Minnesota Public Utilities Commission

Staff Briefing Papers

Meeting Date: November 2, 2017 .... *Agenda Item # **3**

Company: Xcel Energy dba Northern States Power

Docket No. E-002/M-17-531

In the Matter of Petition of Approval to Terminate the Pine Bend Power Purchase Agreement (PPA)

Issue(s): What action should the Commission take on the Petition to Terminate the Pine Bend PPA?

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Relevant Documents

Xcel, *Initial Filing (Public and Trade Secret)* .... June 30, 2017
Department of Commerce, *Comments (Public and Trade Secret)* ....August 2, 2017

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.

Contents

I. Statement of the Issue

What action should the Commission take on the Petition to Terminate the Pine Bend PPA?

II. Procedural Background

On June 30, 2017, Northern States Power Company, dba Xcel Energy (Xcel or the Company), filed a petition to terminate its PPA with Gas Recovery System Energy, LLC (GRS). Xcel specifically requests that the Commission approve termination of the PPA and recovery of the transaction costs through an adjustment to be recovered through the fuel clause, which would require a three-year variance to Minnesota Rules 7825.2500 and 7825.2600, subp. 2.

On August 2, 2017, the Minnesota Department of Commerce (DOC or the Department) submitted comments recommending approval of the Petition, cost recovery, and requested three-year rule variance.

III. Staff Analysis

A. History of the Pine Bend PPA

Pine Bend is a 12 MW waste-to-energy electric generating facility located in Inver Grove Heights, Minnesota that is now owned by GRS.[1] This landfill gas facility has an annual production of 36,000 MWh.[2] Pine Bend qualifies as an eligible energy technology under the Renewable Energy Standard (RES), Minn. Stat. § 216B.1691.[3]

On September 20th, 1994, Xcel and GRS entered into a PPA for 30 years that would not end before December 31, 2025.[4] This PPA was executed as a contract under the Public Utilities Regulatory Policies Act (PURPA) as a qualifying facility and Minn. Stat. § 216B.164, subd. 2.[5] The early terms of the PPA included both capacity and energy payments that were lower than Xcel's levelized avoided costs.[6] After May of 2005, the energy prices reflected actual costs for Sherco 3.[7]

In 2010, Xcel filed Amendment No. 2 to establish an "all in" pricing structure, that is, the pricing structure changed from capacity and energy charges on actual costs at Sherco 3 to a contract defined by a per-MWh price of energy delivered.[8] This Amendment was not only less costly than buying replacement energy, but it also alleviated a forced shutdown since GRS had a more consistent revenue.[9] Energy costs under this Amendment were estimated about $2 million higher than the prior payment structure, depending on costs linked to Sherco 3.[10]

On June 30, 2017, Xcel filed a Petition to terminate the remaining eight years of the PPA due to cost savings. Xcel estimates the costs will amount to $12.3 million in Net Present Value (NPV) terms under the current PPA pricing terms (capacity and energy charges).[11]

B. Proposed PPA Termination

The proposed Termination Agreement provides monthly payments[12] made by Xcel to GRS "until GRS has received a total of $1,050,000 or until the end of three years after monthly payments have begun,

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[1] Xcel Energy, *Initial Filing* at 5.
[2] *Id* at 7.
[3] Subd 2(a) defines eligible technologies and landfill gas is among them. DOC also notes the same in their comments on Page 2.
[4] Xcel Energy, *Initial Filing* at 5.
[5] *Id.*
[6] The levelized avoided costs were based on three reference units: a peaking unit in service before May 1, 1996, an intermediate facility in service by 2001, and a base-load unit in service by 2005.
[7] Xcel Energy, *Initial Filing* at 5.
[8] Docket No E-002/M-10-822.
[9] Xcel Energy, *Initial Filing* at 5.
[10] *Id* at 6. Future capacity and energy costs were linked to Sherco 3.
[11] *Id* at 7.
[12] The monthly payments will be the difference between the current PPA price and the average monthly

whichever is earlier."[13] After adding $6.1 million in estimated replacement energy costs to the $1 million GRS buyout, Xcel is projecting a savings of $5.2 million over the remainder of the PPA.[14] (Xcel included a live Microsoft Excel model showing the assumptions it used to calculate the savings as part of its June 30, 2017 filing.)

When evaluating the proposed pricing terms, DOC notes the "all in" PPA price "is greater than the current prices in the MISO (Midcontinent Independent System Operator, Inc.) energy spot market and is greater than the current price for the least cost renewable energy source (wind)."[15] This underscores Xcel's Petition to terminate the agreement from a cost-savings standpoint.

The Department tested the validity of the assumptions by starting with Xcel's model as a baseline and increasing the assumed locational marginal price (LMP) at the NSP node until the resulting ratepayer savings were close to zero.[16] This process demonstrated that ratepayers would be better off at LMPs up to Xcel's forecast plus $25. The Department concludes that it is unlikely that LMPs will exceed or equal the breakeven point on a sustained basis in the near future. Staff agrees that Xcel's model is reasonable.

C. Replacement Energy Costs

Xcel's Petition qualifies their replacement energy calculation by noting, "To the extent the Company does not need to buy replacement power, our customers will realize additional savings."[17] In staff's view, it is likely Xcel will not need the energy from Pine Bend to serve its native load requirements, and therefore the $6.1 million Xcel calculated for replacement energy costs could be a rather high estimate; in other words, cost savings could be even greater than Xcel projects.

