MINNESOTA
PUBLIC UTILITIES COMMISSION

Staff Briefing Papers

Meeting Date	September 27, 2019	Agenda Item 1**

Company	Northern States Power Company d/b/a Xcel Energy (Xcel, Company)
Docket Nos.	IP6949, **E-002/PA-18-702**
	IP6949, **E-002/GS-15-620, 04-76-PPS**
	In the Matter of the Petition for Approval of the Acquisition of the Mankato Energy Center (MEC)
Issues	1. Should the Commission approve the purchase of the Mankato Energy Center and approve transfer of its site permits? 2. If the transaction is approved, should it be subject to other conditions?

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✓ **Relevant Documents**	**Date**
Xcel Energy – Petition (Public & Trade Secret)	November 28, 2018

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✓ Relevant Documents	Date
Xcel Energy – Errata to Attachment F Tables 15 through 18	December 18, 2018
Minnesota Public Utilities Commission – Notice of Comment Period	December 20, 2018
Xcel Energy – Responses to Minnesota Public Utilities Commission Information Requests 1 – 5 (Public & Trade Secret)	January 10, 2019
Xcel Energy – Revised Responses to Minnesota Public Utilities Commission Information Requests 1 (revised), 2(revised), and 6 (Public & Trade Secret)	January 18, 2019
Institute for Local Self-Reliance (ILSR) and Cooperative Energy Futures (CEF) – Comments	February 11, 2019
LIUNA Minnesota/North Dakota – Comments	February 12, 2019
Sierra Club – Comments (Public & Trade Secret)	March 5, 2019
Office of the Attorney General – Residential Utilities and Antitrust Division (OAG) – Comments (Public & Trade Secret)	March 5, 2019
Xcel Large Industrials (XLI) – Comments	March 5, 2019
Department of Commerce – Comments (Public & Trade Secret)	March 5, 2019
City of Minneapolis – Comments	March 5, 2019
Xcel Energy – Reply Comments	March 29, 2019
Southern Power Company (Southern) – Reply Comments	March 29, 2019
Minnesota Public Utilities Commission – Notice of Supplemental Comment Period	April 3, 2019
Department of Commerce, Energy Environmental Review and Analysis (EERA) – Comments on Proposed Site Permit Transfer	April 30, 2019
Xcel Energy – Settlement Agreement	May 20, 2019
Clean Energy Organizations (CEO) & Center for Energy and Environment (CEE) – Comments	May 20, 2019
Sierra Club – Request to Withdraw Initial Comments	May 20, 2019
Citizens Utility Board (CUB) – Letter Regarding Sierra Club's Withdrawal Request	May 22, 2019
Xcel Energy – Information Request Responses (Public & Trade Secret)	June 4, 2019
Xcel Energy – Information Request Response	June 7, 2019
City of Minneapolis – Reply Comments	June 12, 2019
Xcel Energy – Information Request Responses (Public & Trade Secret)	June 17, 2019
Xcel Energy – Information Request Responses (Public & Trade Secret)	June 21, 2019
Institute for Local Self-Reliance and Cooperative Energy Futures – Reply Comments	June 24, 2019
Citizens Utility Board – Supplemental Reply Comments	July 26, 2019
Department of Commerce – Supplemental Reply Comments (Public & Trade Secret)	July 26, 2019
Xcel Large Industrials – Supplemental Reply Comments	July 26, 2019

✓ Relevant Documents	Date
LSP – Cottage Grove, L.P. – Supplemental Reply Comments	July 26, 2019
Office of the Attorney General – Supplemental Reply Comments (Public & Trade Secret)	July 26, 2019
LIUNA Minnesota/North Dakota (LIUNA) – Supplemental Reply Comments	July 29, 2019
Department of Commerce – Additional Supplemental Comments	August 29, 2019
Xcel Energy – Additional Supplemental Comments	August 30, 2019
Office of the Attorney General – Additional Supplemental Comments	August 30, 2019
Xcel Large Industrials – Additional Supplemental Comments	August 30, 2019
Citizens Utility Board – Additional Supplemental Comments	August 30, 2019

Public Comments:

IBEW Local Union 949	February 8, 2019
Jacob Herbers	February 11, 2019
Patrick Hentges, Mankato City Manager	February 12, 2019
Mankato Building and Construction Trades Council	February 13, 2019
Jonathan Zierdt, President, Greater Mankato Growth, Inc.	February 15, 2019
Mallory Mitchell	February 20, 2019
Debbie Meister	February 25, 2019
Anthony Varriano	March 5, 2019
Mike Kreuset	March 13, 2019
Ben Allen	March 13, 2019
John White	March 13, 2019
Clean Energy Supporters	March 28, 2019
Carol Overland/Legalectric	May 23, 2019
Advanced Energy Management Alliance	June 24, 2019
Blue Earth County	August 9, 2019
South Central College	August 27, 2019
Mankato Clinic	September 3, 2019

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I. Statement of the Issues

- Should the Commission approve the purchase of the Mankato Energy Center and approve transfer of its site permits?
- If the transaction is approved, should it be subject to other conditions?

II. Executive Summary

The record in this matter was developed over an elongated period, with a number of rounds of analysis, comments, and changes in party positions and arguments. It is difficult to come up with a clear decision path or a logical order for addressing the issues. Below is a very brief summary of the parts of the record.

A. Standard Acquisition Criteria and Analysis

Minn. Stat. §216B.50 Restrictions on Property Transfer and Merger, requires the Commission to find a proposed utility action to be "consistent with the public interest" and requires the Commission to take into consideration the reasonable value of the plant to be acquired.

Xcel s revenue requirements model shows the cost of owning the plant over time exceeds the costs of the remaining capacity payments to Southern by approximately $360 million. The Department and OAG show that, if additional considerations are added, the premium is likely higher.

B. Resource Planning Analysis

Xcel undertook a resource planning analysis using the Strategist model, which projected that avoided capacity and variable O&M costs, as well as other categories of savings, more than offset the acquisition premium. The Department, however, identified a number of flaws in Xcel's initial modeling, and the Department concluded that Xcel did not remedy these issues in reply comments. Additionally, the Department noted several areas where it thought the model was biased and inflated MEC's value.

C. Partial Settlement Agreement

On May 20, 2019, Xcel submitted a settlement agreement among the Company, LIUNA Minnesota and North Dakota, Clean Grid Alliance, Center for Energy and Environment, Minnesota Center for Environmental Advocacy, Union of Concerned Scientists, Fresh Energy, and the Sierra Club. The settlement includes a commitment by Xcel to include early retirement of the King and Sherco 3 coal plants in its preferred plan in its 2019 IRP and at least 3,000 MW of solar. The signatories agree to support Xcel's recovery of the undepreciated balance of Sherco 3 as a regulatory asset and ownership of at least 50% of the new solar assets.

Commerce, the OAG, and other non-signatory parties oppose the settlement and still recommend the Commission deny the Xcel petition to acquire MEC.

D. Parties' Final Positions

The Table below provides a summary of parties' final positions and their preferred alternative if the Commission disagrees.

Party	Final Position	If Commisison Disagrees
Xcel Energy	Approve	Will buy through unregulated affiliate
Department of Commerce	Deny	Include conditions and adjustments
Office of the Attorney General	Deny	Impose ratepayer protections
Citizens Utility Board of Minnesota	Deny	Evaluate in IRP proceeding
City of Minneapolis	Deny	Evaluate in IRP proceeding
Institute for Local Self-Reliance/Cooperative Energy Futures	Deny	Impose ratepayer protections
LIUNA Minnesota and North Dakota, Clean Grid Alliance, Center for Energy and Environment, Minnesota Center for Environmental Advocacy, Union of Concerned Scientists, Fresh Energy, and Sierra Club.	Approve - via Settlement with Xcel	n/a
LSP – Cottage Grove, L.P.	Deny	n/a
Xcel Large Industrials	Deny	Evaluate in IRP proceeding

E. Commission considerations

Xcel acknowledges that the revenue requirements analysis shows that the revenue requirements associated with acquiring the MEC plant exceeds the values of the payments under the existing PPAs. The Commission needs to decide whether the resource planning analysis demonstrates that ratepayers are better off on a net present-value basis from the acquisition, and/or if the settlement agreement provides addition value to ratepayers, and/or if there are any other mitigation measures that would result in the acquisition being found in to be consistent with the public interest.

III. Background

A. History of the MEC Facility

The Mankato Energy Center (MEC) is a natural gas-fired combined cycle (NGCC) power plant located in Mankato, Minnesota. MEC was designed and permitted to be constructed in two phases as a full 720 megawatt (MW) facility.[1] In the 2003-2004 timeframe, Calpine Corporation (Calpine) sought and received a Certificate of Need and Site Permit for the entire 720 MW.[2]

[1] Docket No. E-002/CN-12-1240, In the Matter of the Petition Northern States Power Company to Initiate a Competitive Resource Acquisition Process, Calpine's Mankato Energy Center Expansion Proposal, at 3 (April 15, 2013).

[2] *See* Order Granting Certificate of Need issued September 22, 2004 in Docket No. IP-6345/CN-03-1884, and Site Permit issued September 16, 2004 in EQB Docket No. 04-76-PPS-CALPINE.

The first phase, MEC I, was constructed as a 375 MW NGCC facility and was placed into service in 2006. The output from MEC I has been sold to Xcel Energy (Xcel) since the facility's commercial operation date under a 20-year Power Purchase Agreement (PPA). The MEC I PPA is scheduled to expire on July 31, 2026.

MEC II is a 345 MW combined cycle expansion project that was bid by Calpine Corporation (Calpine) in Xcel's 2013-2014 competitive resource acquisition process, which followed Xcel's 2011 Integrated Resource Plan (IRP).[3] The Commission determined in Xcel's 2011 IRP proceeding that Xcel had a capacity need for an additional 150 MW in 2017, increasing up to 500 MW by 2019.[4] This finding informed the size and timing of resources Xcel sought to procure through the resource acquisition process.

Calpine's MEC II PPA proposal was essentially a capacity-pricing based payment structure—although it includes additional monthly payments for dispatchability, energy, and turbine starts—and has a 20-year term following the commencement of service. MEC II became operational in June 2019, so the PPA expires in 2039.

MEC I was upgraded in 2017 as part of "a major overhaul of the combustion turbine" and "addressed known operational issues."[5] According to Xcel, as a result of the upgrade and "performance improvements attributed to the newer vintage combustion turbines,"[6] MEC I and MEC II total capacity is now expected to be 760 MW."[7] (Xcel did not say how the capacity payments may have changed, since the 2017 turbine upgrade increased the capability of the power plant.)

B. Background on the Sale

On October 7, 2016, approximately 20 months after the Commission approved the MEC II PPA, Calpine filed a letter notifying the Commission of its intention to sell the entire MEC facility to Southern Power Company.[8] Southern Power separately notified the Commission through a compliance filing on October 31, 2016 that the MEC sale was complete and that Southern Power acquired the facility.

According to Xcel's Petition in the instant docket, it was not until August 2018 that Xcel learned Southern Power was planning to sell MEC.[9] Xcel explained that when Southern Power's intentions to sell the facility became known, Xcel evaluated purchasing MEC from Southern

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[3] Docket No. E-002/CN-12-1240.

[4] Docket No. E-002/RP-10-825.

[5] Petition, at 10.

[6] Petition, at 10.

[7] The MEC I nameplate capacity is 375 MW, and the MEC II expansion capacity is 385 MW (375+385 =760).

[8] Docket No. IP-6949/GS-15-620.

[9] Petition, at 1.

Power, and the Company determined there were a number of benefits with MEC ownership. Thus, Xcel and Southern Power commenced negotiations on October 2, 2018.[10]

As a condition to entering a transaction that is subject to regulatory approval, Southern Power required a "reverse breakup fee," which would be payable by Xcel in the event the transaction is not approved by state regulators as requested.[11] (The amount was designated as trade secret.)

The agreed-upon purchase price is $650 million, which Xcel believes is a fair price based on other recent combined cycle acquisitions in the region. Xcel noted that Southern Power acquired MEC I and the MEC II expansion rights for $395 million in 2016 (based on a Calpine press release), and according to Xcel's estimates, Southern has invested $31 million for the MEC I turbine upgrade and $180 million for the MEC II expansion. Thus, Xcel estimates that, in total, Southern has invested approximately $609 - $622 million in the MEC facility.[12]

C. Summary of Parties' Positions

In their initial comments, the Department, Institute for Local Self-Reliance and Cooperative Energy Futures (ILSR/CEF), LSP-Cottage Grove, the Office of the Attorney General (OAG), the Sierra Club and Xcel Large Industrials (XLI) recommended that the transaction not be approved; however, in the event that the Commission approves the transaction, the Department recommended that various financial adjustments be included. The City of Minneapolis recommended that the Commission weigh risks and costs against the value of Xcel's ownership of and long-term responsibility for the Mankato Energy Center gas plant.

The International Brotherhood of Electrical Workers (IBEW) Local Union 949, and the Laborers District Council of Minnesota and North Dakota (LIUNA Minnesota) recommended approval.

Parties' reply comments positions are summarized as follows:

- Xcel provided alternate financial models that show that, even if the MEC were to be retired early, the proposed transaction would still generate positive financial benefits.
- Southern stated that, as stipulated in its contract with Xcel, if the transaction does not close by September 27, 2019, Southern will exercise its rights to terminate the agreement.
- The Department of Commerce - EERA recommended that MEC permit transfers be approved if Xcel complies with the permits' conditions.
- The Clean Energy Organizations (CEOs) and the Center for Energy and Environment (CEEs) determined that the MEC purchase not only is cost-effective but becomes more so as coal is retired from Xcel's system. CEOs and CEEs recommended the transaction be approved.
- The City of Minneapolis reaffirmed its previous recommendations.

[10] Petition, at 1-2.

[11] Petition, at 15.

[12] Petition, at 17.

- The ILSR/CEF considered the acquisition to be imprudent; however, if it is approved, then consumer-protection measures should be included.

On May 20, 2019, Xcel and the Sierra Club filed a Settlement agreement[13] in which Xcel agreed to seek early retirement of its coal generating plants in exchange for the Sierra Club supporting transaction approval. No other parties were signatories to the agreement. On the same day, the Sierra Club filed a request to withdraw its initial comments. Subsequently, CUB, Legalectric/Carol Overland, the City of Minneapolis filed letters opposing the Sierra Club's request.

Parties' supplemental reply comments positions are summarized as follows:

- The Department recommended that the Petition be denied; however, if it is approved, the DOC recommended that certain disallowances and conditions be included.
- The OAG recommended that the Petition be rejected and be considered in Xcel's IRP proceeding.
- XLI stated that the transaction should only be approved within the IRP proceeding.
- LIUNA continued to support the Transaction.
- CUB asserted that the Transaction is imprudent, would shift risks to ratepayers and, if it were to be approved, it should be approved within the context of the IRP.
- LSP – Cottage Grove recommended that the Petition be denied.

On August 1, 2019, Xcel filed a letter stating that if the Commission does not approve the purchase, the Company will complete the purchase through an unregulated subsidiary. In response to a Commission Notice, parties provided the following comments regarding Xcel's plan to, if necessary, complete the transaction through an unregulated subsidiary:

- Xcel stated that, upon receipt of FERC approval, it would make an affiliated interest filing. While Xcel noted that such a filing does not need to be approved prior to signing the affiliate contract, Xcel acknowledged that, without Commission approval, recovery was at risk.
- The Department noted that a purchase by an affiliate would require Xcel to file an affiliated interest petition and recommended that Commission review of that any affiliate issues in such a proceeding.
- The OAG determined that Xcel may need Commission approval before proceeding with any affiliate purchase.
- XLI stated that reviewing and complying with statutory guidelines associated with a possible affiliate purchase is Xcel's burden.
- CUB recommended that any affiliate purchase would require an affiliated interest filing and should be reviewed after such a filing is made.

[13] Signatories were Xcel Energy, LIUNA Minnesota and North Dakota, Clean Grid Alliance, Center for Energy and Environment, Minnesota Center for Environmental Advocacy, Union of Concerned Scientists, Fresh Energy, and Sierra Club.

IV. Financial Issues

A. Governing Statutes and Rules

Statutes mentioned in this section pertain to asset purchase transactions. If the transaction is approved, the other additional statutes would become relevant; however, those statutes will be discussed in their related sections below.

1. Minnesota Statute § 216B.50 Restrictions on Property Transfer and Merger

Subdivision 1. Commission approval required. No public utility shall sell, acquire, lease, or rent any plant as an operating unit or system in this state for a total consideration in excess of $100,000, or merge or consolidate with another public utility or transmission company operating in this state, without first being authorized so to do by the commission. Upon the filing of an application for the approval and consent of the commission, the commission shall investigate, with or without public hearing. The commission shall hold a public hearing, upon such notice as the commission may require. If the commission finds that the proposed action is consistent with the public interest, it shall give its consent and approval by order in writing. In reaching its determination, the commission shall take into consideration the reasonable value of the property, plant, or securities to be acquired or disposed of, or merged and consolidated.

