


Staff Briefing Papers

Meeting Date	November 5, 2020	Agenda Item 2*
Company	Xcel Energy	
Docket No.	E002/M-20-614	
	In the Matter of Approval of a Power Purchase Agreement (PPA) between Xcel Electric and the City of St. Cloud for 8.5 MW Hydroelectric Generation	
Issues	Should the Commission approve the PPA between Xcel Electric and the City of St. Cloud for 8.5 MW Hydroelectric Generation?	
Staff	Andy Bahn	Andrew.bahn@state.mn.us 651-201-2249

 Relevant Documents	Date
Xcel Initial Filing – St. Cloud PPA	July 23, 2020
Xcel Supplemental Filing – Amended PPA	August 10, 2020
The Department of Commerce Comments	August 24, 2020
Xcel Reply Comments	September 3, 2020
The Department Response to Reply Comments	September 30, 2020

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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 the Issues

Should the Commission approve the PPA between Xcel Electric and the City of St. Cloud for 8.5 MW Hydroelectric Generation?

II. Background

On July 23, 2020, Xcel Energy (Xcel) submitted a Letter to inform the Commission that the it had executed a Power Purchase Agreement (PPA) with the City of St. Cloud on June 12, 2020 regarding the St. Cloud Hydroelectric Generation Facility (St. Cloud Hydro). Attached to Letter, as Attachment A, was the PPA with portions designated as confidential, not public information.¹

As described by Xcel, St. Cloud Hydro is an 8.5 MW hydroelectric facility owned and operated by the City of St. Cloud and located on the Mississippi River, within the city limits of St. Cloud. Xcel and the City of St. Cloud have an existing PPA regarding St. Cloud Hydro, dated May 12, 1986, which continues through October 31, 2021. Xcel explained the new PPA is a 20-year term that will begin on November 1, 2021 and continues through May 31, 2041. Xcel noted the new PPA had some formatting errors in the Table of Contents that did not materially impact the terms of the PPA and it was in the process of executing an Amendment to the PPA to correct these errors.² On August 10, 2020, Xcel made a supplemental filing with an attached PPA Amendment correcting the clerical errors made in the original PPA.³ Xcel also noted it developed and made the St. Cloud Hydro PPA offer before the 2019 Integrated Resource Plan assumptions were developed.⁴

Xcel stated St. Cloud Hydro satisfies the conditions established by the Public Utility Regulatory Policies Act of 1978 (PURPA) for 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. Under PURPA and Minnesota's implementing statute and rules, Xcel is required to purchase all energy and capacity made available by QFs. Since St. Cloud Hydro qualifies as a QF, Xcel stated it negotiated the PPA with City of St. Cloud pursuant to Minn. Rule 7835.4019 at avoided energy and capacity cost. Xcel will pay for energy, capacity and green benefits based on the Company's avoided costs according to the terms of the PPA. The levelized cost for energy and capacity for the duration of the PPA was filed as confidential non-public information. As described by Xcel, payment for capacity begins in 2026 when there is capacity need on Xcel's system. The expected annual facility generation capacity of St. Cloud Hydro was also filed as

¹ Xcel Initial Filing – St. Cloud PPA, p. 1. Xcel explained on p. 4 of its filing that the release of the confidential not public information would undermine its resource bidding process by providing potential suppliers with competitive information that derives independent economic value from not being generally known or ascertainable. According to Xcel, 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.

² *Id.*, pp. 1-2.

³ Xcel Supplemental filing – Amended PPA

⁴ Xcel Initial Filing – St. Cloud PPA, p. 3.

confidential non-public information.⁵ As described by Xcel, in the PPA all environmental attributes are assigned to the Company, including renewable energy credits and avoided emissions of greenhouse gases and pollutants.⁶

According to Xcel the levelized cost aligns with its recent offers for solar PPAs. Xcel also explained hydroelectric generation provides more reliable and steady power production year-round and each hour of the day, unlike solar. As compared to wind generation, Xcel stated hydroelectric generation typically receives a higher MISO capacity accreditation. Xcel stated further the PPA pricing 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. Xcel also claimed St. Cloud Hydro has a relatively high average capacity factor compared to some other hydroelectric facilities and the 20-year term of the St. Cloud Hydro PPA will provide more reliable production. For the above reasons, Xcel asserted the pricing negotiated for the St. Cloud Hydro PPA is reasonable.⁷