For instance, the Commission recently approved Xcel's proposal to acquire 1,550 MW of new wind generation.[18] In that docket, the greatest near-term financial benefit of the new wind, according to Xcel, will be increases in revenues from MISO market sales, which occur during periods of time where the generation on the NSP system will exceed its native load serving requirement. The next highest financial benefit is projected to be production cost savings (i.e. not running expensive generators). This means that the NSP system will be energy-rich in the near-term, at least throughout the current remainder of the PPA term. Therefore, terminating the PPA may not prompt the need for replacement energy, at least on a MWh-for-MWh basis, nor would it necessarily require spot market purchases at all times. Even though staff understands why Xcel chose to employ a conservative approach, Xcel's assumptions for replacement energy may actually underestimate customer savings.

D. Cost Recovery and Variance Request

Xcel's Petition includes approval of cost recovery through the Fuel Clause Adjustment (FCA). Xcel attests that "Commission approval of cost recovery through the FCA for this proposal is warranted as we will continue to incur monthly expenses to be paid to a third party related to an existing PPA in an effort to save our customers money. The fact that we are not receiving energy or capacity in exchange for this payment is overcome by the substantial customer savings that will flow from making these necessary payments."[19]

As mentioned above, the utility is not purchasing energy or fuel in the termination agreement, which compels Xcel's request for a three-year variance of two Minnesota rules:

> Minn. R. 7825.2500(A)
> *Provisions for the automatic adjustment of charges must encompass:*

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locational marginal price at the NSP node plus $10/MWh. If the difference is negative, no payment will be made to GRS.

[13] Xcel Energy, *Initial Filing* at 7.

[14] *Id* at 1.

[15] The Department, *Comments* at 3.

[16] The Department, *Comments* at 3.

[17] *Id* at 8.

[18] Commission Order, Docket No. 16-777, *In the Matter of the Petition of Xcel Energy for Approval of the Acquisition of Wind Generation*, September 1, 2017.

[19] Xcel Energy, *Initial Filing* at 9.

Changes in cost resulting from changes in the federal regulated wholesale rate for energy purchased and changes in the cost of fuel consumed in the generation of electricity. This provision is entitled electric energy adjustment.

Minn. R. 7825.2600, subp. 2
The adjustment per kWh is the sum of the current period cost of energy purchased and cost of fuel consumed per kWh less the base electric cost per kWh.

Per Minn. R. 7829.3200, the Commission may vary its rules if it finds:

a) Enforcement of the rule would impose an excessive burden upon the applicant or others affected by the rule;

b) Granting the variance would not adversely affect the public interest; and

c) Granting the variance would not conflict with standards imposed by law.

Therefore, in its filing, Xcel addresses each with the following:

a) Excessive burden - If the Commission does not approve a variance for collection of these costs, the Company will be unable to proceed with the proposed transaction. As a result, customers will lose the chance to save more than $5 million (NPV).

b) Public Interest - Granting the requested variance is in the public interest due to the anticipated cost savings for customers and the Company. In addition, all contracting parties support the proposed transactions.

c) Conflict with Legal Standards - Granting the variance would not violate any standards imposed by law.[20]

Lastly, if Xcel files an electric rate case before the variance expires, it proposes to roll the remaining recovery at that time into base rates.[21] Xcel notes that the earliest rate case would be for rates effective January 1, 2020 per the settlement approved in Docket No. E002/GR-15-826.[22]

E. Effects on the Integrated Resource Plan

In the Company's 2016-2030 Integrated Resource Plan (IRP),[23] Xcel did not assume any PPA currently in effect would be extended beyond its term, including Pine Bend.[24] In other words, Pine Bend was not a part of Xcel's approved resource plan beyond 2025. Additionally, in Xcel's IRP, the Company did not project a capacity deficit until 2024, after the retirement of Sherco 2. To meet that need, the Commission required Xcel, among other things, to procure at least 1,000 MW of new wind (Xcel has received approval for 1,550 MW), 650 MW of new solar by 2021, and 400 MW of new demand response by 2023. For these reasons, staff does not believe the early termination of the 12 MW Pine Bend PPA will materially affect Xcel's ability to meet its planning reserve requirements.

The Department reviewed the modeling files from Xcel's most recent IRP and highlighted possible effects to their expansion plan and found "a change in the forecast equivalent to approval of the Termination Agreement is far smaller than the forecast contingencies used by the Department and Xcel."[25] Staff agrees that the termination of the Pine Bend PPA would not have a significant impact on Xcel's resource plan.

[20] *Id*.
[21] *Id* at 10.
[22] *Id*.
[23] Docket No. E-002/RP-15-21.
[24] *Xcel Energy, Initial Filing* at 5.
[25] The Department, *Comments* at 6.

F. Effect on Compliance with the Renewable Energy Standard

The proposed transaction will result in a slight reduction of Xcel's renewable energy standard (RES) surplus. Early PPA retirement "might result in a total of about 0.3 million lost RECs annually."[26] By comparison, Xcel retired 7,572,298 RECs this year for its 2016 obligations[27]; 0.3 million RECs is minor when looking at Xcel's current RES obligations and would be even more minimal when considering its recently approved 1,550 MW wind portfolio approved in Docket No. E002/M-16-777.

Overall, staff appreciates the Department's analysis and agrees that the Petition and rule variances should be approved.

IV. Decision Options

A. Approve the Petition, including the proposed Termination Agreement and requested rule variances. (*Department, Xcel*)
OR
B. Make some other finding.

V. Staff Recommendation

Staff recommends A.

[26] *Id* at 7.
[27] See Xcel's June 1, 2017 REC retirement filing in Docket 17-12.