2. Minnesota Rules 7825.1800 Filing Requirement for Petitions to Acquire Property

Petitions for approval to acquire property shall contain one original and three copies of the following information, either in the petition or as exhibits attached thereto:

> A. Petitions for approval of a merger or of a consolidation shall be accompanied by the following: the petition signed by all parties; all information, for each public utility, as required in parts 7825.1400 and 7825.1500; the detailed reasons of the petitions and each party for entering into the proposed transaction, and all facts warranting the same; the full terms and conditions of the proposed merger or consolidation.
>
> B. Petitions for approval of a transfer of property shall be accompanied by the following: all information as required in part 7825.1400, items A to J; the agreed upon purchase price and the terms for payment and other considerations.
>
> C. A description of the property involved in the transaction including any franchises, permits, or operative rights, and the original cost of such property, individually or by class, the depreciation and amortization reserves applicable to such property, individually or by class. If the original cost is unknown, an estimate shall be made of such cost. A detailed description of the method and all supporting documents used in such estimate shall be submitted.
>
> D. Other pertinent facts or additional information that the commission may require.

3. Minnesota Rules 7829.3200 Other Variances

Subpart 1. When granted. The commission shall grant a variance to its rules when it determines that the following requirements are met:

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.

Subp. 2. Conditions. A variance may be granted contingent upon compliance with conditions imposed by the commission.

Subp. 3. Duration. Unless the commission orders otherwise, variances automatically expire in one year. They may be revoked sooner due to changes in circumstances or due to failure to comply with requirements imposed as a condition of receiving a variance.

B. Purchase Price and Cost/Benefit Analysis

1. Xcel's Petition

Xcel's stated that it agreed to purchase membership interests in Mankato Energy Center, LLC and Mankato Energy Center II, LLC from Southern for $650 million, which is about $100 million higher than the present value of Xcel's capacity payment obligations under the PPAs. The purchase price includes the following:[14]

- Inventory valued at $4 million.
- Spare L-0 stage blades for the steam turbine which were on order at the time of the filing valued at $4 million.
- The market value of the water supply agreement with the City of Mankato with a value of $9 million.
- A contingent, trade secret reverse breakup fee. Xcel stated that, if triggered, it would not seek recovery of this fee.
- If MEC II is not operational by June 1, 2019, a contingent, trade secret purchase price reduction.

Xcel added that, in 2016, Southern bought MEC I and the MEC II expansion rights for $395 million. Subsequently, Southern upgraded the MEC I combustion turbine for $31 million in 2017 and has invested $180 million in the MEC II expansion and general facility upgrades. Xcel estimated that, upon completion of the MEC II, Southern total investment will be between $609 and $622 million.

[14] Copies can be found in Attachment A (public) and Attachment B (trade secret).

Using its Strategist modeling, Xcel calculated that the present value of the transaction's societal cost (PVSC) savings ranges from $158 to $251 million and the present value of the revenue requirement (PVRR) savings ranges $66 to $142 million. Xcel acknowledged that the High Renewables scenario will most closely reflect customer bills.

Table 1: MEC Ownership with 2015 IRP Renewables, in millions

	PVSC	PVRR
Mankato Purchase PVRR	$915	$915
Fixed Savings of Mankato PPA, in millions	($555)	($555)
Fixed Cost/Expansion Plan Cost/(Savings)	($373)	($359)
VOM Cost/(Savings)	($45)	($47)
Fuel Cost/(Savings)	$67	$21
Market Cost/(Savings)	($161)	($71)
CO_2 Cost/(Savings)	$25	$0
Externalities Cost/(Savings)	($72)	$0
PPA Starts/Own Start Fuel Cost/(Savings)	($51)	($46)
Total Cost/(Savings)	($251)	($142)

Table 2: MEC Ownership with High Renewables, in millions

	PVSC	PVRR
Mankato Purchase PVRR	$915	$915
Fixed Savings of Mankato PPA, in millions	($555)	($555)
Fixed Cost/Expansion Plan Cost/(Savings)	($372)	($365)
VOM Cost/(Savings)	($32)	($28)
Fuel Cost/(Savings)	$33	$13
Market Cost/(Savings)	($40)	($6)
CO_2 Cost/(Savings)	$6	$0
Externalities Cost/(Savings)	($67)	$0
PPA Starts/Own Start Fuel Cost/(Savings)	($47)	($39)
Total Cost/(Savings)	($158)	($66)

Based on the modeled savings the Company concluded that purchase is reasonable.

2. Department of Commerce Comments

When the Department asked Xcel to extend out its incremental revenue requirement calculation of ownership compared to the PPAs for the entire life of MEC I and MEC II, the Company provided the following:

Table 3: Incremental Revenue Requirement Impact with High Renewables, in millions

	2018 PVRR
Mankato Purchase PVRR	$915
Fixed Savings of Mankato PPA, in millions	($571)

Fixed Cost/Expansion Plan Cost/(Savings)	($364)
VOM Cost/(Savings)	($32)
Coal	($3)
Gas	($29)
Fuel Cost/(Savings)	$28
Coal	($41)
Gas	$72
Other	($2)
Market Cost/(Savings)	($28)
CO2 Cost/(Savings)	$5
Externalities Cost/(Savings)	($65)
PPA Starts/Own Start Fuel Cost/(Savings)	($48)
Total Cost/(Savings)	($165)

The Department primarily focused on the first three lines of the above table. The first line's $915 million reflects the present value of revenue requirements under the ownership method. Lines 2 and 3, which total $935 million, reflect the present value under the PPA method. As a result, the Department concluded that the ownership method and the PPA method provide fairly similar present value amounts over the life of the plant. The Department added that, except for property taxes, it considered that, for the revenue requirements model, inputs and assumptions used in the ownership method appear to be reasonable.[15]

The Department noted that Xcel's actual plant life may be shorter than estimated and recognized that, moving from a PPA to ownership, the following operational and cost risks would shift to Xcel and its ratepayers:

- decommissioning;
- plant outages and equipment failures;
- risk of higher property taxes;
- risk of higher O&M expenses.

Since the Department's review determined that, under Xcel ownership or under continued PPAs, revenue requirements are similar, the Department did not believe that Xcel has shown clear ownership benefits.

3. OAG Comments

The OAG stated that, as shown in Table 4, Xcel's modeling makes clear that the cumulative financial savings begin many years in the future and only begin if the MEC is operated far past the expiration of the PPAs.

Table 4: Revenue Requirement Impacts of MEC Purchase, in millions

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031

[15] The Department continued to have problems with the Strategist modeling.

Capital Cost of Mankato Purchase	$46	$86	$83	$81	$78	$76	$75	$73	$70	$74	$67	$65	$65
Fixed Savings of Mankato PPA	($39)	($67)	($68)	($69)	($70)	($71)	($72)	($55)	($31)	($32)	($32)	($33)	($33)
Fixed Cost/Expansion Plan Cost/(Savings)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
VOM/Fuel/Market Cost/(Savings)	($6)	($9)	($10)	($9)	($5)	($7)	($11)	($17)	($22)	($24)	($24)	($25)	($30)
Total Cost/(Savings)	$2	$9	$4	$3	$2	($3)	($9)	$0	$16	$19	$10	$7	$1

	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Capital Cost of Mankato Purchase	$67	$68	$67	$65	$64	$62	$68	$62	$61	$60	$60	$59	$57
Fixed Savings of Mankato PPA	($34)	($34)	($35)	($35)	($36)	($36)	($37)	($15)	$0	$0	$0	$0	$0
Fixed Cost/Expansion Plan Cost/(Savings)	$0	$0	($22)	($22)	($22)	($23)	($23)	($53)	($54)	($133)	($135)	($138)	($141)
VOM/Fuel/Market Cost/(Savings)	($32)	($34)	($29)	($28)	($28)	($30)	($34)	($39)	($51)	$27	$28	$28	$28
Total Cost/(Savings)	$1	$0	($19)	($20)	($22)	($26)	($26)	($46)	($45)	($45)	($47)	($51)	($56)

	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057
Capital Cost of Mankato Purchase	$57	$50	$28	$36	$29	$29	$32	$40	$39	$17	$0	$0	$0
Fixed Savings of Mankato PPA	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fixed Cost/Expansion Plan Cost/(Savings)	($135)	($114)	($116)	($118)	($121)	($123)	($125)	($128)	($120)	($94)	($96)	($87)	($100)
VOM/Fuel/Market Cost/(Savings)	$19	$43	$61	$66	$60	$61	$62	$53	$56	$94	$107	$103	$114
Total Cost/(Savings)	($59)	($20)	($27)	($16)	($32)	($33)	($32)	($35)	($25)	$17	$12	$16	$14

The OAG pointed out that Xcel's financial modeling shows that, when compared to the 2015 IRP scenario, the High Renewables scenario is almost 40% lower from a PVSC perspective and more than 50% lower from a PVRR perspective. Based on Xcel's statement that it believes that its High Renewables scenario is more likely than the 2015 IRP scenario, the OAG concluded that Xcel believes the most likely for the future reduces Xcel's estimated benefits by almost half.

4. Sierra Club Comments

Even under Xcel's unsubstantiated assumptions, the Company's own modeling shows that, under the 2015 IRP and High Renewable scenarios, Mankato ownership does not become economically beneficial to ratepayers until either 2035 or 2045, respectively. Given the substantially lower cost of pursuing the High Renewables scenario, the Sierra Club concluded that the 2045 date is the more reasonable. Table 5 summarizes annual and cumulative savings.

Table 5: Present Value of Revenue Requirements by Year for Mankato Acquisition vs. PPAs (High Renewables Scenario), in millions

Year	Annual Cost/(Savings)	Cumulative Cost/(Savings)	Year	Annual Cost/(Savings)	Cumulative Cost/(Savings)
2019	$1.7	$1.7	2037	($1.0)	$73.5
2020	$7.9	$9.7	2038	($2.9)	$70.6
2021	$3.7	$13.4	2039	($7.3)	$63.3
2022	$2.1	$15.4	2040	($5.3)	$58.0
2023	$1.6	$17.0	2041	($14.7)	$43.3

Year	Annual Cost/(Savings)	Cumulative Cost/(Savings)	Year	Annual Cost/(Savings)	Cumulative Cost/(Savings)
2024	($1.9)	$15.1	2042	($14.2)	$29.1
2025	($3.1)	$12.0	2043	($14.0)	$15.1
2026	$4.1	$16.2	2044	($14.2)	$0.9
2027	$13.1	$29.3	2045	($9.1)	($8.2)
2028	$15.2	$44.5	2046	($7.2)	($15.3)
2029	$9.9	$54.5	2047	($8.5)	($23.8)
2030	$7.9	$62.4	2048	($6.0)	($29.8)
2031	$5.5	$67.9	2049	($8.2)	($38.0)
2032	$5.2	$73.1	2050	($7.8)	($45.8)
2033	$4.7	$77.8	2051	($7.2)	($53.0)
2034	($0.5)	$77.3	2052	($6.0)	($59.0)
2035	($1.1)	$76.2	2053	($2.3)	($61.3)
2036	($1.7)	$74.5	2054	($1.5)	($62.8)

Because economic benefits do not arise for more than 20 years, the Sierra Club concluded that the acquisition exposes customers to significant risk that the benefits may never appear.

The Sierra Club added that the proposed transaction's financial benefits are grounded in the key, unsubstantiated claim that the Company will operate MEC more efficiently than it is currently operated under the PPAs. Xcel's modeling is based on the unsubstantiated premise that MEC will generate more energy under its ownership than under the existing PPAs. Xcel's assumption that it will cheaper to operate results in MEC being dispatched more often, thus enhancing its value.

Despite the Company's stated carbon-free goals of 85% by 2035 and 100% by 2050, the Sierra Club noted that Xcel's cost-benefit analysis is based on the premise that the Company will use MEC I through 2046 and MEC II through 2054. Furthermore, Xcel acknowledged that it did not conduct cost-benefit analyses that would achieve either of these carbon goals.[16] When asked why there was no carbon-free modeling, Xcel responded that "achieving the long-term vision of zero-carbon electricity requires technologies that are not cost effective or commercially available today."[17]

The Sierra Club (and the OAG) requested that Xcel re-calculate its cost-benefit analysis using earlier retirement dates for the MEC plant. When Xcel assumed the gas plant would retire in 2050, under the High Renewables scenario, the acquisition results in only $23M in savings to customers on PVRR basis, and $138M on PVSC basis.[18] When Xcel assumed the gas plant would retire in 2040, ownership results in *additional* cost to customers of $116 million, and the PVSC savings are reduced to $13 million. The Sierra Club noted that when Xcel produced the 2040 retirement analysis, the Company included the following caveat: "As noted in the response

[16] Sierra Club Exhibit SC-08.

[17] Sierra Club Exhibit SC-10.

[18] Sierra Club Exhibit SC-11.

above, we expect that technological advances may allow use to obtain value from MEC through its expected book life and beyond 2050. Retiring Mankato in 2040 reduces the expected 35 year life of MEC II by 14 years, which we do not believe is a reasonable assumption."

The Sierra Club concluded that Xcel's proposal shows no persuasive evidence that the acquisition is in the public interest.

As part of the Settlement mentioned above, on May 20, 2019, the Sierra Club filed a request to withdraw its initial comments. Other stakeholders objected to the withdrawal request.

5. Xcel Reply Comments

Xcel addressed issues regarding MEC's retirement date by providing revised net present value benefits based on a 2050 retirement date. Xcel stated that, as shown in the table below, the revised analysis continues to show benefits on both a PVSC and PVRR basis with markets on and off. Xcel added that the benefits of operating MEC into the 2040s will depend on the technology and costs of replacement resources available in that timeframe. The results show that MEC acquisition costs are largely offset by 2040 allowing for flexibility in determining whether an early retirement of MEC is in the public interest; therefore, a retirement date can occur before 2050 and still achieve customer savings.

Table 6: Early Shutdown of MEC, in millions

	Markets Sales On		Markets Sales Off	
Scenario	**PVSC**	**PVRR**	**PVSC**	**PVRR**
Base (Continuation of PPAs)	$0	$0	$0	$0
MEC Ownership	($122)	($165)	($128)	($91)
MEC Ownership and 2040 shutdown	$121	$25	($31)	$80
MEC Ownership and 2050 shutdown	($90)	($124)	($66)	($28)

Additionally, Xcel addressed possible property tax increase concerns by stating that it has undertaken substantial efforts to ensure that it will qualify for the same property tax exemptions that applied to Southern's MEC ownership. Moreover, the Company has experience applying for, and receiving, the same exemption at other sites; therefore, they did not see any significant risk associated with the property tax treatment.

6. Institute for Local Self-Reliance/Cooperative Energy Futures Reply Comments

The Institute for Local Self-Reliance/Cooperative Energy Futures (ILSR/CEF) disputed Xcel's statement that modeling shows customer benefits associated with ownership under a wide variety of resource planning scenarios demonstrates that the Company is paying a reasonable price for the plant. The ILSR/CEF asserted that Xcel's statement conflates the purpose of net present value calculations with comparison shopping.

Rather, reasonableness would require a comparison of the net benefits of alternatives like the present value of revenue requirements and present value of societal costs of purchasing the

LSP-Cottage Grove plant. Without an apples-to-apples comparison, participants in this docket do not know what constitutes a reasonable purchase price.

The ILSR/CEF noted that Xcel's offer that the Mankato gas plant could shutter early to help address its long-term climate and market vulnerabilities comes with two significant caveats:[19]

- "Those modeling results show that we can retire the plant a full 14 years earlier than the anticipated operational life for a very modest incremental cost of $25 million on a [present value of revenue requirements] basis."

- "And should that aggressive scenario ultimately come to pass, the Commission would have full authority to determine how best to deal with the remaining plant balance in an equitable fashion."

The ILSR/CEF stated that, even if retirement of Mankato in 2040 makes financial, environmental, or economic sense, early retirement will cost customers more than not purchasing the plant. Despite that promise of financial liability for customers, the utility expects the Commission to ensure that shareholders still get paid.

Based on their evaluation, the ILSR/CEF consider the acquisition to be imprudent. However, should the Commission approve the transaction, the ILSR/CEF recommended that consumer protection measures that mitigate consumer risk be adopted.

7. Department of Commerce Supplemental Comments

The Department stated that Xcel's inadequate modeling fails to demonstrate that the MEC purchase is in the public interest, for Xcel's customers or the public as a whole. The DOC noted that Xcel's belief that they "do not see any significant risk" is certainly not the same as Xcel committing to charge its ratepayers no more than is charged under the PPA. Moreover, Xcel's statement that "the transaction is cost effective even if we retire the plants earlier" is invalid. As noted in Xcel's response to the OAG's Information Request #103, the MEC's net book value at the end of 2040 could result in significant stranded costs if the MEC is retired early.