Xcel stated it will include the Minnesota portion of the hydroelectric energy costs incurred in connection with the St. Cloud Hydro PPA in future fuel cost forecasting, for inclusion in the Fuel Clause Rider as provided by Minnesota Rule 7835.4021 and these costs will be included in Xcel's actual fuel expense reporting from 2021 forward. Xcel stated the transaction will not result in any net increase in revenue to Xcel Energy, as the Minnesota costs of the power purchase will equal the Minnesota revenue collected.⁸

III. Parties' Comments

A. The Department of Commerce Comments

In its Comments, the Department requested that Xcel Electric provide additional information in reply comments and stated it would make a final recommendation after review of the reply comments. Specifically, the Department recommended that Xcel, in reply comments:

- identify its avoided cost of energy and its avoided cost of capacity, as well as the relevant tariff, and
- 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.⁹

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

⁵ *Id.*, pp. 2-3.

⁶ *Id.*, p. 1.

⁷ *Id.*, p. 3.

⁸ *Id.*, pp. 3-4.

⁹ The Department of Commerce Comments, p. 7.

- 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.¹⁰

In determining whether the proposed PPA is in the public interest, and hence whether the Commission should approve the PPA, the Department considered the following questions:

- Is the purchase price to be paid by Xcel for hydro energy reasonable?
- Are ratepayers reasonably protected from financial risk, and
- Are ratepayers reasonably protected from operational risks?¹¹

1. Is the Purchase Price Reasonable?

The Department noted that Subdivision 4(b) of Minn. Stat. § 216B.164 states the following:

[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...¹²

In discovery, the Department requested Xcel demonstrate that its proposed PPA price is in compliance with Subdivision 4(b) of Minn. Stat. § 216B.164. Xcel responded by stating the Commission 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. According to Xcel, the Order states that under this statute the Commission has the discretion to set the avoided cost of energy and capacity and 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.¹³

¹⁰ *Id.*

¹¹ *Id.*, p. 2.

¹² *Id.*, p. 3.

¹³ *Id.*, p. 4.

The Department agreed with Xcel statement that the Commission has the discretion to set the avoided cost of energy and capacity, but clarified that the 2018 Order set the purchase price of energy 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. Therefore, to ensure that the correct figures from Xcel's annual avoided cost filing are considered, the Department requested 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.¹⁴

2. Financial Risks

The Department concluded that ratepayers are not at risk of financial harm due to early termination because under the price structure of the PPA, early termination of the PPA would not result in overpayments by Xcel's ratepayers. In addition, the Department stated the proposed PPA 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. 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 concluded that the proposed PPA would reasonably protect Xcel's ratepayers from the financial risks.¹⁵

3. Operational Risks

According to the Department, the operational risks are the risks that the hydro project would not be operated as expected and include a complete shutdown or a partial shutdown of the project due to technical problems. The Department stated the proposed PPA includes specific features that would protect both Xcel and its ratepayers from the operational risks. The Department also noted 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, the Department noted Paragraph 19.1 of the proposed PPA states that the Company has no obligation to provide any assignment consent unless several requirements are satisfied. The Department noted further that 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. According to the Department, under similar conditions its March 24, 2015 *Order Approving Solar Portfolio* in Docket No. E002/M-14-162. the Commission required protections for Xcel's rate payers. With the same restrictions applied to the St. Cloud Hydro project, the Department concluded that the proposed PPA would reasonably protect Xcel's ratepayers from the operational risks of the proposed PPA if:

¹⁴ *Id.*, p. 5.

¹⁵ *Id.*

- 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; and
- 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.

