at pages 2-3.
[7] Source: Xcel's response to the Department's Information Request No. 1, Attachment 1 of these comments.

> in its May 31, 2018 order in *In the Matter of a Complaint by Red Lake Falls Community Hybrid LLC Regarding Potential Purchase Power Agreement Terms and Pricing with Otter Tail Company*, in Docket Nos. E017/CG-16-1021 and E017/CG-17-464. There, citing Minn. Stat. 216B.164, sudb. 4(b) [sic], the Commission set the avoided energy and capacity costs at about $34.11/MWh for a 4.6 MW hybrid wind/solar generation project based on Otter Tails Small Power Production Tariff. Although the lowest renewable PPA rate of Otter Tail was not in the public record, based on what is in the record it appears that this rate was in the low $20s/MWh.
>
> …
>
> These tariff rates of about $34.11/MWh were based on Otter Tail's avoided costs. The order states that Minnesota implemented PURPA by enacting Minn. Stat. § 216B.164, which states in part that: "This section shall at all times be construed in accordance with its intent to give the maximum possible encouragement to cogeneration and small power production *consistent with protection of the ratepayers and the public*." (Emphasis in Commission order). The order then noted that Minn. Stat. 216B.164, sudb. [sic] 4(b), specifically states: "[t]he qualifying facility shall be paid the utility's full avoided capacity and energy costs as negotiated by the parties, as set by the commission, or as determined through competitive bidding approved by the Commission." The order states that under this statute the Commission has the discretion to set the avoided cost of energy and capacity. The order states that there is no need to determine if there is any conflict between PURPA and state law, as both were written to encourage renewables at a time when renewable prices were high and could not effectively compete in the marketplace. The Commission found that its determination results in just and reasonable rates that are consistent with the protections of customers and the public.

Based on our review of the record in Docket Nos. E017/CG-16-1021 and E017/CG-17-464, the Department agrees with Xcel's statement that "the Commission has the discretion to set the avoided cost of energy and capacity." However, the Department clarifies that the 2018 Order set "the purchase price of energy per MWh for the Red Lake Falls hybrid solar/wind project equal to an estimate of avoided costs *based on Otter Tail's 2017 Small Power Production Tariff filing*" (emphasis added):[8]

> Having considered the record and the last negotiating positions of the parties, the Commission will exercise the discretion accorded it under Minn. Stat. § 216B.164, subd. 4(b), to set avoided costs. The Commission will set the purchase price of energy per MWh for the Red Lake Falls hybrid solar/wind project equal to an estimate of avoided costs based on Otter Tail's 2017 Small Power Production Tariff filing of January 3, 2017.
>
> …

[8] 2018 Order at page 13.

> According to Otter Tail, the Small Power Production rates are based on Otter Tail's avoided costs and the updates to energy and capacity rates which are established annually, consistent with Minnesota Rules, Chapter 7835. Importantly, the Small Power Production Tariff price of energy set in early 2017 also closely corresponds to the time the LEO was established in this matter in December 2016.
>
> In making this determination, the Commission has applied the plain language of Minn. Stat. § 216B.164, subd. 4(b), which accords the Commission the discretion to set the avoided cost of energy and capacity.

To ensure that the correct figures from Xcel's Annual Avoided Cost Filing are considered,[9] the Department requests that Xcel, in reply comments:

1. identify its avoided cost of energy and its avoided cost of capacity, as well as the relevant tariff, and
2. demonstrate that the proposed purchase price per MWh is based on the avoided cost of energy and avoided cost of capacity identified in response to question 1 above.

A. FINANCIAL RISKS

The Department concludes that ratepayers are not at risk of financial harm due to early termination because the price under the PPA is **[TRADE SECRET DATA HAS BEEN EXCISED]** for the 20-year duration of the PPA. Given this price structure, if the PPA terminated early, the levelized price that ratepayers would have paid for the pre-termination output would **[TRADE SECRET DATA HAS BEEN EXCISED]** than the levelized price for the PPA's output over the full contract period. Therefore, an early termination of the proposed PPA would not result in overpayments by Xcel's ratepayers.

While the Seller is not required to maintain a post-commercial operation date Security Fund, Xcel may still demand security by adequate assurance.[10] The proposed PPA also allows Xcel to seek actual damages and/or offset against any payments due to Seller, any actual damages and other amounts due from Seller, in connection with any default event.[11]

Therefore, given the features of the Adequate Assurance and the remedies available to the Company if the Seller fails to cure any default event, the Department concludes that the proposed PPA would reasonably protect Xcel's ratepayers from the financial risks of the proposed PPA.