The Department noted that Xcel indicating that their O&M costs and decommissioning costs are consistent with industry standards is not helpful. Xcel's recent rate cases, depreciation studies and decommission studies have shown material cost increases to both O&M and decommissioning costs. Those higher costs can be avoided by continuing with the existing PPAs. Additionally, Xcel's estimates variable operating and maintenance (VOM) *savings* of $32 million which, despite the upward trend in Xcel's VOM costs, the Company has not shown how they would be achieved.

The Department also pointed out that, if Xcel owns MEC, the ROE would be subject to change over time which exposes ratepayers to the risk of paying higher returns on the same asset.

[19] Xcel Energy, Reply Comments.

Overall, the Department concludes that a PPA methodology better protects ratepayers from risks by keeping costs fixed during the contract period and by not requiring ratepayers to pay for stranded costs of the plant that occur after the contract period of the PPA, decommissioning costs, plant outages or failures, higher O&M expenses or higher returns on equity for the same asset. Thus, in addition to the flawed Strategist modeling, the Department recommended that existing PPAs should remain in place and the purchase not be approved.

8. OAG Supplemental Comments

As discussed in a different section of these briefing papers, the OAG's filing was mostly IRP-related; however, the OAG voiced concern regarding Strategist modeling assumptions which are the basis of Transaction's cost/benefit analysis.

9. LSP – Cottage Grove, L.P. Supplemental Comments

LSP – Cottage Grove, L.P.'s filing essentially repeated comments made earlier.

10. Xcel August 1, 2019 Letter

Xcel disagreed with the Department's recommendation that the transaction be denied and stated that, at the Commission hearing, it will be prepared to respond to issues raised by the Department and other parties.

Xcel added that if the Commission does not approve the purchase, the Company will complete the purchase through an unregulated subsidiary.

11. Staff Analysis

Staff does not consider Xcel's statement that the $650 million is only $100 million higher than the capacity payment's ($555 million) net present value to be useful. The $650 million does not include all other ownership-associated costs so parties' focus on the $915 million PVRR provides the most relevant "apples-to-apples" comparison.

The $915 million PVRR is based on a 2% inflation factor and a 9.35% ROE. Parties in this proceeding have expressed concerns about the ROE assumptions and ratepayers' exposure to the inflationary risks. In an effort to quantity those concerns, Staff used Xcel's financial model[20] and calculated PVRR based on different assumptions. As shown in the following table, a 3% inflation rate and a 10.0% ROE would increase the PVRR by $56.5 million.

[20] Xcel Energy, Initial Filing, Attachment G.

Table 7: Present Value Revenue Requirements, in millions

Assumptions	PVRR	PVRR Increase
Base Model - 2.0% inflation, 9.35% ROE	$914.554	$0.000
2.0% inflation, 9.50% ROE	$919.975	$5.421
2.0% inflation, 9.75% ROE	$929.011	$14.457
2.0% inflation, 10.00% ROE	$938.047	$23.493
2.5% inflation, 9.50% ROE	$935.671	$21.117
2.5% inflation, 9.75% ROE	$944.753	$30.199
2.5% inflation, 10.00% ROE	$953.837	$39.283
3.0% inflation, 9.50% ROE	$952.830	$38.276
3.0% inflation, 9.75% ROE	$961.963	$47.409
3.0% inflation, 10.00% ROE	$971.096	$56.542

Considering the possible magnitude of the additional risk shown in Table 7 combined with the fact that, regardless of the scenario used, the transaction's cumulative financial benefits do not materialize until, at a minimum, the mid-2030s, suggests that the transaction, from a financial perspective, is risky for ratepayers.

Furthermore, Staff believes that, if the transaction does not make sense financially in this proceeding, it will not make financial sense in another proceeding (such as the IRP).

12. Decision Alternatives

1. Approve Xcel's request to purchase the Mankato Energy Center. (Xcel, Sierra Club revised position, CEO and CEE, IBEW, LIUNA)

2. Not approve Xcel's request to purchase the Mankato Energy Center. (DOC, OAG, Staff)

C. Net Book Value/Acquisition Premium (Adjustment)

1. Department of Commerce Comments

Following its review of Xcel's response to the OAG's Information Request regarding MEC's net book value, the Department determined that depreciation should be recorded through the purchase date; thereby, reducing MEC's estimated $541 million book value by that amount.

The Department noted that, in the Company's proposed journal entries,[21] Xcel shows that a $96.194 acquisition adjustment[22] (premium) is included in the purchase price which Xcel plans to include in rate base and amortized over the estimated useful life of the plant, which is 2046 and 2054 for MEC I and MEC II, respectively. When the Department asked Xcel to provide support for why ratepayers should pay for the $96.194 million acquisition adjustment, including identifying offsetting benefits for ratepayers, Xcel provided the following response:

[21] Petition, Attachment I.

[22] An acquisition adjustment is the amount that is above or in excess of the net book value (original cost of the plant less accumulated depreciation).

> The purchase price adjustment represents an estimate of the purchase price in excess of the net book value of the acquired assets. The net book value reflects the asset carrying value per Southern Power's accounting records and is not representative of the fair market value of the plant. As our analysis shows, Xcel Energy's customers will realize savings from the acquisition at the purchase price, including the acquisition adjustment, when compared to continuing with the PPAs and securing replacement power post PPA.

The Department also asked Xcel to provide citations to cases where acquisition adjustment recovery was allowed for plants already devoted to public service. Xcel provided the following response:

> The Uniform System of Accounts of the Federal Energy Regulatory Commission requires any difference between the original plant cost and the cost to acquire to be recorded as an acquisition adjustment (See Title 18, Chapter I, Subchapter C, Part 101).
>
> An example of when an acquisition adjustment was allowed occurred in December 2010, with PSCo's purchase of Blue Spruce Energy Center and Rocky Mountain Energy Center from Calpine Development Holdings, Inc. and Riverside Energy Center LLC (FERC Docket Nos. EC10-71-000; AC11-99-000).

The Department noted that acquisition adjustments are on top of the net book value and, before rate recovery is allowed, require a significant finding of benefits to offset or justify this adjustment is allowed, especially for utility assets that were already being used for public service such as MEC. Use of net book value in rate base is consistent with Federal Energy Regulatory Commission requirements and Minnesota requirements under 216B.16, subd. 6, which states:

> **SUBD. 6. FACTORS CONSIDERED, GENERALLY.**
> The commission, in the exercise of its powers under this chapter to determine just and reasonable rates for public utilities, shall give due consideration to the public need for adequate, efficient, and reasonable service and to the need of the public utility for revenue sufficient to enable it to meet the cost of furnishing the service, including adequate provision for depreciation of its utility property used and useful in rendering service to the public, and to earn a fair and reasonable return upon the investment in such property. In determining the rate base upon which the utility is to be allowed to earn a fair rate of return, the commission shall give due consideration to evidence of the cost of the property when first devoted to public use, to prudent acquisition cost to the public utility less appropriate depreciation on each, to construction work in progress, to offsets in the nature of capital provided by sources other than the investors, and to other expenses of a capital nature. **For purposes of determining rate base, the commission shall consider the original cost of utility property included in the base and shall make no allowance for its estimated current replacement value.** If the commission orders a generating facility to terminate its operations

> before the end of the facility's physical life in order to comply with a specific state or federal energy statute or policy, the commission may allow the public utility to recover any positive net book value of the facility as determined by the commission.

If the Commission were to approve the MEC purchase, then such approval would require consideration of whether or not the $96.194 million acquisition adjustment is reasonable, and if so, who pays for it (ratepayers or shareholders). The Department noted that competitive bidding would have been a way to ensure that the adjustment is reasonable; however, that process was not used in this case.

Additionally, the FERC uniform system of accounts supports a net book valuation of utility plant, especially for plant that is already being used in public service. The FERC uniform system of accounts does allow for the opportunity of an acquisition adjustment; however, it requires approval from the rate regulator and a clear showing of benefits that justify or offset this higher acquisition adjustment cost. Xcel provided only one example of when an acquisition adjustment was allowed rate recovery and it occurred in another jurisdiction in December 2010. The Department reviewed that FERC proceeding and noted the following on page 8 of the June 6, 2011 filing of Final Accounting Entries in FERC Docket EC10-71-000:

> Third, the use of fair value based on the unique circumstances present here will ensure that the Commission's accounting regulations do not have unintended impacts on state-supervised RFPs. In this case, PSCo's acquisition of Blue Spruce and Rocky Mountain was at less cost to PSCo (and its customers) than either new-build options or PPAs, as measured on a consistent Present Value Revenue Requirement basis. Indeed, the CPUC-supervised process was specifically designed to value each resource type on an "all-in" basis without any adjustment for specific resource types.[footnote 19 omitted] Strict adherence to original cost, however, as opposed to fair value would create substantial accounting differentials between resource categories (existing resources vs. new-build vs. PPAs) that could lead to cost recovery differentials. If, for example, a portion of the cost of a generation asset is labeled an "acquisition adjustment," then a different standard is applied to those costs and a utility seeking to recover such costs through cost-based rates must meet a "heavy" burden to justify cost recovery. [footnote 20 is below] On the other hand, if an asset is brand new, there is no accumulated depreciation and no acquisition adjustment. PPAs do not present acquisition adjustment issues. Thus, if a utility is compelled to value acquired generation assets at original cost, it is at risk for recovery of any amounts classified as an acquisition adjustment notwithstanding the fact that, as here, the total costs of the generation assets are lower than other resource options that do not carry this same risk.

The Department has two takeaways from Xcel's citation in that FERC docket. First, the use of fair value was unique in that case, based on a set of circumstances that does not exist here. For example, there was a state-supervised RFP process including a competitive bid process, which is not true in the current proceeding. Second, in that case, "PSCo's acquisition of Blue Spruce and Rocky Mountain was at less cost to PSCo (and its customers) than either new-build options or

PPAs," a fact that does not exist in the current proceeding. Thus, the Department concluded that the above case is not sufficient to demonstrate that it is reasonable to charge Xcel's ratepayers for the "acquisition adjustment" which must still meet a "heavy" burden to justify cost recovery.

The Department recommended that recovery of the $96.194 million acquisition adjustment be denied for the following reasons:

- MEC is an asset that is already devoted to public service and is used and useful under an existing PPA;
- For purposes of FERC and Minnesota ratemaking – use of the net book value is appropriate for setting rates;
- Xcel did not do a competitive bid process; and
- Allowing approval of an acquisition adjustment must meet a heavy burden to justify cost recovery – which it does not believe Xcel has fully met as further discussed in the next section – Comparison of PPA and Revenue Requirement Ownership.

2. OAG Comments

The OAG also noted that the purchase price is $96 million higher than MEC's net book value and also recommended that recovery of this acquisition premium be denied. The OAG argued that Xcel has not demonstrated that the acquisition premium is attributable to the original cost of the asset or infrastructure that will be used and useful in providing service to ratepayers. It is not plant-in-service, and should not be placed into rate base. Furthermore, according to the FERC Uniform System of Accounts, $96 million should be accounted for in FERC account 114, Electric Plant Acquisition Adjustment. While FERC has, in some cases, allowed acquisition premium recovery it was under circumstances that do not apply in this docket. Those other instances were under settlements, or were for purchases that had already been reviewed and approved by the state commission after an extensive notice-and-comment process and competitive bidding (e.g. RFPs). This guidance recognizes that only the original cost of the plant should be accounted for in the Plant-in-Service account. The Commission's Rules require Xcel to follow FERC's Uniform System of Accounts,[23] which dictates that the acquisition premium should not be included in rate base.

3. Xcel Reply Comments

Xcel opposed recommendations that recovery of the $96 million acquisition be disallowed. The Company believes that the focus should be transaction as a whole will result in customer benefits and is in the public interest.

Xcel noted that, while the Department is correct to point out that FERC accounting rules require the Company to record the plant's net book value separately from the acquisition adjustment, those rules do not preclude the Company from recovering the total amount of its investment. Xcel argued that value of generating plants like MEC change over time especially when large systemic changes in market conditions occur, such as the passage of the Tax Cuts and Jobs Act

[23] Minn. Rules 7825.0200.

(TCJA) in 2018, which effectively increased the value of plants that had long-term PPAs in place with pricing that was based on a 35% corporate tax. There is little reason, then, to assume that fair market value for a plant should be tied to net book value, and little reason to disincentivize the Company from seeking out beneficial transactions simply because the asset in question is already in service. A plant's value, among other things, is a product of its generating characteristics, its expected life, its operating costs, and its projected revenues either from PPAs or expected market sales.

Xcel pointed out that there is no Minnesota law or rule prohibiting the Company from recovering the full MEC cost. Minnesota Statute 216B.16, Subd. 6 referenced by the Department instructs the Commission to consider both "the cost of the property when first devoted to public use" and the "prudent acquisition cost to the public utility." In this way, Xcel believes Minnesota law explicitly acknowledges that net book value and fair market value may differ when a utility acquires a plant, and it instructs the Commission that it should consider both when determining rate base. In light on the Company's modeling that shows a $124 million in net PVRR, Xcel does not see any justification for denying recovery of almost $100 million.

Xcel stated that if the $96 million is disallowed it would be unable to move forward with the transaction and would have to exercise its right to exit the agreement.

4. Department of Commerce Supplemental Comments

The Department noted that Xcel did not address the Department's concern of how MEC I, a plant that is currently in-service and operating under an existing and continuing PPA that continues to charge Xcel's ratepayers for depreciation expense, can be reclassified by Xcel for proposed ratemaking purposes as "plant held for sale" and therefore cease recording depreciation while continuing to operate at the same time. The Department does not agree that this approach is in conformity with GAAP (Generally Accepted Accounting Principles) and Xcel has not provided any citation to support the Company's incorrect conclusion. In the Department's view, this proposal looks like an attempt to overstate the net book value of the MEC facilities and double-charge ratepayers for the same costs. As a result, the Department continued to recommend the net book value of the MEC facilities be adjusted to account for depreciation through the acquisition date.

The Department added that, despite having four opportunities to show that its proposal was reasonable, Xcel failed to do so. Thus, based on the facts in this case, Xcel did not meet its "heavy" burden required to show clear benefits that exceed the $96 million acquisition adjustment. Even if Xcel had met that burden, Xcel was unable to justify charging ratepayers for the acquisition adjustment. The Department also disagreed with Xcel's belief that the rate recovery standard is fair market value: the FERC Uniform System of Accounts as adopted by Minnesota and Minnesota ratemaking operate under a system of cost-based regulated rates and not market-based rates). In this case MEC I and II are cost-based assets that were providing energy/capacity under a PPA agreement and were generation plants already devoted to public service. Moreover, Xcel's response shows that Xcel wants to retain the value of the reduction in federal income taxes from 35% to 21% for its shareholders. Although the Department

continued to prefer that the recovery of $96.194 million Acquisition Adjustment be denied, the DOC noted that approving 50% of the Acquisition Adjustment would improve Xcel's proposal.

5. Staff Analysis

Staff agrees that, embedded in the PPA's pricing, ratepayers began "paying" for MEC once it became operational. That, combined with the parties' arguments opposing the Acquisition Premium and the Commission's history of denying such premiums, support denying recovery of the $96 million.

Staff does not find the argument that additional depreciation expense should not be booked because the assets is "held for sale" to be persuasive. Staff agrees that depreciation should be booked until the closing date.

6. Decision Alternatives

3. Approve recovery of the $96.194 million Acquisition Adjustment. (Xcel)

4. Do not approve recovery of the $96.194 million Acquisition Adjustment. (DOC primary recommendation, OAG, Staff)

5. Approve recovery of one-half of the $96.194 million Acquisition Adjustment. (DOC alternate recommendation)

6. Allow depreciation not to be booked while the asset is "held for sale". (Xcel)

7. Require depreciation expense to be booked through the Transaction's closing date. (DOC, Staff)

D. Transaction Costs

1. Department of Commerce Comments

Xcel's Petition included a journal entry that records estimated transaction costs of $450,000.[24] In response to an Information Request regarding the nature of the costs, the Company provided the following response:

> (a) The $450k transaction costs represent an estimate of the legal and regulatory filing fees associated with transaction. We estimated the $450k number based on:

- $234k in outside counsel fees billed as of 11/20/2018;
- An estimated $50k in additional outside counsel fees to complete the transaction legal work after 11/20/18;
- $125k in Hart-Scott-Rodino filing fees to be paid to the Federal Trade Commission; and
- An additional $41k for support and fees associated with closing the transaction.

[24] Petition, Attachment I.