B. Xcel Reply Comments

In response to the Department's request for further information regarding two questions that clarify how this PPA's purchase price reflects avoided costs and was agreed upon by the parties Xcel stated statute and Commission precedent supports consideration of avoided cost pricing consistent with the following four principles:

- The PPA pricing of avoided costs was negotiated by the parties, consistent with Minn. Stat. 216B.164, subd. 4(b);
- The PPA pricing is based on Xcel Energy's avoided costs, the pricing reflects the type of generation technology at issue;
- The PPA pricing results in just and reasonable rates that protect the ratepayers and public, and
- The PPA pricing is consistent with PURPA that adequately and accurately reflects avoided costs.¹⁶

Xcel maintained the St. Cloud Hydro PPA is consistent with these principles. Xcel claimed the St. Cloud Hydro PPA is based on its avoided costs and reasonable for the type of generation at issue, and that it is consistent with our requirements under PURPA.¹⁷

Regarding the Department's request for Xcel to Identify from Xcel Energy's Annual Avoided Cost filing its avoided cost of energy and its avoided cost of capacity, as well as the relevant tariff, Xcel answered that the contract negotiated with the City of St. Cloud is based on the avoided costs identified in Xcel's 2020 Cogeneration and Small Power Production report, as filed in Docket No. E999/PR-20-9 used to develop the Company's avoided cost tariff A55. Xcel stated it used these avoided costs, with reasonable adjustments to reflect the resource type and contract duration.¹⁸

Regarding the Department's request that Xcel demonstrate that the proposed purchase price per MWh is based on the avoided cost of energy and avoided cost of capacity identified in the relevant tariff, Xcel stated it developed two price offer options for the St. Cloud Hydro PPA in

¹⁶ Xcel Reply Comments, p. 2.

¹⁷ *Id.*

¹⁸ *Id.*

2018; the first being an initial valuation of the avoided costs of purchasing the facility's output with a capacity value being applied in 2026, and the second having the same leveled avoided cost but with a smoother rate curve as a result of negotiations between the parties.¹⁹

According to Xcel, the 2018 tariffed avoided cost values informed its starting point for the initial St. Cloud Hydro valuation offer. For the longer-term contract Xcel developed a forward avoided energy cost-based pricing consistent with the approach it uses in its resource planning modeling, reflecting potential future avoided market purchases and, in the first year, is very similar to the avoided energy cost estimates included in our 2018 and 2020 tariffs. Xcel explained further that the capacity cost component of the PPA price is also based on the avoided costs indicated in its tariff, with certain adjustments to reflect the going forward nature of the PPA.²⁰

Finally, Xcel stated that to the extent that the eventual agreed upon PPA prices are higher in the early years than the avoided cost benchmarks would suggest, they reflect the Company's negotiations with the City of St. Cloud. Xcel explained that during negotiations, the Company developed an alternative pricing offer, which resulted in a nearly identical leveled cost for the contract but with smoothed escalated payments over the full duration of the contract, which the City preferred.²¹

Xcel provided a workpaper in Reply Comments showing both the initial and smoothed, negotiated offer provided to the City of St. Cloud.²²

C. The Department Response to Xcel Reply Comments

After review of Xcel's Reply Comments, the Department recommended the Commission approve the 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.²³

The Department reviewed Xcel's responses to the Department's requests to determine whether the Company used the correct figures from Xcel's Annual Cost Filing when determining

¹⁹ *Id.*, p. 3.

²⁰ *Id.*

²¹ *Id.*, p. 4.

²² *Id.*, Attachment C (contains confidential, not public information)

²³ The Department of Commerce Response to Reply Comments, pp. 2-3.

the rate for the proposed PPA. The Department concluded that Xcel identified its avoided cost of energy and capacity, as well as the relevant tariff and the Department reviewed the Xcel's calculations and concluded that the Company's proposed PPA pricing methodology appears reasonable and is based primarily on the Company's avoided cost.²⁴

IV. Decision Options

Should the Commission approve the PPA between Xcel Electric and the City of St. Cloud for 8.5 MW Hydroelectric Generation?

- A. Approve the PPA between Xcel Electric and the City of St. Cloud for 8.5 MW Hydroelectric Generation (Xcel); OR
- B. Do not approve the PPA between Xcel Electric and the City of St. Cloud for 8.5 MW Hydroelectric Generation: OR
- C. Approve the PPA between Xcel Electric and the City of St. Cloud for 8.5 MW Hydroelectric Generation with the following conditions (Department):
 - 1. 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;
 - 2. Xcel may not purchase the St. Cloud Hydro facility without the consent of the Commission; and
 - 3. Upon exercising its option to purchase the facility, Xcel shall file with the Commission its plan to recover the costs of purchasing the facility.

²⁴ *Id.*, p. 2.