[9] Xcel's January 2, 2020 Report in Docket No. E999/PR-20-9.
[10] Article 11 (Adequate Assurance) of the proposed PPA.
[11] Article 12 (Default and Remedies) of the proposed PPA.

B. OPERATIONAL RISKS

As is typically true for PPAs in general, the operational risks are the risks that the hydro project would not be operated as expected. These risks include a complete shutdown or a partial shutdown of the project due to technical problems.

The proposed PPA includes specific features that would protect both Xcel and its ratepayers from the operational risks discussed above. These features include the Adequate Assurance and the remedies discussed above, and payments ($/kWh) only for energy actually delivered to Xcel. Additionally, the PPA includes restrictions on the sale or transfer of the hydro facility (Article 19-Assignment), along with provisions to allow Xcel to monitor the operational aspects of the project and to verify compliance with certain aspects of the Project (Article 10-Operations and Maintenance). In particular, Paragraph 19.1 of the proposed PPA, regarding potential assignment by Seller, states that the Company has no obligation to provide any assignment consent unless several requirements are satisfied, including but not limited to:

- Seller has provided to Company such information concerning the transferee's direct and indirect ownership as Company reasonably requests;
- the transferee has substantial experience in the operation of power generation facilities akin to the Facility, either directly, through its affiliates or through an operator acceptable to Company;
- the transferee (together with its parents and affiliates) possesses an Investment Grade Credit Rating or other creditworthiness satisfactory to Company.

Articles 19.2 ("Assignment by Company") and 19.3 ("ROFO") of the PPA would allow Xcel to assign the proposed PPA to another party or the opportunity to negotiate to purchase the Facility from Seller.

The Department notes that, under similar conditions, the Commission required that:[12]

- No party may transfer a PPA without the consent of the Commission if that transfer would cause any material change to the terms and conditions of the existing agreement.

- Xcel may not purchase any of the three facilities [Marshall Solar, MN Solar I and North Star Solar] addressed in this order without the consent of the Commission.

- Upon exercising its right of first offer in any of the three PPAs, Xcel shall file with the Commission its plan to recover the costs of purchasing the facility.

[12] March 24, 2015 *Order Approving Solar Portfolio* in Docket No. E002/M-14-162.

With the same restrictions applied to the St. Cloud Hydro project, the Department concludes that the proposed PPA would reasonably protect Xcel's ratepayers from the operational risks of the proposed PPA:

- No party may transfer the proposed PPA without the consent of the Commission if that transfer would cause any material change to the terms and conditions of the existing agreement.
- Xcel may not purchase the St. Cloud Hydro facility without the consent of the Commission.
- Upon exercising its option to purchase the facility or all equity ownership interest in Seller, Xcel shall file with the Commission its plan to recover the costs of purchasing the facility.

C. CURTAILMENT

The proposed PPA does not contain curtailment provisions besides a requirement that the "Seller shall not curtail or interrupt deliveries of Renewable Energy to Company for economic reasons of any type."[13]

IV. DEPARTMENT CONCLUSIONS AND RECOMMENDATIONS

To complete the record, the Department recommends that Xcel, in reply comments:

1. identify its avoided cost of energy and its avoided cost of capacity, as well as the relevant tariff, and
2. demonstrate that the proposed purchase price per MWh is based on the avoided cost of energy and avoided cost of capacity identified in response to question 1 above.

The Department concludes that the proposed PPA would reasonably protect Xcel's ratepayers from the financial and operational risks of the proposed PPA, with the following requirements:

- No party may transfer the proposed PPA without the consent of the Commission if that transfer would cause any material change to the terms and conditions of the existing agreement.
- Xcel may not purchase the St. Cloud Hydro facility without the consent of the Commission.
- Upon exercising its option to purchase the facility, Xcel shall file with the Commission its plan to recover the costs of purchasing the facility.

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[13] Article 7 (Sale and Purchase) of the proposed PPA.

PUBLIC DOCUMENT –
NOT PUBLIC DATA HAS BEEN EXCISED

☐ **Not Public Document – Not For Public Disclosure**
☒ **Public Document – Not Public Data Has Been Excised**
☐ **Public Document**

Xcel Energy		Information Request No. 1
Docket No.:	E002/M-20-614	
Response To:	Department of Commerce	
Requestor:	Samir Ouanes	
Date Received:	July 31, 2020	

Question:
Topic: Xcel's Proposed PPA price
Reference(s): Xcel's July 23, 2020 filing in Docket No. E002/M-20-614 (Petition)
Request:

Under page 2 of the above-referenced Petition, Xcel stated the following:
Since St. Cloud Hydro qualifies as a QF [qualifying facility], we negotiated the attached PPA with City of St. Cloud pursuant to Minn. Rule 7835.4019 at avoided energy and capacity cost. Per the terms of the PPA, the Company will pay for energy, capacity and green benefits based on the Company's avoided costs.