To ascertain whether any transaction costs may already be included in base rates, the Department subsequently asked the Company to provide a detailed cost breakdown and to explain and provide support for why these transaction costs should be allowed to be capitalized and included in rate base. Table 8 provides Xcel's breakdown of legal fees included in base rates following its most recent rate case:[25]

Table 8: Xcel Energy Legal Services Breakdown, by FERC Category

506 - Misc Steam Pwr Exp	$80,000
524 - Nuclear Steam Pwr Exp	$321,000
539 - Hydro Oper Misc Pwr Exp	$5,000
549 - Oth Oper Misc Pwr Exp	$175,000
557 - Purchased Power Other[26]	$5,000
566 - Trans Oper Misc Exp	$37,000
923 - A&G Outside Services	$3,362,760
Total	$3,985,760

Based on Xcel's response, the Department recommended that recovery of the $450,000 be denied for the following reasons:

- The Department believe Xcel was unable to show that representative amounts of these types of transaction costs were not already included in Xcel's base rates, as requested.
- Xcel had almost $4 million in legal costs built into base rates and $3.362 million of these costs appear to be generic "A&G Outside Services" not tied to a specific type of transaction.
- Additionally, in the Commission's January 23, 2018 Order Approving Petitions, Approving Cost Recovery Proposal, and Granting Variances, regarding the termination of Xcel's power purchase agreement with Benson Power, LLC, the Commission specifically disallowed recovery of legal expenses.[27]
- Xcel's five-year hold-harmless commitment for wholesale customers should also apply to the Company's Minnesota retail customers.[28]

2. OAG Comments

The OAG recommended denial of Xcel's proposed recovery of $507,000 in transaction costs that include legal fees, regulatory fees and other costs because fees and legal costs are not infrastructure costs and should not be capitalized in rate base. These costs are not part of the actual plant nor are they "used and useful". Additionally, the MEC transaction is similar to a merger and the Commission has denied recovery in other merger proceedings.[29]

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[25] Docket E-002/GR-15-826.

[26] Xcel's reply footnoted the explanation that "legal expenses related to purchase power agreements (similar to Benson work) would be booked in the FERC 557".

[27] Docket E-002/M-17-530.

[28] Xcel's filing for MEC I & MEC II in FERC Docket No. EC19-28

[29] In the Matter of a Request for Approval of the Merger Agreement Between Integrys Energy Group, Inc. and Wisconsin Energy Corporation, Docket No. G-011/PA-14-664, ORDER APPROVING MERGER SUBJECT TO

3. Xcel Reply Comments

Xcel believes that the Department's $450,000 disallowance recommendation would penalize the Company for having brought this transaction forward and potentially dissuade utilities from seeking out opportunities to benefit customers in between rate cases. Xcel noted that its 2016 test-year legal budget include only $5,000 for outside legal services for the acquisition of assets like MEC. Since MEC transactions costs were not factored into base rates, the Company continues to believe that transaction costs recovery should be allowed.

4. Department of Commerce Supplemental Comments

The Department considered Xcel's assertion that only $5,000 of their $4 million legal budget labeled "Other" relates to the current MEC I and II transaction to be without a basis. Utilities get to charge customers for the representative expenses, regardless of whether or not the utility prudently incurs such costs in any particular year. In exchange, utilities do not later get to surcharge customers for expenses of any specific project. Such an approach would unreasonably double-charge ratepayers. The Department continued to recommend recovery denial.

5. Staff Analysis

Staff agrees with the assessment that Xcel's only has a $5,000 annual legal budget for these type of transactions is not persuasive.

6. Decision Alternatives

8. Approve recovery Xcel's transaction costs. (Xcel)

9. Do not approve recovery of Xcel's legal costs of $450,000. (DOC, Staff)

10. Do not approve recovery of Xcel's transaction costs of $507,000. (OAG)

E. 2019 Capital Cost Revenue Requirements True-Up

1. Xcel's Petition

Xcel explained that the current PPA includes both energy and capacity payments. The energy charge is incurred per MWh used and is recovered through the FCA and the capacity charge is recovered through base rates. Since the energy charges would disappear if the transaction is approved, Xcel requested that it be allowed to recover the $11 million 2019 revenue requirement through the FCA.[30] If the request is granted then a variance to Minnesota Rules 7825.2500, 7825.2600, subp. 2 and 7829.3200 would be needed.

CONDITIONS (June 25, 2015); see also In the Matter of the Petition of CenterPoint Energy Resources Corp., d/b/a CenterPoint Energy Minnesota Gas, for Approval of an Affiliated Interest Agreement between CenterPoint Energy Minnesota Gas and Minnesota Limited, Docket No. G-008/AI-18-517, STIPULATION OF CENTERPOINT ENERGY MINNESOTA GAS (Oct. 26, 2018).

[30] Attachment H.

2. Department of Commerce Comments

Based on its review, the Department's determined that Xcel's request to true-up rate recovery for 2019 revenue requirements for the MEC I and II gas plants outside of a rate case is not reasonable and not consistent with past Minnesota practices for several reasons:

- In Minnesota Power's Nemadji Trail Energy Center (NTEC) facility filing[31] the Department concluded that rate recovery for capacity costs (capital costs) and non-fuel operating and maintenance (O&M) costs should occur through base rates set in a future general rate case, not in a rider as proposed by Minnesota Power. The Department's NTEC testimony also noted that rider recovery for capacity/capital costs and non-fuel O&M costs for a gas plant outside a rate case is not reasonable or permitted under Minnesota law[32]. The Commission's agreed in its January 24, 2019 Order in that docket.
- Xcel continues to be subject to a rate case settlement through December 31, 2019;[33] therefore, it is not reasonable to allow Xcel a true-up for rate recovery in 2019. If the MEC I and MEC II transaction is approved, Xcel will be able to seek rate recovery in its next general rate case, which is likely to incorporate a multi-year rate plan (MYRP), starting in 2020.
- Xcel's waiver request to allow a true-up of 2019 revenue requirements through the FCA is inappropriate. Costs and revenues allowed through the FCA are defined in Minnesota Rules 7825.2400 – 7825.2600; the rules do not allow recovery of capacity/capital costs or O&M costs through the FCA. Rider recovery was not allowed in Minnesota Power's EnergyForward Resource Package proceeding – specifically, the costs associated with the NTEC gas plant as discussed above.

Additionally, since MEC I and MEC II were not owned by Xcel and were not included in Xcel's capital costs/rate base for the 2015 MYRP, the Department does not consider it reasonable to include MEC I and MEC II in the 2019 Capital True-Up filing.

3. Xcel Reply Comments

Using arguments similar to the ones used to justify the acquisition premium, Xcel reaffirmed its request for an FCA variance to recover the 2019 revenue requirement deficiency that would result from the transaction.

4. Department of Commerce Supplemental Comments

The Department explained that utilities are generally not entitled to recover costs outside of a rate case except under extraordinary circumstances and only for costs that are specifically set out in statute. Since Department did not believe that Xcel provided any information that would support approval the proposed $10.62 million surcharge, the Department continued to recommend recovery denial.

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[31] Dockets E-015/AI-17-568 and E-015/RP-15-690.

[32] Id., Campbell Direct at 33 to 35 and Campbell Surrebuttal at 33 to 34.

[33] Xcel's August 16, 2016 Stipulation of Settlement, Docket E-002/GR-15-826.

5. Staff Analysis

Staff notes that when transactions such as the MEC purchase occur, the utility does not receive the revenue requirement true-up Xcel seeks. The most common argument is that, between rate cases, the utility's specific costs in any one area fluctuate – some will be higher, some will be lower. Regardless of those fluctuations' outcomes, the utility absorbs any higher costs or keeps any lower costs.

However, in this instance, Xcel would be acquiring an operating facility that requires ratepayers to make payments under the terms of the PPA. Since the PPA would disappear under Xcel ownership and ratepayers "save" those PPA costs, the Commission may want to consider allowing Xcel to recover, through the end of 2019, the costs ratepayers would have paid Southern under PPA – subject to a cap equal to the actual 2019 revenue requirement.

6. Decision Alternatives

11. Allow Xcel to recover its 2019 Revenue Requirement True-up and grant a variance to allow Xcel to recover those costs through the FCA. (Xcel)

12. Deny recovery of the 2019 Revenue Requirement True-up. (DOC)

13. Allow Xcel to recover, through the end of 2019, costs that ratepayers would have paid Southern under the PPA, cap recovery at an amount equal to the actual 2019 Revenue Requirement True-Up and grant a variance to allow Xcel to recover those costs through the FCA. (Staff)

F. Other Financial Considerations

1. Department of Commerce Comments

The Department's review found Xcel's accounting and ratemaking for the Plant Materials and Operating Supplies (turbine blades) and Prepayments (water supply agreement) to be reasonable.

Based on its December 24, 2018 comments in Docket E,G-002/S-18-654 that show that the Company's revised 2019 capital structure as a result of the assumed MEC I and MEC II purchase did not change the Company's common equity percentage, increased short-term debt by 0.8% and decreased long-term debt by 0.8%, the Department's concluded that, if the MEC transaction is approved, those revisions are reasonable.

2. OAG Comments

The OAG noted that if Xcel buys MEC and terminates the PPAs ratepayers would be exposed to additional risks:

- Forced Outage Risk – in the event of a forced outage ratepayers would be exposed to capacity payments, replacement power costs including extra transmission costs and the

cost of bringing the plant out of the forced outage. For example, in 2017, Southern paid $30 million to recover from what was labeled as a "Forced Outage".

- Plant Repair Costs – although Southern's warranties would transfer to Xcel, those warranties do not cover everything. For example, there is a long term parts and service agreement covering the combustion turbines through 2051, but it appears that the combustion turbine *generators* are only covered for 10 years. Under Xcel ownership, ratepayers would not be insulated from costs not covered by warranties.
- Decommissioning and Remediation Costs – under the PPA's terms, Southern shall decommission the Facility, remove the Facility and remediate the Site as, if and when required by Applicable Laws. Under Xcel's ownership, ratepayers would bear all costs that exceed the Company's removal cost assumptions.
- Heat Rate Degradation – under the PPA, Xcel would receive a discounted price if MEC does not achieve the projected efficiency thresholds and requires Southern to pay for heat rate testing costs to ensure compliance with the PPA. Xcel ownership would eliminate these protections.
- Energy Emergency Adjustments - if there is an energy emergency called by MISO and MEC is not available to respond, the PPA requires Southern to make energy adjustment payments to Xcel. Under Xcel's ownership, ratepayers would bear the full cost of MISO penalties.
- Capacity Payments - Xcel provided information showing it has previously avoided making some capacity payments because the plant was not fully available.[34] Ratepayers would lose this protection under Xcel ownership.
- Natural Gas Pricing Risk - since Xcel pays for natural gas and delivers it to MEC, during the term of the existing PPAs, Xcel is fully exposed to natural gas pricing risk for MEC; however, under Xcel ownership, the price risk would remain for as long as the MEC operates. In response an OAG Information Request 39, Xcel provided modeling where gas price growth rates were 33 percent higher than its "High" forecast. The results were so significant that it wiped out most of the estimated savings for the MEC purchase:[35]

Table 9: MEC Ownership with High Renewables, in millions

	PVSC	PVRR
Mankato Purchase PVRR	$915	$915
Fixed Savings of Mankato PPA, in millions	($555)	($555)
Fixed Cost/Expansion Plan Cost/(Savings)	($372)	($365)
VOM Cost/(Savings)	($39)	($35)
Fuel Cost/(Savings)	($3)	$4
Market Cost/(Savings)	$164	$158
CO2 Cost/(Savings)	$4	$0
Externalities Cost/(Savings)	($36)	$0
PPA Starts/Own Start Fuel Cost/(Savings)	($44)	($44)
Total Cost/(Savings)	$33	$78

[34] OAG Exhibit 14.

[35] OAG Exhibit 15.

- Early Coal Retirement Impacts - Xcel confirmed that its Strategist model does not include any quantified risk related to stranded asset costs.[36]

If the Commission approves the Company's request, it should place conditions to protect ratepayers from the most significant potential harms:

- Benefits Guarantees - rather than rely solely on the Company's statements of the potential benefits, the Commission should take action to ensure that the ratepayer benefits which the Company is using to justify this purchase are preserved. In order to ensure that ratepayers receive the benefits that Xcel promises, the Commission should, through 2054, cap O&M cost recovery at Xcel's modeled 2% annual inflation rate and cap property taxes and future capital costs at them amounts identified in the Strategist modeling. In response to Information Requests, Xcel identified some known financial risks associated with these recommendations.[37]
- Stranded Costs – approval of Xcel's purchase creates a risk that MEC will become a stranded asset. The possibility of new technology, including renewables plus storage, the risk of new climate regulations, and Xcel's ambitious climate goals, mean that MEC may eventually be retired before the end of its useful life. If Xcel receives power through a PPA with another company, then ratepayers are completely insulated from the risk of stranded costs through the PPA terms. If Xcel purchases the plants, ratepayers will be subject to the risk of paying for a system resource that is shut down early. If the purchase is approved, the Commission should determine now that Xcel will not be permitted to recover any stranded costs nor will Xcel be permitted to accelerate the facilities' depreciation. The Commission should also make clear that future resource decisions about MEC will be made on their own merits and without regard to whether Xcel would suffer losses in the event of an early retirement. These decisions would place some of the MEC purchase risks on the Company. If Xcel unwilling to do so, then that would be a sign that Xcel sees risks in the transaction that it is trying to shift onto ratepayers.

3. Sierra Club Comments

When Xcel was asked to provide any analysis it had done to assess risks related to stranded asset potential for the purchase, the Company responded that "[n]o analysis directed at that possibility was performed. We anticipate the MEC facility will be a viable resource serving our customer load throughout its useful life."[38] Similarly, in response to an information request asking whether the Company's Strategist model included any quantified risk related to the possibility that MEC I or II could become stranded assets, Xcel responded in the negative. Xcel added:

> The Company is confident that the Mankato resource will serve as an important flexible resource that provides firm capacity for the full useful life of the asset. It

[36] OAG Exhibit 5.

[37] OAG Exhibits 21 and 22.

[38] Sierra Club Exhibit SC-14.

is impossible to predict when or if new technologies will come along that can perfectly mimic all of the characteristics of a combined cycle in a more economic and less carbon intensive way. However, based on current technology and expectations, there is no substitute that can provide all of the characteristics of a combined cycle and therefore, we believe that the risk of MEC I and MEC II becoming stranded is low.[39]

4. City of Minneapolis Comments

The City of Minneapolis stated that long-term capital investments in natural gas generation come with risks to utility customers who generally pay for stranded assets when infrastructure investments become obsolete. While the City does not support the acquisition of MEC, if the Commission approves the purchase, the City requested that the Commission consider a mechanism to protect customers from future economic and regulatory risks associated with utility ownership so that these risks are shared by the utility's investors rather than borne primarily by customers. Additionally, the City noted that, under an ownership scenario, customers bear the burden of fuel cost uncertainty.

5. LSP-Cottage Grove, L.P. Comments

In light of the other lower-cost alternative capacity and energy resources in the area, such as the LSP-Cottage Grove, L.P.'s (LSPCG) Cottage Grove Facility, LSPCG objected to Xcel's MEC purchase price for the MEC. LSPCG stated that the MEC's per-kilowatt purchase price is over three times Xcel's last formal offer for the Cottage Grove Facility in 2015 and; therefore, did not consider the purchase to be in the public or the ratepayers' benefit.

6. Xcel Reply Comments

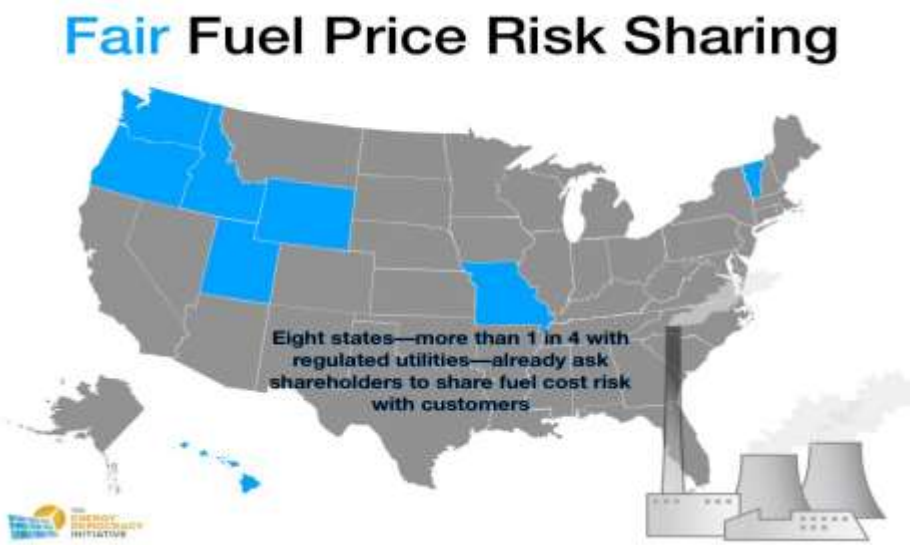
Xcel stated that it estimated the MEC's transmission interconnection rights to be worth between $100 million and $370 million on a net present value basis. These benefits are not included in the Strategist modeling.

