

June 7, 2019

—Via Electronic Filing—

Daniel P. Wolf Executive Secretary Minnesota Public Utilities Commission 121 7th Place East, Suite 350 St. Paul, MN 55101

RE: RESPONSE TO MPUC INFORMATION REQUEST NO. 7 SUPPLEMENT

ACQUISITION OF THE MANKATO ENERGY CENTER (MEC)

DOCKET NO. IP6949, E002/PA-18-702

Dear Mr. Wolf:

At the request of Commission staff, we enclose our response to the referenced Minnesota Public Utilities Commission information requests in the above-noted docket for e-filing.

Please contact me at (612) 337-2268 or <u>amber.r.hedlund@xcelenergy.com</u> if you have any questions regarding this submission.

Sincerely,

/s/

Amber Hedlund Regulatory Case Specialist

Enclosure c: Service List

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Xcel Energy Information Request No. 7

Docket No.: E002/PA-18-702

Response To: MN Public Utilities Commission

Requestor: Sean Stalpes
Date Received: May 21, 2019

Question:

In Xcel's March 29, 2019 reply comments, the Company provides a "MEC Ownership with Early Coal Retirement" scenario, which aligns with the Settlement Agreement Xcel filed on May 20, 2019. To align Xcel's new proposal with its analysis presented in the Initial Petition, staff seeks additional information on (1) the Continuation of PPAs with Early Coal Retirement scenario and (2) the MEC Ownership with Early Coal Retirement scenario.

7.a. Please update Table 4 of the November 27, 2018 Initial Petition to show the PVSC and PVRR of the following categories of costs/savings associated with the MEC Ownership with Early Coal Retirement scenario relative to the Base (Continuation of PPAs) with Early Coal Retirement:

Capital Cost of Mankato Purchase

Fixed Savings of Mankato PPA

Fixed Cost/Expansion Plan Cost/(Savings)

VOM Cost/(Savings)

Fuel Cost/(Savings)

Market Cost/(Savings)

CO2 Cost/(Savings)

Externalities Cost/(Savings)

PPA Starts/Own Start Fuel Cost/(Savings)

Total Cost/(Savings)

7.b. Please update Table 7 of the November 27, 2018 Initial Petition. Xcel's response should compare the Continuation of PPAs with Early Coal Retirement scenario to the Owned MEC with Early Coal Retirement scenario, with the same sensitivities as Table 7, shown below.

Table 7: MEC Ownership with High Renewables

	Continuation of	Owned	
	PPAs	MEC	Delta
Base PVSC (High Ext Costs thm 2024, High Reg Costs)	53,115	52,956	(158)
Base PVSC + Low Gas	52,182	52,002	(180)
Base PVSC + High Gas	54,745	54,673	(72)
Base PVSC + Low Load	49,727	49,652	(75)
Base PVSC + High Load	56,971	56,750	(221)
Base PVSC + Mkts Off, No Dump Credit	53,815	53,729	(87)
Base PVSC + Mkts Off, Dump Credit	52,026	51,939	(87)
Base PVSC + High MEC Ongoing Costs	53,115	52,989	(126)
Base PVSC + Low MEC Ongoing Costs	53,115	52,925	(190)
PVSC - Low Ext Costs All Years	47,684	47,598	(86)
PVSC - High Ext Costs All Years	58,363	58,239	(124)
PVSC - Low Ext Costs thru 2024, Low Reg Costs	46,163	46,072	(92)
PVRR (No CO2)	44,693	44,627	(66)

- 7.c. Please update "Figure 1: Annual Cost/Savings" of the November 27, 2018 Initial Petition. Xcel's response should show the annualized PVRR and PVSC of the Owned MEC with Early Coal Retirement relative to the Continuation of PPAs with Early Coal Retirement scenario, with the revised amount of renewable energy as shown in Table 3 of Xcel's reply comments.
- 7.d. Please update "Figure 3: Net Capacity Position with Ownership" of the November 27, 2018 Initial Petition. Xcel's response should show the net capacity position through 2034 under the Owned MEC with Early Coal Retirement scenario. Again, please include the revised amount of renewable energy as shown in Table 3 of Xcel's reply comments. Also, please provide a separate figure showing the net capacity position through 2034 under the Continuation of PPAs with Early Coal Retirement scenario.
- 7.e. Please update "Figure 4: Displaced Energy" of the November 27, 2018 Initial Petition. Xcel's response should show the displaced energy (in GWh) by fuel source through 2054 under the Owned MEC with Early Coal Retirement scenario relative to the Continuation of PPAs with Early Coal Retirement scenario.
- 7.f. Please update "Table 8: Incremental Revenue Requirement Impact MEC Ownership" of the November 27, 2018 Initial Petition. Xcel's response should include the same rows as shown below. However, staff requests Xcel extend the years of the table through 2034.