Minn. Rule 7835.4019 states that:

> A qualifying facility with capacity of 1,000 kilowatt capacity or more must negotiate a contract with the public utility to set the applicable rates for payments to the customer of avoided capacity and energy costs.

Minn. Stat. §216B.164, Subd. 4(b) states that:

> The utility to which the qualifying facility is interconnected shall purchase all energy and capacity made available by the qualifying facility. The qualifying facility shall be paid the utility's full avoided capacity and energy costs as negotiated by the parties, as set by the commission, or as determined through competitive bidding approved by the commission. The full avoided capacity and energy costs to be paid a qualifying facility that generates electric power by means of a renewable energy source are the utility's least cost renewable energy facility or the bid of a competing supplier of a least cost renewable energy facility, whichever is lower, unless the commission's resource plan order, under section 216B.2422, subdivision 2, provides that the use of a renewable resource to meet the identified capacity need is not in the public interest. (Emphasis added)

PUBLIC DOCUMENT –
NOT PUBLIC DATA HAS BEEN EXCISED

Consistent with the requirements of Minn. Stat. §216B.164, Subd. 4(b) and Minn. Rule 7835.4019, please demonstrate that the proposed PPA price is at most the "full avoided capacity and energy costs" of Xcel's "least cost renewable energy facility," including but not limited to:

1. identifying Xcel's "least cost renewable energy facility,"

2. identifying the "full avoided capacity and energy costs" of Xcel's "least cost renewable energy facility,"

3. providing in a live Excel spreadsheet with all links and formulas intact all calculations used to identify the "full avoided capacity and energy costs" of Xcel's "least cost renewable energy facility,"

4. demonstrating that the proposed PPA price is at most equal to the "full avoided capacity and energy costs" provided in response to question 3 above,

5. identifying and justifying all assumptions used in the calculations provided in response to question 3 above, and

6. state whether the methodology used in response to question 3 above has been approved by the Commission in previous similar proceedings. If so, please identify the most recent applicable proceeding(s). If not, please identify and explain the differences with any Commission-approved methodology used to calculate the "full avoided capacity and energy costs" of a renewable energy facility.

7. Please provide a PDF copy of each table provided in response to question 3 above.

<u>Response:</u>
Before addressing sub-parts 1 through 7 of this IR, however, we need to provide some important background. The Commission has interpreted the requirements of Minn. Stat. § 216B.164, subd 4(b) and Minn. R. Ch. 7835 in its May 31, 2018 order in *In the Matter of a Complaint by Red Lake Falls Community Hybrid LLC Regarding Potential Purchase Power Agreement Terms and Pricing with Otter Tail Company*, in Docket Nos. E017/CG-16-1021 and E017/CG-17-464. There, citing Minn. Stat. 216B.164, sudb. 4(b), the Commission set the avoided energy and capacity costs at about $34.11/MWh for a 4.6 MW hybrid wind/solar generation project based on Otter Tails Small Power Production Tariff. Although the lowest renewable PPA rate of Otter Tail was not in the public record, based on what is in the record it appears that this rate was in the low $20s/MWh.

(See, Otter Tail Opening Brief of October 6, 2017, at page 30 at this link:
https://www.edockets.state.mn.us/EFiling/edockets/searchDocuments.do?method=showPoup&documentId={907FF35E-0000-C91B-9BBF-85082662B785}&documentTitle=201710-136206-01;

and, Red Lake Falls Brief of October 6, 2017, at page 4 at this link:
https://www.edockets.state.mn.us/EFiling/edockets/searchDocuments.do?method=showPoup&documentId={9060015F-0000-CA30-B8C2-A4434C00CC61}&documentTitle=201710-136210-02)

These tariff rates of about $34.11/MWh were based on Otter Tail's avoided costs. The order states that Minnesota implemented PURPA by enacting Minn. Stat. § 216B.164, which states in part that: "This section shall at all times be construed in accordance with its intent to give the maximum possible encouragement to cogeneration and small power production *consistent with protection of the ratepayers and the public*." (Emphasis in Commission order). The order then noted that Minn. Stat. 216B.164, sudb. 4(b), specifically states: "[t]he qualifying facility shall be paid the utility's full avoided capacity and energy costs as negotiated by the parties, as set by the commission, or as determined through competitive bidding approved by the Commission." The order states that under this statute the Commission has the discretion to set the avoided cost of energy and capacity. The order states that there is no need to determine if there is any conflict between PURPA and state law, as both were written to encourage renewables at a time when renewable prices were high and could not effectively compete in the marketplace. The Commission found that its determination results in just and reasonable rates that are consistent with the protections of customers and the public.