7. Institute for Local Self-Reliance/Cooperative Energy Futures Reply Comments

The ILSR/CEF noted that none of Xcel's assertions about the risk mitigation reduce customers' risk exposure or financial liability should fuel price or capacity needs forecasts prove inaccurate. The ILSR/CEF disputed Xcel's assertion that MEC could prove a hedge against capacity costs. The ILSR/CEF noted that this hedge has value if capacity costs are higher in the future; however, the future market may provide multiple, low-cost capacity options with renewable energy, demand response, and lower cost energy storage.

The ILSR/CEF stated that Xcel customers deserve greater certainty that this investment will result in financial benefits. One potential customer risk mitigation mechanism would be to ask shareholders to shoulder a portion of fuel price risk, as is done in eight other states with vertically integrated utilities.

[39] Sierra Club Exhibit SC-15.



8. Staff Analysis

Based on the Department's assertions about Xcel's flawed Strategist modeling which, in turn, informs the financial modeling in this record, Staff agrees that, if the transaction is approved, all future Xcel recoveries should be capped at the amounts the Company presented in this proceeding. This cap would insulate ratepayers from the identified risks mentioned above such as stranded costs, higher inflation and higher ROEs.

Staff notes that ILSR/CEF proposed that Xcel shoulder a portion of future fuel price risks; however, that proposal did not include any specifics. Therefore, if the Commission adopt this recommendation, then the Commission will have to determine what portion of that risk would allocated to Xcel.

9. Decision Alternatives

14. Allow Xcel to recover all *actual* future costs. (Xcel)

15. Place ratepayer protections that cap recovery of future costs at amounts presented in this record. (OAG, City of Minneapolis, Staff)

16. Require Xcel to shoulder a portion of future fuel price risks. (ILSR/CEF)

G. Transmission Rights Financial Factors

1. Xcel's Petition

Xcel characterized the MEC's existing interconnection rights as a highly valuable component of this overall transaction. Based on an Excel Engineering study,[40] the Company stated that

[40] Attachment E.

transmission improvement costs that would be needed to connect a potential greenfield combined cycle to the electric grid would require $263 million in upgrades. Because MEC already has secured transmission rights, it will not require any such upgrades or expenditures.

H. Statutes and Rule Variance

1. Xcel's Petition

Regarding Minnesota Statutes § 216B.50, Xcel concluded that the proposed transaction is in the public interest because the transaction will provide cost savings to the Company's customers, is consistent with Xcel's commitment to achieve 85% carbon-free energy by 2030 while maintaining both affordability and reliability; and does not materially impact the amount of gas generation in Xcel's portfolio.

Xcel requested a variance to Minnesota Rules 7825.1800, subp. B so that it would not have to provide the information set forth in Minnesota Rules 7825.1400, items (A) to (J). Xcel reasoned that its request meets the Minnesota Rules 7829.3200 requirements for a variance:

- Information required in Minnesota Rules 7825.1400 (A) to (J) does not apply; therefore, its provision would impose an excessive burden on the Company.
- Since the proposed transaction does not involve any securities' issuance, granting a variance does not conflict with the public interest.
- Granting the variance will not violate any standards imposed by law.

2. Department of Commerce Comments

Since the proposed transaction does not involve the issuance of securities, the Department agreed with Xcel's analysis; therefore, the Department recommended that the Commission approve a variance request.

3. Staff Analysis

Staff agrees with the Department that, if the transaction is approved, a variance should be granted.

4. Decision Alternatives

17. Grant Xcel's variance request to Minnesota Rules 7825.1400. (Xcel, DOC, Staff)

18. Do not grant Xcel's variance request.

I. General Housekeeping

1. Staff Analysis

Staff points out that, if the Petition is approved, the final purchase price may change as a result of one or more of the following: Commission decisions made in this proceeding, closing date, passage of time adjustments, final closing adjustments. For these reasons, the Commission

may want to require Xcel to file, within 60 days of the Transaction's closing, the final journal entries used to record the Transaction in the Company's books and to incorporate that information into upcoming rate case.

2. Decision Alternatives

19. Order Xcel's to file, within 60 days of the Transaction's closing, the final journal entries used to record the Transaction. (Staff)

20. Order Xcel to incorporate information reflected in final journal entries into its upcoming rate case. (Staff)

V. Resource Planning Analysis

A. Resource Planning, Resource Acquisition, and Certificate of Need Proceedings

Xcel argued that "because the plant is already an integral part of the Company's generation and planning, we believe it is appropriately viewed more as a change in ownership proposal rather than a traditional resource acquisition that would follow from an IRP."[41]

Several non-settling parties generally argue that the MEC acquisition circumvents the established IRP and resource acquisition process. The OAG (and other parties) argue that "in normal procedures, Xcel would be required to demonstrate that there is a need for resources on its system during that time period, and that this resource is a reasonable way for meeting that need, pursuant to Minn. Stat. section 216B.2421 and Minn. Rule 7843."[42] Contrary to Xcel's position (that the acquisition should be viewed as a transfer of ownership) non-settling parties at the expected life of the MEC facilities (2046 and 2054) extend beyond the date of the current PPA expirations (of 2026 and 2039).[43] Therefore, the proposals should be evaluated through or consistent with an IRP proceeding, which includes evaluations of system alternatives. Any selected resources should be acquired through a competitive resource acquisition process, as required by Commission Order.[44,45]

The controlling resource planning statute is Minn. Stat. § 216B.2422,[46] which requires a resource plan be filed by Minnesota's large utilities that includes information on "a set of resource options that a utility could use to meet the service needs of its customers over a forecast period, including an explanation of the supply and demand circumstances under which, and the extent to which, each resource option would be used to meet those …needs."

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[41] Petition, at 5.

[42] OAG Initial, pg. 2

[43] CUB Supplemental, p. 1, OAG Initial, p.2, etc.

[44] See *Order Establishing Resource Acquisition Process*, July 28, 2006 (Docket 04-1752); Xcel Compliance Filing August 31, 2006 (Docket 04-1752)

[45] OAG, Initial pg. 3. Additionally, further arguments to this effect are examined in more detail by staff in the modeling and economic analysis section (ie. On what the long-term implications on resource selections).

[46] Minn. Stat. 216B.2422

Minn. Stat. § 216B.243 requires utilities to obtain a Certificate of Need before constructing a large energy facility. Minn. Stat. 216B.2422, Subdivision 5 of this section provides a certificate of need exemption process (here, for Xcel, referred to as a Resource Acquisition Process or two-track bidding process) that authorizes the Commission to establish by order a bidding process by which a utility may select resources that are consistent with its latest resource plan; if the bidding process is used, the resource is then exempted from certificate of need requirements.[47] While the Commission first established a bidding process in 1999[48] it was significantly revised and updated in the Commission's 2006 *Order Establishing Resource Acquisition Process, Establishing Bidding Process…and Requiring Compliance Filings.*[49]

Staff believes an important procedural consideration is whether the resource decisions are legally required to be made through the IRP or resource acquisition proceedings. Staff does not believe that any party has identified statutory or rule authority prohibiting the Commission from considering resource acquisitions outside of an IRP. The Certificate of Need Statute, Minn. Stat. § 216B.243, contemplates resource acquisitions that are outside of an IRP and requires that a showing of need be made prior to a facility being constructed.

It is also important to consider whether the Commission *should* consider resource acquisitions outside of an IRP, and how it should do so. Whether Xcel has demonstrated that this acquisition is a reasonable way to satisfy established demand is addressed in the rest of these briefing papers; this section will briefly discuss the two-track bidding process and how it applies to MEC.

As noted by the Department, the original 1999 resource acquisition process contemplated and granted exemptions to the resource acquisition process for capacity decisions involving existing generation units (repowering, capacity expansions, or extensions). The 2006 process does not include these provisions for existing generation units.[50] Therefore there is no current guidance or requirements to follow in this instance. That does not necessarily mean that the Commission must only consider the MEC purchase is an IRP, just that there is no clear procedure for a bidding process or for the resource acquisition generally in place for an instance as we have here with MEC.

Xcel and the Department noted that the current process utilized when acquisitions are outside the bandwidth of the latest IRP docket has been to conduct a supplemental analysis on whether the resource is a prudent resource and in the public interest. The Department noted that "in principle, the Department supports a bidding process as the primary tool for resource acquisition. However, there are other considerations."[51]

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[47] Minn. Stat. 216B.2421, 216B.243

[48] Docket M-99-888

[49] See *Order Establishing Resource Acquisition Process*, July 28, 2006 (Docket 04-1752); the competitive bidding process is laid out in the subsequent filing: Xcel Compliance Filing August 31, 2006 (Docket 04-1752)

[50] DOC Initial, p. 29, by reference to its July 8, 2016 Comments in docket RP-15-21.

[51] DOC Initial, Id.

This scenario, which is an acquisition outside of the IRP or formal competitive process, has occurred in several recent Commission dockets for multiple reasons (e.g. renegotiation of a PPA, desire of the owner to sell, failure of other Commission-approved projects and access to low-cost resources). This includes the following acquisition dockets before or approved by the Commission that had various docket-specific considerations: Borders Wind, Community Wind South, Jeffers Wind, and Dakota Range III.[52]

Additionally, the DOC noted that the MEC II PPA included a provision to allow Xcel the right of first offer of both MEC facilities, in advance of other third-party solicitations, and therefore, the acquisition is consistent with the Commission's order approving the MEC II PPA.[53]

Staff believes it is important to highlight that most (if not all) recently reviewed Xcel-PPAs currently have this right-of-first-offer provision. While these provisions have been approved in the past, they should be considered along with all of the other circumstances each time they are proposed, as they have been in the past.

Given the existing PPAs with right-of-first-offer provisions and Xcel's interest in acquiring PPAs for Company ownership, it appears likely that this situation will arise again in the future. The Commission may want to consider requesting that the Department, Xcel, and perhaps other stakeholders file a comments (potentially concurrent with the IRP) on the status of the competitive bidding two-track process, whether the two-track process is still comprehensive and effective, and whether it should be modified to account for right-of-first-refusal or other existing generation, or any other issues.[54]

Last, as process for existing resources is unclear or unaddressed in the 2006 Commission order establishing the two-track competitive bidding process, staff does not believe it is required to consider the MEC facility acquisitions in the context of the IRP or a competitive process. However, whether or not the facility is in the public interest lies with the results of the additional analysis conducted and discussed in other sections of this paper.

B. Relationship to Xcel's 2015 IRP

On January 11, 2017, the Commission issued its *Order Approving Plan with Modifications* in Xcel's 2015 IRP proceeding.[55] Among other things, the Commission's Order approved Xcel's proposal to retire the coal-fired Sherco Units 1 and 2 in 2026 and 2023, respectively.

In addition, the Commission found that "more likely than not there will be a need for approximately 750 MW of intermediate capacity coinciding with the retirement of Sherco 1 in 2026." The Commission authorized Xcel to file a petition for a certificate of need under Minn. Stat. § 216B.243 to select the resource or resource combination that best meets the system resource and reliability needs associated with the retirement of Sherco 1 in 2026.

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[52] See dockets M-13-607, M-18-777, and 17-694.

[53] Department initial comments, at 29-30.

[54] See Commission's January 11, 2017 Order, Point 5, at 11.

[55] Docket No. 15-21, *In the Matter of Xcel Energy's 2016-2030 Integrated Resource Plan*.

The Commission required Xcel to file its next IRP by February 1, 2019. This date was chosen in part because Xcel hoped to avoid having a certificate of need proceeding and an IRP proceeding overlap.[56]

Subsequent to the IRP Order, the specific need for intermediate capacity in 2026 was addressed by the Minnesota Legislature. Laws of Minnesota 2017, Chapter 5 stated, in part:

> Section 1. NATURAL GAS COMBINED CYCLE ELECTRIC GENERATION PLANT.
> (a) Notwithstanding Minnesota Statutes, section 216B.243 and Minnesota Statutes, chapter 216E, a public utility may, at its sole discretion, construct, own, and operate a natural gas combined cycle electric generation plant as the utility proposed to the Public Utilities Commission in docket number E-002/RP-15-21, or as revised by the utility and approved by the Public Utilities Commission in the latest resource plan filed after the effective date of this section, provided that the plant is located on property in Sherburne County, Minnesota, already owned by the public utility, and will be constructed after January 1, 2018.

After requesting a five-month extension to file its next resource plan, which the Company argued was reasonable because it did not have any actions in its five-year plan, Xcel filed its 2019 IRP on July 1, 2019.[57] The Reference Case expansion plan adds the Sherco CC in 2027, and assumes in all scenarios and sensitivities that the Commission has approved Xcel's MEC purchase. According to its Strategist assumptions,[58] the Sherco CC will be an 835 MW (nameplate) NGCC power plant. Thus, the Sherco CC will likely exceed the need for intermediate capacity the Commission determined in Xcel's 2015 IRP.

It is worth noting that a major disputed issue in Xcel's 2015 IRP was Xcel's forecast. The Commission's size, type, and timing finding of 750 MW of intermediate capacity by 2026 was qualified with language that it would be "more likely than not" this need would emerge. The Order was clear this could change depending on the new forecast to be included in the certificate of need proceeding. Ordering paragraph 2 of the Commission's January 11, 2017 Order stated:

> Xcel's Strategist-modeled energy and demand forecast is acceptable for planning purposes but may not be used to support any resource acquisition proposal beyond the five-year action plan.[59]

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[56] Hearing Transcript, Docket No. 15-21, October 13, 2016, at 47-48.

[57] On October 15, 2018, Xcel requested a five-month extension to provide time to continue working with stakeholders prior to the IRP filing. Xcel noted the extension "will not adversely impact the plan [it will] ultimately file since [the Company does] not have any actions necessary in [the] five-year action plan." The Commission heard the matter at the December 6, 2018 agenda meeting and granted the extension in its January 30, 2019 Order.

[58] Appendix F2, Table 14.

[59] Commission order, ordering paragraph 2 (January 11, 2017).

The reason for the Commission's specific distinction between the IRP five-year action plan and a future resource acquisition proposal was to make it clear that the 2015 IRP forecast would not be acceptable for the certificate of need proceeding. The combined size of the Sherco CC and MEC is roughly 1,600 MW. Setting aside staff's concerns over the lack of adherence to the regulatory process, it is troubling that Xcel is seeking to add this amount of nonrenewable capacity without a forecast deemed to be reasonable by the Commission and without these resources approved in the IRP.

C. Xcel's Initial Petition

1. Benefits of Ownership

According to Xcel's Strategist modeling, the acquisition is cost-effective under nearly every modeled scenario. However, Xcel identified several other benefits that ownership could provide, such as:

- increased planning flexibility;
- renewable energy integration;
- the displacement of more expensive and more carbon-intensive generation;
- greater Commission oversight of the plant's future operation;
- a path to accelerating the retirement of existing baseload units on Xcel's system; and
- socioeconomic benefits to the Mankato area, including jobs.

Also, since it is an existing facility, it already has transmission access and natural gas supply:

> NSP's 345 kV and 115 kV Wilmarth Substation is located adjacent to Mankato and is utilized for electrical interconnection. Natural gas supply is via a dedicated 20 inch diameter natural gas lateral which interconnects with Northern Natural Gas' interstate pipeline, located approximately 5 miles from Mankato. Cooling water for the plant utilizes reclaimed water supplied by the City of Mankato's Water Resource Recovery Facility under a long term supply agreement with an initial term of 25 years and four optional ten year extensions.[60]

According to Xcel, MEC's existing interconnection rights is a highly valuable component of the acquisition. Xcel retained Excel Engineering to assess the interconnection cost of a similar CC unit. They found that a potential greenfield combined cycle resource would require approximately $263 million in necessary upgrades,[61] but owning MEC will avoid these costs.

[60] Petition, at 8.

[61] Petition, at 18.

2. Overview of Economic Analysis

Over the course of the proceeding, Xcel used four different Strategist databases to conduct its economic analysis; the Department thoroughly summarizes all four in various areas of its Supplemental Comments.[62] (And as staff will discuss later, the Department considers all four rounds of the Company's modeling to be of no value.[63]) In all databases, Xcel simulated the operation of the NSP System through 2057, and Strategist compared system costs of MEC ownership to system costs with the MEC output purchased under the existing PPAs.[64]

The multiple rounds of analysis were largely the result of two factors: (1) Xcel significantly changed its Reference Case expansion plan after the Petition and initial comments were filed, and (2) the Department encountered several problems in its review of Xcel's modeling and asked Xcel to correct several errors. (According to Xcel's August 1, 2019 letter, however, it does not appear the Company agrees there actually were errors in its analysis.)

Nonetheless, the four databases can be briefly explained as follows:

- The first database, Database #1, is the Strategist database that produced the results presented in Company's Initial Petition.

- Database #2 includes the files Xcel used to perform its Reply Comment modeling. This is the only database which did not "lock in" the renewable expansion plan. Rather, the model optimized the renewable additions according to an applied 80% CO_2 reduction constraint.