Capital Cost of Mankato Purchase
Fixed Savings of Mankato PPA
VOM/Fuel/Market Cost/(Savings)
Total Cost/(Savings)

7.g. Please update "Table 9: MN Forecasted Incremental Impact on Average Monthly Bills" to show the forecasted incremental impact on average monthly bills in Minnesota under the Owned MEC with Early Coal Retirement scenario. Please show the bill impact relative to both the Base and Base with Early Coal Retirement. Please show the revised Table 9 through 2034.

7.h. Refer to the corrected Tables 15-18 of Attachment F of the November 27, 2018 Initial Petition, e-filed on December 18, 2018. Please show the annual expansion plans under the Owned MEC with Early Coal Retirement and the Continuation of PPAs with Early Coal Retirement scenarios.

Response:

The Company has provided responses to the majority of this request using the "Early Coal" modeling conducted for the Company's Reply Comments, as well as the "Early Coal" supplemental modeling provided to DOC as a response to their Informal IR #2. The Strategist files provided for informal DOC IR 2 were based on the High Renewables scenario included in the Company's initial filing. To address concerns raised in the Department's initial comments, the Company conducted additional modeling that excluded market sales, analyzed impacts using the midpoint CO2 externality and regulatory costs, analyzed impacts under early coal shutdown, and analyzed impacts under a 2040 and 2050 end of life assumption for the MEC. In addition, the files did not exceed the saved state limit in Strategist and the run time was significantly reduced from multiple days to less than half an hour. These two sets of modeling data differ primarily by the use of a fully optimized renewable expansion plan that differs between the MEC PPA and Ownership scenarios (Reply Comments) or a "locked in" renewable expansion plan that is the same in the PPA and Ownership scenarios (Informal IR #2). 7g was completed for the Reply Comments modeling only.

- a. Please see Attachments A and B to this response.
- b. Please see response to part (a).
- c. Please see response to part (a).
- d. Please see response to part (a).
- e. Please see response to part (a).
- f. Please see response to part (a).
- g. The Company continues to work on the rate impact analysis requested by this sub-part and will supplement our response with this information no later than June 7, 2019.
- h. Please see response to part (a).

Supplement:

g. Please see below for the estimated bill impact.

Table 9: MN Forecasted Incremental Impact on Average Monthly Bills UPDATED

	Residential	Commercial Non	C&I Demand	
		<u>Demand</u>	Billed *	
2020	\$0.10	\$0.19	\$7.97	
2021	\$0.03	\$0.09	\$4.79	
2022	-\$0.02	\$0.01	\$2.46	
2023	-\$0.10	-\$0.10	-\$0.90	
2024	-\$0.17	-\$0.21	-\$4.60	
2025	-\$0.28	-\$0.38	-\$9.88	
2026	-\$0.16	-\$0.25	-\$8.09	
2027	-\$0.14	-\$0.18	-\$3.97	
2028	-\$0.12	-\$0.16	-\$3.94	
2029	-\$0.26	-\$0.36	-\$9.80	
2030	-\$0.53	-\$0.66	-\$14.74	
2031	-\$0.48	-\$0.58	-\$11.24	
2032	-\$0.41	-\$0.46	-\$7.41	
2033	-\$0.45	-\$0.53	-\$9.35	
2034	-\$0.47	-\$0.55	-\$9.54	
* Customer kWh usage and rate impacts for C&I demand billed customers varies significantly				

Preparer: Jon Landrum / Mike Peppin

Title: Manager, Resource Planning Analytics / Principal Pricing

Analyst, NSPM Regulatory

Department: Resource Planning / Regulatory Affairs

Telephone: 303.571.2765 / 612.337.2317

Date: June 4, 2019 **SUPPLEMENTED**: June 7, 2019