During the April 26, 2018 deliberations in that matter, with the introduction of the motion eventually approved by the Commission, beginning at about 3:20:00 of the hearing archives, the discussion of the Commissioners showed their alignment that the pricing being set by the Commission was based on the project being a hybrid of solar and wind and that it was not just a wind project. The specific project size and specific type of technology were important for the Commission in determining the appropriate pricing.

Given this context, we believe the pricing in the current St. Cloud Hydro PPA is consistent with the factors adopted by the Commission in applying Minn. Stat. § 216B.164, subd 4(b) and Minn. R. Ch. 7835. As explained in further responses below, the PPA pricing is based on Xcel Energy's avoided costs; the pricing reflects the type of generation technology at issue; the pricing results in just and reasonable rates that protect the ratepayers and the public; and the avoided capacity and energy costs in the PPA are as negotiated by the parties. We note that the Company has not had a competitively bid hydro PPA, so the analysis used to develop St. Cloud Hydro pricing is unique to hydro generation. We would not expect to use the below analysis for determining the appropriate PPA rate for wind or solar generation. Different types of generation have different characteristics and capacity factors, and therefore have different values to the Company and our customers.

<u>Responses to the Department's questions 1-7</u>

1. On a levelized cost basis, the Company's least cost renewable energy facility is the Dakota Range III wind project. We note that Dakota Range III's PPA price resulted from contract negotiation subsequent to a competitive solicitation, and – for reasons specific to wind generation – its price does not reflect the Company's avoided costs of marginal energy or capacity. In fact, we pursued that PPA in part because the price was significantly below our system's avoided energy and capacity costs and below our previous least cost renewable resources.

2. As noted above, the Dakota Range III PPA was negotiated through a different process, at a price below our avoided costs. While the company receives energy, capacity and RECs from the project – like the St. Cloud PPA affords – the negotiated contract terms do not enumerate these components separately. We can apply a similar pricing methodology as we used to formulate the St. Cloud bid, using the operating characteristics and capacity accreditation of Dakota Range III as a purely theoretical example of that plant's avoided cost value. Please see Attachment A to this response. That said, we do not believe this is an applicable basis for comparison for the avoided cost value of a hydro facility, for reasons we explain further in the response to question #1.4.

3. Please see Attachment A to this response.

4. If we apply the same pricing methodology we employed for the St. Cloud PPA to a theoretical 20-year wind resource with the same characteristics as Dakota Range III, we find that it results in a lower avoided cost than the levelized price of the St. Cloud PPA. That said we continue to believe the St. Cloud PPA price is reasonable and is based on the Company's avoided costs. This is because it takes into account the fact that hydropower has different operating characteristics than our lowest cost renewable resource; namely a higher capacity factor, more consistent generation profile, and higher capacity accreditation. We believe these factors mean that the costs avoided by a hydro PPA are not necessarily fully reflected in wind pricing (particularly for a wind project that followed from a competitive sourcing process and is eligible for production tax credits).

First, the energy component of the St. Cloud PPA is based on a Minn Hub 7x24 forward curve, which aligns with the hydro facility's generally flat generation shape and high capacity factor. Our least cost renewable wind resource, on the other hand, has a generation shape that is more commensurate with the Minn Hub Off-Peak forward curve pricing. We believe this is reasonable since, we would expect a wind facility's generation output to be typically more heavily weighted towards off peak periods where prices are generally lower. As a result, the St. Cloud Hydro facility's generation profile provides more value to our system – i.e., it displaces higher cost energy – and accordingly we provided a higher offer price on the energy component.

Second, on the capacity side, the St. Cloud facility receives capacity accreditation that is much higher than a wind facility. Over the last three years, St. Cloud hydro has averaged a capacity accreditation of 7 MW, or over 80 percent of its nameplate capacity. In the 2020/2021 Planning Year, the Midcontinent Independent System Operator (MISO) has assigned new wind in the NSP area a 16.7 percent capacity accreditation. As a result, we also attribute greater value to the capacity characteristics of St. Cloud and therefore it is reasonable that capacity payments incorporated into its PPA exceed that of our least-cost renewable facility.

Finally, our least cost wind resource benefits from the availability of production tax credits which results in wind pricing below our average system energy and capacity costs. As existing hydro facilities do not have access to similar production tax credits, we believe it is reasonable to consider the effect of PTCs (or lack thereof) on the avoided cost calculation as well.