- Database #3 was provided in response to Department Information Request No. 1. In its Supplemental Comments, the Department refers to Database #3 as the "First Supplemental Modeling." According to the Department, "[t]he Department encountered significant errors by Xcel in each step of the analysis,"[65] which led the Department to request another Strategist database.

- Xcel produced Database #4 in response to a separate Department information request. Xcel refers to this modeling as "Response to DOC Informal IR No. 2"; the Department refers to this database as Xcel's "Second Supplemental Modeling."

Because the initial modeling (Database #1) and the First and Second Supplemental Modeling (Databases #3 and #4) locked in Xcel's renewable expansion plan, the size, type, and timing of renewable energy additions are the same under both the PPA and Ownership scenarios. This also means that only natural gas CT and CC units could be selected as potential expansion options. This is important because the Department could not verify whether additional

[62] See in particular DOC supplemental comments, at 6-25.

[63] Department supplemental comments, at 40.

[64] Xcel's Strategist assumptions are listed on pages 21-22 of the Petition, as well as in Attachment F.

[65] Department supplemental comments, at 19.

renewable energy was least-cost relative to owning MEC. This contributed to the Department's conclusion that Xcel failed to meet the Renewable Preference provision of the IRP Statute.[66]

3. Strategist Results – Initial Petition

Xcel's initial model used two different expansion plan scenarios, a "2015 IRP Renewables" case and a "High Renewables" case. These scenarios were tested across a range of sensitivities (e.g. high/low natural gas prices, high/low load, markets on/off, etc.). The total renewable energy additions by scenario are provided in the table below:

Table 10: 2019-2030 Total Renewable Nameplate Additions by Scenario (MW)

	IRP Renewables Case	High Renewables Case
Wind Additions	2,212	2,962
Solar Additions	1,462	6,462
Total Additions	3,673	9,424

Notably, under the 2015 IRP Renewables case, Xcel estimated that "approximately 67% of [its] generation is expected to come from carbon-free resources by 2030."[67] However, also in the 2015 IRP Renewables case, Xcel's total CO_2 emissions bottom out in 2029, and from 2030 to 2057 CO_2 emissions steadily rise.[68] In Reply Comments, Xcel addressed parties' concerns that the 2015 IRP Renewables case is inconsistent with the Company's stated CO_2 goals:

> We agree that we intend to add significantly more renewables than included in the 2015 IRP Renewables scenario. Since our last IRP, the pricing of renewables has continued to decline and we have announced aggressive carbon reduction goals.[69]

Tables 4 and 5 of the Petition[70] compare savings from the two ownership scenarios (2015 IRP Renewables and High Renewables) relative to two continue as PPAs scenarios under base case conditions, with and without carbon costs. Below, staff shows Table 5, which is the High Renewables scenario:[71]

[66] Minn. Stat. 216B.2422, subd. 4.

[67] Petition, at 23.

[68] Xcel response to PUC Information Request No. 4.

[69] Xcel reply comments, at 15.

[70] Petition, at 27.

[71] As mentioned previously, Xcel agreed in its Reply Comments that this expansion plan is more representative of its long-term resource plan than the 2015 IRP Renewables scenario, due to the Company's CO_2 reduction goals and the declining price of renewable energy.

Table 5: MEC Ownership with High Renewables

	PVSC	PVRR
Capital Cost of Mankato Purchase	915	915
Fixed Savings of Mankato PPA	(555)	(555)
Fixed Cost/Expansion Plan Cost/(Savings)	(372)	(365)
VOM Cost/(Savings)	(32)	(28)
Fuel Cost/(Savings)	33	13
Market Cost/(Savings)	(40)	(6)
CO2 Cost/(Savings)	6	
Externalities Cost/(Savings)	(67)	
PPA Starts/Own Start Fuel Cost/(Savings)	(47)	(39)
Total Cost/(Savings)	(158)	(66)

Note that among the savings categories listed above, most of the savings come from the Fixed Cost/Expansion Plan Cost/(Savings) row (the third row). Xcel explained, "Sizable Fixed Expansion Plan Cost savings are also generated from the avoided fixed costs of procuring replacement capacity after the existing PPAs expire."[72] Staff will discuss the Fixed Cost/Expansion Plan Cost/(Savings) category in more detail later in the briefing papers.

4. Incremental Revenue Requirements

Table 8 of the Petition shows the forecasted incremental revenue requirement impact of MEC ownership through 2024. The values in the table reflect incremental costs (or savings) as compared to continuation of the MEC PPAs. Xcel projects that ownership will have a net cost in the short-term:[73]

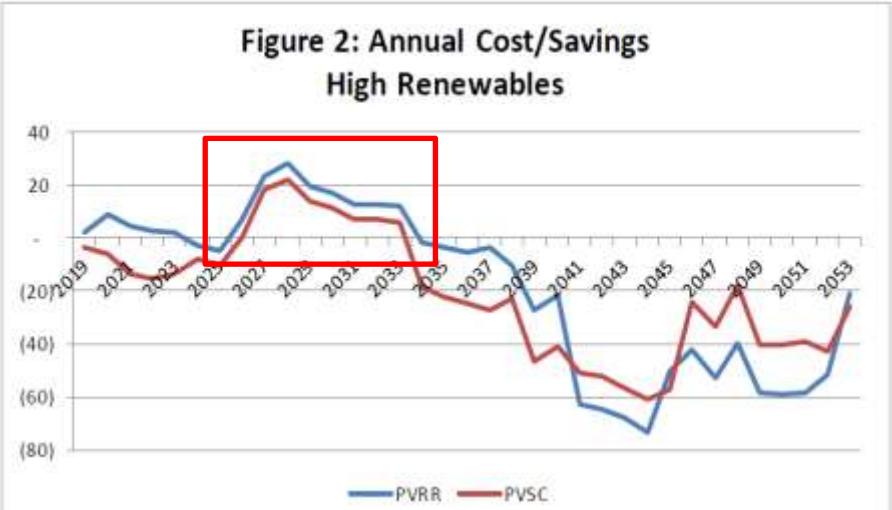
Table 8: Incremental Revenue Requirement Impact MEC Ownership ($millions)

	2019	2020	2021	2022	2023	2024
Capital Cost of Mankato Purchase	46	86	83	81	78	76
Fixed Savings of Mankato PPA	(39)	(67)	(68)	(69)	(70)	(71)
VOM/Fuel/Market Cost/(Savings)	(6)	(9)	(10)	(9)	(5)	(7)
Total Cost/(Savings)	2	9	4	3	2	(3)

If Table 8 were extended further out into the future, it would show a higher net cost after 2026 as a result of the expiration of the MEC I PPA. This is because there is no longer an avoided capacity payment for the MEC I PPA after July 2026, and no replacement unit immediately takes its place. Figure 2 of the Petition, below, shows the annualized cost/savings of the Ownership-High Renewables scenario relative to the PPA-High Renewables scenario. Staff added a red box around year 2025 (the year following the end of Table 8) through 2035 to illustrate this intermediate-term revenue requirement impact:

[72] Petition, at 27.

[73] Petition, at 34.



As can be seen in Figure 2, the net savings are mostly back-ended. In fact, it is not until the 2030s when customers begin to realize net savings. Xcel explained that "under the High Renewables scenario, Figure 2 does not show a capacity benefit for the transfer of ownership until 2034."[74]

D. Summary of the Department's Review of Xcel's Modeling

1. The Department Was Not Able to Perform Its Typical Review Process

One the main takeaways of this record is the remarkable number of flaws the Department identified during its review of Xcel's modeling. According to the Department:

> Due to the numerous flaws in Xcel's Strategist inputs and modeling technique, the Department considers all four rounds of the Company's modeling analysis to be of no value.[75]

The Department outlined the general process it takes when reviewing a utility's Strategist modeling:[76]

> 1. obtain from the company a base case file, and the commands necessary to recreate the various scenarios explored by the Company;
>
> 2. re-run the company's base case file to make sure the outputs match and that the Department is working with the correct file;
>
> 3. review the company's base case's inputs and outputs for reasonableness;

[74] Petition, at 30.

[75] Department, supplemental comments, at 40.

[76] Department supplemental comments, at 13 (July 26, 2019).

4. create a new Department base case, to include any changes needed to the company's base case;

5. run scenarios of interest on the new base case to explore various risks and alternative futures;

6. assess the results of the scenarios and establish a new preferred case; and

7. run scenarios of interest on the new preferred case to test the robustness of the Department's preferred case.

It appears that the Department was unable to perform its multi-step process it traditionally applies in IRP/resource acquisition proceedings. According to the Department:

> As explained above the Department's first step is to re-run the Company's base case file to make sure the outputs match. In this case, the Department ran numerous scenarios in an attempt to match as many of the cases analyzed by the Company as possible. The original goal was to limit the time required by relying strictly on the Company's analysis. However, in this case the Department was almost able to match the Company's results for only one scenario—the base case.[77]

a. The operation of Xcel's units was inefficient

In addition to the Department's inability to verify Xcel's modeling, the Department discussed two primary concerns it had with Xcel's results: (1) Xcel's system was being run in an uneconomic manner and (2) there were several flaws involving Xcel's assumptions and use of the spot market.

The Department explained that Xcel's peaking and intermediate resources were being run in an uneconomic manner. The Department observed that capacity factors for Xcel's dispatchable units became rather high starting in 2027. In reality, the Department argued, there would be less expensive ways to generate electricity than how the units were dispatched in Xcel's model.[78] The effect of how peaking and intermediate units would be utilized was an artificial inflation of the value of MEC, while resources such as energy conservation were artificially undervalued.

The Department also determined that Xcel's assumptions about how their resources would be used in the MISO market are not realistic or supportable, either in the Company's initial or subsequent modeling. For example, according to the Department, "the incremental impact of the Company's purchase of MEC I and MEC II was dominated by changes in the amount of energy bought and sold in the spot market."[79] In general, the Department's view is that the

[77] DOC supplemental comments, at 14.

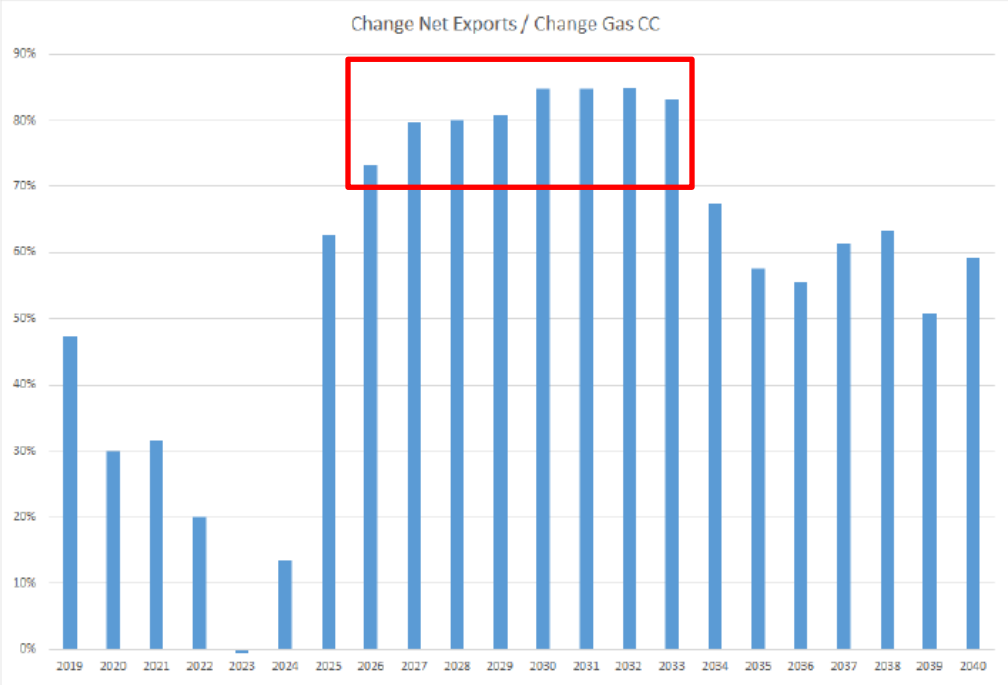
[78] Department initial comments, at 21.

[79] Department initial comments, at 22.

spot market should play a very limited role, if any, in whether a resource is in the public interest.

Figure 1 of the Department's comments, below, shows the percentage of the increase in new generation that is sold into the spot market. Figure 1 demonstrates that over half of the additional energy resulting from Xcel's purchase of MEC I and MEC II is simply resold into the spot market during the years 2025 to 2040. Staff added a red box around years 2026-2033; in these years, incremental generation sold into the spot market is within the range of 70-90%:

Figure 1: Percent of New Generation Sold into Spot Market



2. Staff Comment on Xcel's Initial Modeling

To revisit Table 5 of the Initial Petition, Xcel projects that the Mankato acquisition will save ratepayers $66 million in PVRR (present value revenue requirement) terms and $158 million in PVSC (present value societal costs) terms under the Ownership-High Renewables scenario. Most of these savings are incurred by Fixed Cost/Expansion Plan savings. As shown by an excerpt of Table 5, Xcel projects roughly $370 million in fixed cost savings, which staff has outlined this row with an orange box below:

Table 5: MEC Ownership with High Renewables

	PVSC	PVRR
Capital Cost of Mankato Purchase	915	915
Fixed Savings of Mankato PPA	(555)	(555)
Fixed Cost/Expansion Plan Cost/(Savings)	(372)	(365)

Xcel projects the acquisition will cost ratepayers $915 million in total capital costs, and Xcel is committed to $555 million in capacity payments for the remainder of the MEC I and II PPAs. Thus, for the acquisition to be cost-effective, Xcel must show it can make up the difference between the two values over time. This section intends to explain why there are such

substantial Fixed Cost/Expansion Plan savings, as well as discuss how the Commission can consider the results. Ultimately, the point is to explore the likelihood that ratepayers might actually realize savings of this magnitude.

b. Fixed Cost/Expansion Plan Savings: *How* does ownership create savings?

When staff compared the expansion plans under the PPA-High Renewables and Ownership-High Renewables scenarios, what stood out was (1) there is roughly the same amount of generic natural gas capacity added under each scenario, (2) what changes is mostly the *type* of natural gas resource Strategist selects, and (3) some natural gas units are not really avoided, but deferred, and deferred investments produce a significant financial benefit in Strategist.

The table below shows that both scenarios add about the same amount of natural gas capacity (ownership adds more if the incremental capacity from MEC is included). What is different is that the PPA-High Renewables scenario adds about twice as much CC capacity (two 844 MW CC units,[80] instead of just one in the Ownership-High Renewables scenario). The Ownership scenario, on the other hand, adds three more 321 MW CT units[81] than the PPA scenario and avoids a 200 MW CT, so the total capacity is about the same; it is just a different type:

Plant Type	Remain PPAs (MW)	Ownership (MW)
Greenfield CC	1,688	844
Greenfield CT	2,568	3,531
Brownfield H CT	-	-
Brownfield F CT	200	-
Total Gas Capacity	4,456	4,375

Why this result would lead to substantial fixed cost savings can be explained by Table 13 of Xcel's Petition; in short, a CC unit is significantly larger and has significantly higher $/kW fixed costs than a generic CT unit. So, if one expansion plan (MEC-Owned in this case) has 844 MW *less* CC capacity (916 MW nameplate), naturally one can expect significantly lower fixed costs:

[80] 916 MW in nameplate capacity.

[81] 374 MW in nameplate capacity.

Table 13: Thermal Generic Information (Costs in 2018 Dollars)

Resource	Sherco CC	Generic CC	Generic CT	Generic CT	Generic CT
Technology	7H	7H	7H	7F	7H
Location Type	Brownfield	Greenfield	Brownfield	Brownfield	Greenfield
Cooling Type	Wet	Dry	Dry	Dry	Dry
Book life	40	40	40	40	40
Nameplate Capacity (MW)	916	916	374	232	374
Summer Peak Capacity with Ducts (MW)	870	870	NA	NA	NA
Summer Peak Capacity without Ducts (MW)	643	643	331	228	331
Capital Cost ($/kW)	$914	$951	$446	$495	$445
Electric Transmission Delivery ($/kW)	NA	$301	NA	NA	$100
Ongoing Capital Expenditures ($/kW-yr)	$6.77	$6.77	$4.77	$3.85	$3.85
Gas Demand ($/kW-yr) 2018$	$32.56	$21.14	NA	NA	$2.07
Fixed O&M Cost ($000/yr) 2018$	$2,605	$3,105	$422	$736	$668

As the Department noted, Strategist only had the option to select a large CC unit or one of two smaller CT units. Since the Ownership scenario selected more CT units, which are low capital cost/high operating cost units relative to a CC, it appears it was more economic to run CT units at a very high rate than select a CC instead—in other words, the preferred economic choice was avoiding the capital costs of a CC by utilizing less-efficient CTs more.

Below is a table of the utilization rates, or capacity factors, of the generic CC and CT units selected in Strategist under the Ownership-High Renewables scenario. (The only generic CC is labeled "CC_7H_P 590"):[82,83]

MEC Ownership with High Renewables

Capacity Factors

Base PVSC (High Ext Costs through 2024, High Reg Costs)

Thermal Unit	Average Capacity Factor
CT_7H_PG 587	29.3%
CT_7H_PG 589	23.1%
CC_7H_P 590	44.6%
CT_7H_PG 591	22.0%
CT_7H_PG 592	17.6%
CT_7H_PG 593	14.2%
CT_7H_PG 594	12.4%
CT_7H_PG 595	8.8%
CT_7H_PG 596	7.2%
CT_7H_PG 597	5.4%
CT_7H_PG 598	4.1%

Note that most of Xcel's generic CT units have capacity factors greater than 10%—which is generally considered to be a very high rate to run a CT—and three CT units have an average capacity factor greater than 20%. In staff's view, operating CTs at this rate is unreasonably high, which supports the Department's concern that this reflects uneconomic operations of Xcel's generation; the Department concluded:

[82] Xcel Response to PUC IR No. 1 (January 18, 2019).

[83] CT = combustion turbine; CC = combined cycle; 7H is a type of turbine technology.

> Xcel assumed in their initial modeling that peaking units would be overused, in an uneconomic manner. However, since MISO dispatches resources in an economic manner, Xcel's assumption is not valid. Further, lower cost options should be available to Strategist to reduce the uneconomic generation from the peaking units.[84]

Staff believes there is a fair argument that the expansion plans which result from the 2015 IRP Renewables and High Renewables scenarios are not reasonable. Thus, comparing the differences in cost between one unreasonable expansion plan and another unreasonable expansion plan has little, if any, value.

c. Fixed Cost/Expansion Plan Savings: *When* does ownership create savings?

Assuming Xcel's initial modeling was completely valid, it would still be worth examining *when* the proposal creates benefits for ratepayers. As staff noted, meaningful savings do not begin to accrue until the 2030s, when the expansion plans between the two scenarios begin to diverge.

The differences among all expansion plans are shown in Attachment F of the Petition. However, since there was an error in the "Total" column of the tables, Xcel filed corrected tables in its December 18, 2017 errata.[85] The Commission should refer to this errata when reviewing the expansion plans.

Tables 16 and 18 of the errata show the expansion plans under the PPA-High Renewables scenario and Ownership-High Renewables scenario. Staff reorganized these tables to show the delta between the two scenarios by year from 2034 (when the expansion plans begin to diverge) through 2041 (truncated for space).

Where there is a negative value, this means there is a unit in the PPA-High scenario that drops out of the Ownership-High scenario (i.e. it is avoided capacity). Conversely, where there is a positive value, this means there is a unit selected in the Ownership-High scenario that is not in the PPA-High scenario (at least in that particular year):

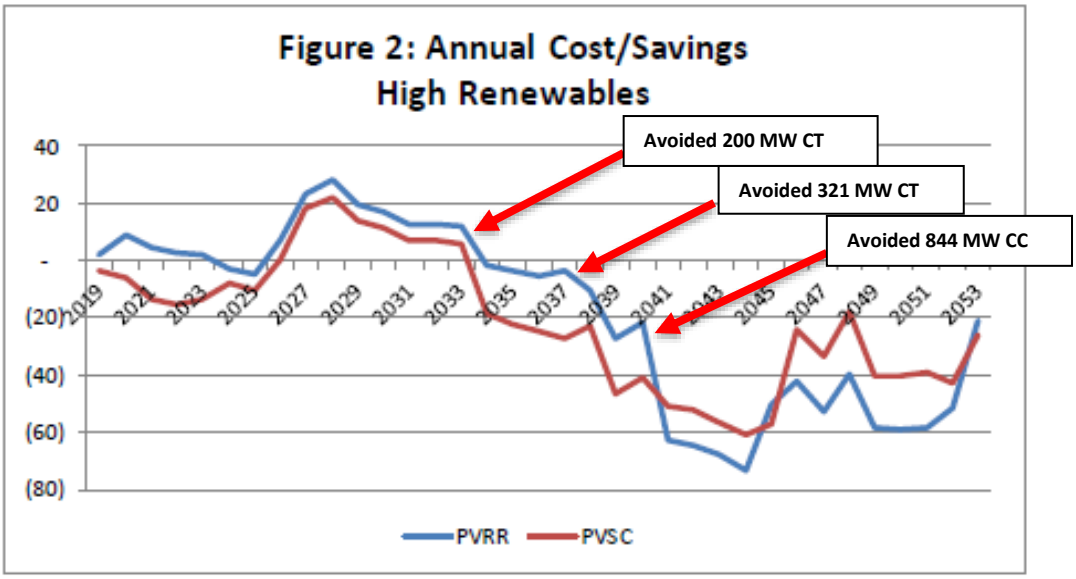
[84] Department supplemental comments, at 8.

[85] e-Dockets Document ID: 201812-148573-01.

Delta: Own-High vs. PPA-High	2018/2019		2034	2035	2036	2037	2038	2039	2040	2041
MEC I	-290									
MEC II	-322									
MEC-Owned	+627									
Sherco CC										
Greenfield CC										-844
Greenfield CT								-321		+642
Brownfield H CT										
Brownfield F CT			-200							
Nameplate Cap.										
Wind										
Solar										

Note that the table above does not contain all of the units in each expansion plan through 2041—it reflects is the *difference* between the expansion plans. This means that the expansion plans are the same until 2033, and then in 2034, the Ownership-High scenario avoids a 200 MW CT. Then, in 2039, a 321 MW CT is avoided. Two years later, in 2041, the Ownership scenario adds two 321 MW CT units, but avoids an 844 MW CC.

The divergences between the two expansion plans are explained in Figure 2 of Xcel's Petition, which shows the annual savings of the Ownership-High Renewables scenario relative to the PPA-High Renewables scenario. Staff added three red arrows to show that the years in which a spike in net savings increase correspond the avoided units in the table above:



The sharp declines in these years reflect net savings as a result of avoided natural gas units. But since they occur far into the future, the estimates carry substantial uncertainty. The Commission may also place a different weight on short-term impacts to ratepayers versus impacts to ratepayers in the future. Additionally, it is highly unlikely that so many natural gas plants will be built if Xcel maintains its carbon-free goals.

E. Xcel's Reply Comment Modeling

According to Xcel, the Reply Comment modeling (Database #2) "was done in response to comments received on the Company's initial filing. For this modeling, the company used a preliminary version of the model being used for the upcoming IRP filing."[86]

Xcel's updated assumptions are detailed on pages 19-27 of the Company's Reply Comments. In summary, these new assumptions include:

- The addition of energy efficiency (EE) bundles;
- The addition of three demand response (DR) bundles;
- The addition of a generic battery storage alternative;
- The addition of a distributed generation (DG) solar alternative;
- Updated generic resource transmission delivery costs; and
- The addition of sensitivity combinations shown in Table 2 of the Reply Comments.

In the initial modeling, the King plant and the Sherco 3 unit were assumed to run through their existing lives of 2037 and 2040, respectively, under every scenario. In its Reply Comment modeling, however, Xcel considered scenarios which retired King and Sherco 3 by 2028 and 2030, respectively.

In addition, in the Reply Comment modeling Xcel evaluated early MEC retirement (by 2040 and 2050) in response to some parties' concerns over stranded cost risk. Xcel also ran "Sensitivity Combinations," such as testing high distributed solar combined with low technology and fuel costs.

1. Department Comments on Xcel's Reply Comment Modeling

According to the Department's analysis of Xcel's Reply Comment modeling, "given the arbitrary nature of the results of Xcel's resource planning process, the Department recommends that the Commission give no weight to results produced by the resource planning processes and Strategist data used by the Company in reply comments."[87]

A few examples of the Department's concerns, which are from the Department's July 26, 2019 Supplemental Comments, are provided below:

- Page 7: "Xcel's initial modeling flaws were serious ... Xcel did not remedy these issues in reply comments. Instead, Xcel's second set of modeling was also flawed. Xcel provided another attempt to model its system appropriately, but that approach also failed. The

[86] Xcel response to PUC Information Request No. 15 (June 17, 2019).

[87] Department supplemental comments, at 18 (July 26, 2019).

Department gave Xcel yet another opportunity to demonstrate the reasonableness of its proposal [but] even in this fourth opportunity to make its case for acquiring MEC, Xcel's modeling assumptions continue to be invalid and inappropriately inflate the value of MEC."

- Page 22: "the widespread discrepancy in inputs used by Xcel versus the inputs provided to the Department was part of a larger pattern throughout this proceeding: the Company has been unable to provide sets of files where the inputs Xcel provided to the Department created the outputs provided to the Department. In other words, Xcel has been unable to 'show its work' accurately."

- Page 21: "all 52 runs involving early coal retirement failed due to errors in Xcel's underlying files implementing early retirement."

- Page 36 and 38: "the base forecast does not appear to be reasonable and creates yet another bias in Strategist in favor of the proposed transaction ... Considering the problematic nature of Xcel's base forecast, the inability of the Company to adequately model changes in the forecast is an important issue."

- Page 52-53: "Xcel used unreasonable assumptions to inflate MEC's value artificially, with biases such as:
    - Using unrealistically low capacity factors for existing nuclear and coal facilities, thus inappropriately making it appear that Xcel needs more energy resources;
    - Forecasting high (ahistorical) demands for energy, again making it appear that Xcel needs more energy resources; and
    - Prohibiting renewable resources from competing with the MEC purchase."

- Page 38: "Even if Xcel's analysis were valid, the results of the Company's analysis are inadequate to support its own proposal."

One of the main problems the Department encountered was Xcel's failure to limit the model run time, screen resource options, and bring the potential plans down to a manageable level. This is important because, if there are too many options, Strategist may discard reasonable expansion plans based on arbitrary criteria. In this case, Xcel's modeling approach forced Strategist to make decisions it is not appropriately suited to make.

Specifically, the Department noted that the way Xcel conducted its analysis was problematic for the following reasons:

- "While normally a Strategist run can be completed in 20 minutes or less, runs on Xcel's Strategist files were taking one to three days, with the three-day length being a common result. At that rate, matching the approximately 150 results in the Company's reply comments would take the Department about two months, if everything went correctly the first time."

- "The Company's inputs required far too many potential plans to be analyzed by Strategist. Such circumstances are concerning since it leads to Strategist inappropriately discarding possible reasonable solutions."

- "The Company's version of Strategist can retain 2,500 plans at the end of any one year … the Company exceeded the maximum number of plans for the first time in 2030 and exceeded the 2,500 plan limit in most years thereafter. In one year (2035) the number of potential plans exceeded 800,000. Even allowing for plans to be discarded by Strategist after using the screening criteria, it is clear that **Strategist was required to discard a half-million or more potentially reasonable plans based upon the arbitrary criteria** that such plans had too high a cost in 2035 (Xcel runs Strategist through 2057). The same conclusion can be reached in other years. **Strategist reported exclusion of in excess of 100,000 potential plans in 2035, 2041, 2046, 2048, 2049, and 2054**." *(Emphasis added by staff.)*

The Department recommended that should the Commission give Xcel's modeling any consideration whatsoever, it would be best to give greater consideration to contingencies using the low forecast, for at least two reasons:

First, the Department argued the low forecast contingency is a better reflection of long-term trends.

Second, the Department appeared surprised by Xcel's base case energy growth rate, which, the Department stated, "curiously" shot upward at the same time the transaction would occur:

> The base forecast net of conservation shows a slow, steady decline in energy use through 2026; the decline averages about -0.2 each year. However, curiously, starting in 2027 when additional capacity and energy under the proposed transaction becomes available, the forecast suddenly changes direction and energy use grows steadily and remarkably; the growth averages about 0.5 percent per year. While the Department did not attempt a full forecast review in the time allowed, **the base forecast does not appear to be reasonable and creates yet another bias in Strategist in favor of the proposed transaction**. *(Emphasis added by staff.)*

Given the degree to which Xcel's modeling was flawed, the Department noted it was difficult to resolve the biased base case forecast. For example, one solution could have been to use Xcel's low forecast contingencies, but this contingency had a number of other problems. Thus, the contingencies using the low forecast are unreliable as well, but for different reasons. [88]

These problems included both the demand-side and supply-side: in the model, decreased supply has the same effect as increased demand, and both can inflate the value of MEC. In

[88] Department supplemental comments, at 37.

Xcel's modeling, its baseload units were dispatched less over time relative to historical averages,[89] thus increasing MEC's value. According to the Department:

> Figures 2 to 4 [of the DOC's supplemental comments] all show that the capacity factors modeled in Strategist for each nuclear unit continually decline from 2023 through the end of the current license life. More importantly, the average capacity factor for Xcel's nuclear fleet from 2027 on (again, excluding the last year) averages only 69.2 percent. By contrast, from 2008 to 2017 Xcel's nuclear units averaged an annual capacity factor of 84.9 percent.
>
> Xcel's assumptions of such ahistorical, low capacity factors post-2026 create a potential bias in Strategist in favor of the proposed transaction because, when a nuclear unit is forced to reduce output, other higher cost units must increase production to replace the lost energy. Then, when the added capacity due to the proposed transaction is modeled, MEC will be able to offset that higher cost generation. Further, Xcel did not allow renewable resources options that might provide that power, so the MEC purchase is one of a few units allowed to offset the lost energy.[90]

The Department's point is clear: it considers Xcel's Strategist modeling to be fatally flawed, systematically biased, and simply not credible. As a result, the Department concluded, among other things, that:

- Xcel failed to demonstrate that its proposal is consistent with the public interest as required by Minnesota Statutes § 216B.50;[91]
- Xcel did not meet the renewable preference in Minnesota Statutes §216B.2422, subd. 4;[92]

The Department also provided some general observations and conclusions about Xcel's modeling:

- the MEC purchase is not needed for future early coal retirements;
- Xcel's system would emit about 1.4 million tons *more* CO_2 with the purchase than without;
- the MEC purchase is cost effective only if MEC is operated far into the future, even beyond 2050;

[89] With the exception of the 22-month period of Sherco 3's catastrophic outage.

[90] Department supplemental comments, at 32.

[91] Department supplemental comments, at 53.

[92] Department supplemental comments, at 53.

- early retirement of MEC to meet CO_2 reduction goals would make the MEC purchase an even more costly option for Xcel's ratepayers; and

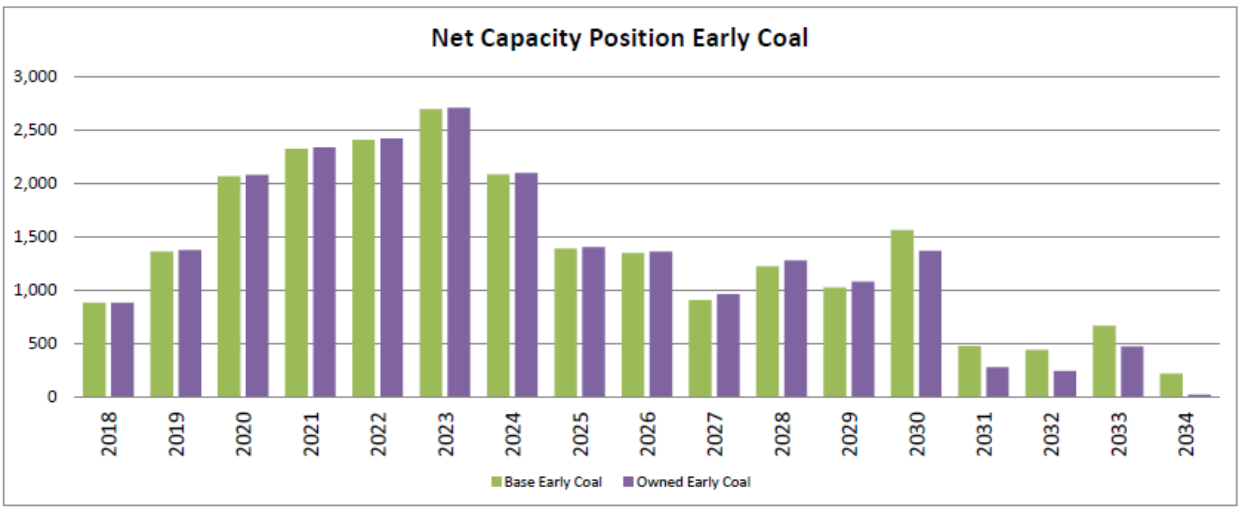
- Xcel's assumptions about the amount of energy bought and sold in the MISO spot market was a dominating factor as to whether the purchase of MEC I and MEC II was reasonable.