5. Please see the response to subpart 4 above.

6. We are not aware of any instances in which the Commission has formally approved a specific pricing methodology for QF offers. Often QF contracts go into effect without specific Commission action, per provisions in the Company's Section 9 Tariff. Above, we noted the factors that the Commission considered when it set the QF rate for the renewable resource in the *Red Lake Falls* case. We also note the pricing approach that was employed in quantifying customer savings in renewable biomass buyout proceedings that resulted in approvals for us to terminate the Fibrominn, Laurentian and Pine Bend biomass PPA contracts. There, we used the Minn Hub 7x24 forward curve to quantify above market PPA costs which informed the determination of buyout payments that were deemed to produce customer savings.

In addition, we note that our resource planning models follow similar high-level valuation logic, although the avoided cost model employed in developing the St. Cloud Hydro offer is simplified in comparison. We use Minn Hub forward curve prices in resource dispatch simulations, where the model chooses to run our own units or purchase from the market (i.e., a marginal cost decision) by comparing costs of these resources against the forward curve. Likewise, on the capacity side, we typically assume that a gas generation resource represents the least cost capacity option and thus adequately approximates avoided capacity costs in years that we have a capacity need or surplus.

The pricing in the current St. Cloud Hydro PPA is consistent with the factors adopted by the Commission in applying Minn. Stat. § 216B.164, subd 4(b) and Minn. R. Ch. 7835 under the factors explained in the *Red Lake Falls* case. The PPA pricing is based on Xcel Energy's avoided costs; the pricing reflects the type of generation technology at issue; the pricing results in just and reasonable rates that protect the ratepayers and the public; and the avoided capacity and energy costs in the PPA are as negotiated by the parties.

7. Please see Attachment B to this response.

Portions of the Attachments provided with this response are marked "NOT-PUBLIC," meeting the definition of trade secret information pursuant to Minn. Stat. § 13.37. In particular, release of this information would undermine the Company's resource bidding process by providing potential suppliers with a compilation of competitive information that derives independent economic value from not being generally known or ascertainable. This information includes data regarding costs of energy and capacity from generating facilities that is not otherwise public. Disclosure of this information could result in higher costs of energy for Xcel Energy customers by allowing potential suppliers to modify their pricing from what they would otherwise bid. Further, the Company and its third-party vendors have taken steps to protect the confidentiality of the designated protected information. This includes cost and related information on specific operating plants owned by third parties who would be harmed by the public release of this information.

Preparer:	PJ Martin	Jim Denniston
Title:	Director, Resource Planning & Bidding	Assistant General Counsel
Department:	Strategy & Planning	General Counsel
Telephone:	612.321.3065	612.215.4656
Date:	August 10, 2020	

Year	Months	MWh	Energy Price $/MWh	Energy Cost	Capacity MW	Capacity Price $/kW-mo	Capacity Cost	Capacity $/MWh	Total $/MWh	Total Cost
		[PROTECTED DATA BEGINS				[PROTECTED DATA BEGINS				
2021	2				8.5					
2022	12				8.5					
2023	12				8.5					
2024	12				8.5					
2025	12				8.5					
2026	12				8.5					
2027	12				8.5					
2028	12				8.5					
2029	12				8.5					
2030	12				8.5					
2031	12				8.5					
2032	12				8.5					
2033	12				8.5					
2034	12				8.5					
2035	12				8.5					
2036	12				8.5					
2037	12				8.5					
2038	12				8.5					
2039	12				8.5					
2040	12				8.5					
2041	5				8.5					
				PROTECTED DATA ENDS]						PROTECTED DATA ENDS]

Year	Months	MWh	Energy Price $/MWh	Energy Cost	Accredited Capacity MW	Capacity Price $/kW-mo	Capacity Cost	Capacity $/MWh	Total $/MWh	Total Cost
		[PROTECTED DATA BEGINS				[PROTECTED DATA BEGINS				
2021	2				25.05					
2022	12				25.05					
2023	12				25.05					
2024	12				25.05					
2025	12				25.05					
2026	12				25.05					
2027	12				25.05					
2028	12				25.05					
2029	12				25.05					
2030	12				25.05					
2031	12				25.05					
2032	12				25.05					
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2034	12				25.05					
2035	12				25.05					
2036	12				25.05					
2037	12				25.05					
2038	12				25.05					
2039	12				25.05					
2040	12				25.05					
2041	5				25.05					
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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
Public Comments

Docket No. E002/M-20-614

Dated this **24th** day of **August 2020**

/s/Sharon Ferguson

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