2. Staff Comments on Xcel's Reply Comment Modeling

Xcel's Reply Comment modeling considers a number of new scenarios. However, for the purposes of this section, staff will discuss only two: (1) the Base Case (PPA)-Early Coal Retirement scenario and (2) Ownership-Early Coal Retirement scenarios. These two scenarios assume the retirement of the King and Sherco 3 coal plants by 2028 and 2030, respectively.

Because the Reply Comment modeling could be viewed as an entirely different petition, which is *not* to say the Commission should ignore the initial modeling results, staff requested Xcel to file several new tables updating tables and figures included in the initial Petition. The tables and figures staff requested refer only to the two early coal retirement scenarios.

Attachment A of Xcel Response PUC IR No. 7[93] is a Microsoft Excel spreadsheet showing the updated tables derived by Xcel's Reply Comment modeling. One particularly notable figure is in tab 7D, which shows Xcel's net capacity position in the 2018-2034 (IRP) timeframe. According to Xcel's results, Xcel has a net capacity surplus in every year of the early coal retirement scenarios. In fact, in 2030-2034, Xcel has more surplus capacity under the Continue as PPAs scenario (green bar) because there is 1,000 MW more solar than in the Ownership scenario (purple bar):



Attachment A, tab 7H shows the expansion plans under the MEC Owned-Early Coal Retirement and the Base (PPA) Early Coal Retirement scenarios. The total capacity added is shown by the table below. Note again that ownership reduces the amount of solar by 1,000 MW. Also note

[93] Document ID 20196-153365-03

that one difference in the Reply Comment modeling is the introduction and selection of 2.6-2.9 gigawatts (GW) of 4-hour duration, Lithium-ion batteries.

Resource	Base Early Coal Retirement (MW)	Owned Early Coal Retirement (MW)
MEC I	-290	-290
MEC II	0	0
Mankato Owned[94]	0	0
Sherco CC	727	727
Greenfield CT	321	321
Wind*	0	0
Solar*	10,500	9,500
Previously Committed Solar*	1,702	1,702
Battery*	2,568	2,889
EE1	0	0
EE2	0	0
EE3	0	0

With 1,000 MW less solar being added to the system, Xcel estimates approximately $540 million in "VOM cost" savings. This means that the major category of savings switched from Fixed Cost/Expansion Plan Cost savings in the initial modeling to the VOM savings category in the Reply Comment modeling:

MEC Ownership with Early Coal Retirement		
	PVSC	PVRR
Capital Cost of Mankato Purchase	915	915
Fixed Savings of Mankota PPA	(555)	(555)
Fixed Cost/Expansion Plan Cost/(Savings)	(24)	(60)
VOM Cost/(Savings)	(538)	(540)
Fuel Cost/(Savings)	184	156

The reason the savings switched from Fixed Costs to VOM costs is because in Databases 1, 3, and 4, the renewable expansion plans were kept the same across scenarios, so only thermal units were avoided. In the Reply Comment modeling, however, solar resources are avoided. As Xcel explained in response to a staff inquiry:

> In Attachment B – 7A [Second Supplemental Modeling], the renewable expansion plans are the same for both the PPA and ownership scenarios. In this case, the addition of Mankato reduces the need for future thermal resources which have primarily fixed costs. In Attachment A – 7A [Reply Comment modeling], the expansion plan with Mankato Owned reduces the need for additional capacity, which reduces the amount of solar selected by the model. The costs of the solar resources in the model are reflected as VOM cost.[95]

[94] Mankato-Owned is 0 MW in the Ownership-Early Coal Retirement scenario because the modeled time horizon is through 2057, and MEC I comes offline in 2045, and MEC II comes offline in 2053, according to tab 7H.

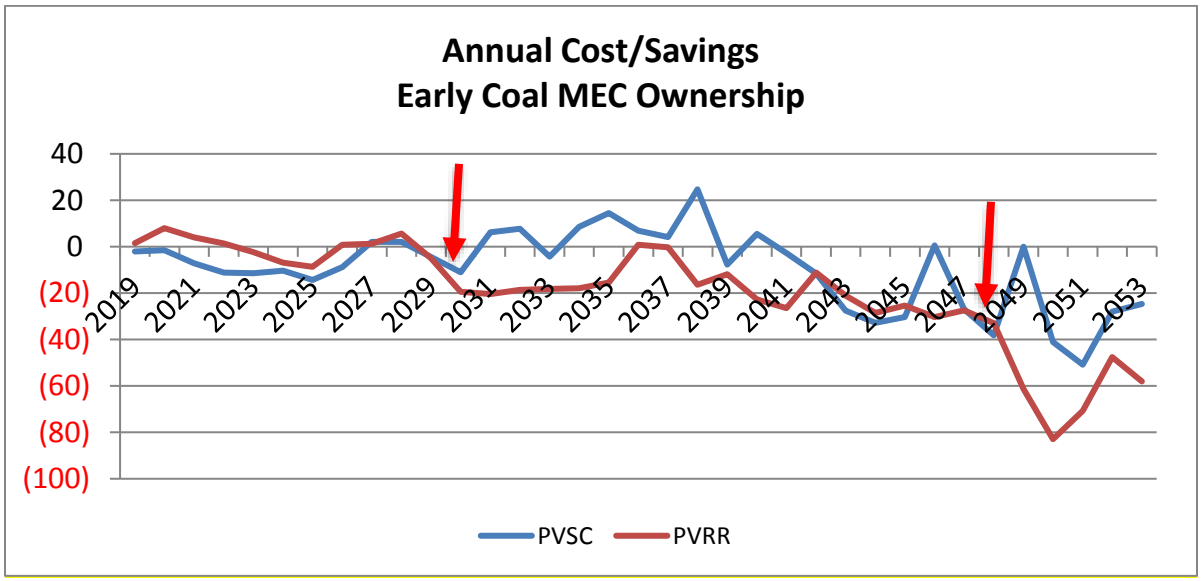
[95] Xcel response to PUC IR 19.a.

Also note from the fifth row of the table above that the Ownership-Early Coal scenario has about $156-$184 million in additional fuel costs (depending on whether CO_2 is included). This is because there is substantially more generation from natural gas resources under the ownership scenario, which makes sense given that the Ownership-Early Coal extends MEC and drops solar.

The natural gas price assumption significantly affects the net savings. For example, as shown in the first three rows of Xcel's table filed in Attachment A – 7B of its response to PUC IR 7, the modeling results vary widely when the natural gas price variable is changed. In fact, the high natural gas price sensitivity is one of the few sensitivities where ownership showed a net cost:

	Continuation of PPAs - Early Coal	Owned MEC - Early Coal	Delta
Base PVSC	52,028	51,963	(65)
Base PVSC+Low Gas	50,851	50,681	(170)
Base PVSC+High Gas	54,055	54,070	14

The figure below shows the annual cost/savings in the Ownership-Early Coal scenario in the PVRR (red line) and PVSC (blue line). In years where solar is dropped, there is either an annual net cost or a net savings based on whether carbon costs are included. Staff added red arrows to illustrate years where solar units are not dropped from the ownership scenario:



The second red arrow in particular shows a very sharp divergence between the two lines. Xcel confirmed in response to a staff inquiry that the drop in the PVRR (red line) in the 2048-2050 timeframe occurs because "the ownership scenario has 1,000 MW less solar in 2049-2057."[96]

The same annual savings values are presented differently below.[97] Capital costs are in the range of $65-$85 million per year. Avoided fixed savings of the PPA are about $70 million per

[96] Xcel response to PUC IR 20.a.

[97] Xcel response to PUC IR 7, Attachment A, tab 7F.

year in 2020-2025, then about $30 million per year in 2027 and later (the MEC I PPA expires in July of 2026, so there is avoided PPA payment for about half the year). VOM savings jump in 2027 and again in 2030 as solar drops out:

Incremental Revenue Requirement Impact MEC Ownership - Early Coal

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Capital Cost of Mankato Purchase - EC	46	86	83	81	78	76	75	73	70	74	67	65
Fixed Savings of Mankato PPA	(39)	(67)	(68)	(69)	(70)	(71)	(72)	(55)	(31)	(32)	(32)	(33)
VOM/Fuel/Market Cost/(Savings)	(6)	(10)	(11)	(10)	(10)	(12)	(11)	(17)	(38)	(37)	(40)	(52)
Total Cost/(Savings)	2	8	4	1	(2)	(7)	(9)	1	1	6	(5)	(19)

To be clear, staff's discussion of the relationship between solar and natural gas units and solar and natural gas prices is not meant to take a position on the merits of Xcel's results; rather, staff's intention is to explain what appears to be going on in the model, so the Commission is aware how Xcel arrived at the results it did.

In summary, Xcel's Reply Comment modeling has very different expansion plans from those in the Initial Petition. However, the underlying risks are actually fairly similar. In both the initial and Reply Comment modeling, Xcel does not need MEC to meet a capacity need, and the benefits from Xcel ownership are back-ended. The capital cost of ownership exceeds the fixed savings of the PPA, but there is significant uncertainty in the expansion plan benefits which make up the delta due to the fact that they occur later in the modeled time horizon.

One difference in the Reply Comment modeling is that the price of natural gas seems to be more of a determining factor in whether the acquisition is cost-effective. (In Xcel's initial modeling, ownership was cost-effective even under the high natural gas price sensitivity.) Thus, parties raise legitimate concerns about fuel price risk.

F. Should the MEC Purchase be considered in the IRP?

Several parties provided comments that the MEC purchase should be considered in an IRP context. Xcel argued the acquisition is more of a change in ownership proposal than a traditional resource acquisition that would follow from an IRP.[98] No other party took this view.

1. City of Minneapolis

The City of Minneapolis recommends the Commission deny the acquisition, or in the alternative, move the Petition to the pending IRP so that it can be evaluated in the context of a comprehensive planning process. According to the City:

> The proposed acquisition of Mankato Energy Center plant presents several risks to Xcel's Minnesota customers. Notably, the 30+ year financial commitment associated with the MEC acquisition crosses into the realm of unknown future technology, policy, and market opportunities … Further, an acquisition of MEC

[98] Petition, at 5.

> does not advance grid modernization efforts and climate solutions that the energy industry, the public, and policy makers aspire to.[99]

Overall, the City believes that a "commitment to an amount that approaches or exceeds $1 billion to purchase and operate MEC presents an opportunity cost that directs valuable resources toward long-term fossil generation and makes it more difficult to invest in building out both utility- and customer-owned renewable generation."[100]

2. CUB

In addition to recommending the MEC purchase be considered within the IRP docket, CUB also argued that Xcel has not been transparent with the Commission and stakeholders about its actions regarding its proposed acquisition of MEC:

> In respect to its 100% carbon-free announcement and on-going IRP work, stakeholder processes, and interactions with the Commission, the Company was surprisingly silent on its filing proposing to acquire MEC. The Company held IRP stakeholder meetings on October 22, 23, and December 14, 2018. The Company also presented an extension request for the 2019 IRP filing to the Commission in a hearing on December 6, 2018. Prior to the Commission's approval of this request to extend the IRP, the Company made no mention to stakeholders, nor the Commission, that it had intended to purchase MEC and planned to do so outside of the IRP process. Had the Company mentioned this intention to stakeholders, it is likely that several parties would have raised objections to the Company's plan to delay the filing of its IRP.

Xcel explained that it was under confidentiality constraints until November 5, 2018, thus limiting its ability to inform stakeholders. CUB responded that the confidentiality provision was not in place at the time of the December 6, 2018 IRP extension hearing, and the Company could have informed the Commission of its intent, as this information was relevant to the IRP proceeding.[101]

3. ILSR/CEF

ILSR/CEF argued that Xcel's Petition "would violate the resource planning process, saddle customers with many additional risks (that shareholders do not share), likely increase customer costs, likely violate the utility's existing carbon commitments, and create poor precedents for utility resource planning."[102]

According to ILSR/CEF, "any consideration of a plant acquisition of this nature should occur in the context of and based on analysis of an IRP review." One reason is because other resource options are cheaper and available. For example, bids received in response to a January 2018

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[99] City of Minneapolis supplemental comments, at 1.

[100] City of Minneapolis initial comments, at 2.

[101] CUB supplemental comments, at 11-12.

[102] ILSR comments, at 5.

RFP in Colorado demonstrate that alternative resources are less expensive than combined cycle plant. Solar+storage bids to Xcel-Colorado, for example, were significantly cheaper than CC costs on a levelized basis.

4. LSP-Cottage Grove

LSPCG noted for the Commission's consideration that LSPCG would be willing to sell its facility "for a fraction of the cost"[103] than what Xcel is proposing to pay Southern Power for MEC. Providing some history, LSPCG noted that Xcel has "periodically expressed an interest in purchasing the [Cottage Grove] Facility," including participating in "numerous auction sale processes" and approaching LSPCG about a purchase in 2014.[104] LSPCG noted that the Cottage Grove Facility uses technology equivalent to MEC because both are dual-fuel, combined-cycle facilities with Siemens 501F class combustion turbines, so they are comparable generation resources.

LSPCG argued that the proposed acquisition is premature in light of Xcel's pending IRP. LSPCG believes postponing any decision in this matter until after the IRP is complete will serve the best interests of the public by allowing for a complete and accurate analysis of all existing and projected energy resources in Minnesota.

5. OAG

The OAG argued that Xcel's claim that the purchase "is simply a change in ownership, rather than a resource acquisition" is flawed. According to the OAG, purchasing MEC involves at least three aspects of long-term resource planning that should be considered in the IRP:

- Whether there is a need for resources after the PPAs expire, and whether MEC is the right resource to meet that need, is a core resource planning decision that would normally take place in the IRP.

- The value of purchasing MEC will likely change depending on the outcome of the 2019 IRP. For instance, Xcel's "high renewables" scenario, which means a scenario that included more renewables than the amount included in the 2015 IRP, can reduce the value of purchasing MEC by more than half.

- Selecting MEC as a system resource after the PPA expirations has an impact on other resource needs.

In its 2015 IRP Order, the Commission specifically declined to make long-term decisions about the resource need in the 2025–2030 time frame. Instead of approving the CT generator that Xcel wanted, the Commission changed the Plan to require:

> the most cost-effective combination of resources consistent with state energy policies, including but not limited to . . . large hydropower, short-term life

[103] LSPCG initial comments, at 5.

[104] LSPCG initial comments, at 2.

extensions of Xcel-owned peaking units, natural gas combustion turbines, demand response, utility-scale solar generation, energy storage, and combined heat and power.[105]

Xcel's Petition seeks approval in 2019 to acquire an already-sited generating facility to meet an intermediate capacity need in 2026, without conducting meaningful alternatives analysis or complying with Two-Track Bidding by demonstrating need under the CON-like criteria. According to the OAG, given that the Commission modified Xcel's proposed IRP by declining to include the location-and-fuel-specific generating facility that the Company proposed to construct to meet its intermediate capacity need in 2027, the Mankato acquisition was not supported by the record.

6. XLI

XLI argued that Xcel is prioritizing Southern Power's timing over the standard practice in IRP. The IRP is over four years old, and XLI states the 2015 filing is obsolete. A fair assessment of MEC ownership can only occur within the context of Xcel's complete resource mix and compared to reasonable alternatives.

Xcel's 2019 IRP has already been filed, and both the MEC Petition and IRP filing applies multiple assumptions used in Strategist modeling, including proposed coal retirements and actions at its nuclear units. Moreover, the reference case for the IRP files appears to be the same Strategist files submitted in this docket. But those Strategist files have not been tested, critiqued, or revised as they would be in the IRP docket. It can problematic if MEC ownership is pre-determined because options for other generation resources, energy efficiency, and demand response will necessarily be constrained.

Finally, there are multiple indications that a MEC acquisition option, when compared with alternative resource options in an IRP, would not be the least-cost option for ratepayers or meet Xcel's renewables goals.

7. Staff Analysis

As discussed above, several parties believe the acquisition is an IRP issue and therefore urge the Commission to require MEC to be considered as part of the IRP proceeding. Staff does not necessarily disagree, but this section will provide a counterpoint to that recommendation.

Staff's general view is that if in this proceeding Xcel has not shown the acquisition of MEC to be in the public interest, then it will probably not make sense in another docket either. This is especially likely given that the IRP proceeding will use the same capacity expansion model and roughly the same modeling approach. While staff agrees MEC *should have been* considered as part of the IRP—and in particular staff agrees with CUB's comment that Xcel "obscured a significant action with material influence on the IRP"[106] when the Company asked for an IRP

[105] In the Matter of Xcel Energy's 2016–2030 Integrated Resource Plan, Docket No. E-002/RP-15-21, ORDER APPROVING PLAN WITH MODIFICATIONS AND ESTABLISHING REQUIREMENTS FOR FUTURE RESOURCE PLAN Filings, Order Point 4.c. (Jan. 11, 2017), eFile No. 20171-128000-01.

[106] CUB supplemental comments, at 12.

extension—it has been argued by many that Xcel failed to produce a convincing case in this record to support the purchase.

Xcel states in its Petition that "the termination of the MEC I PPA would expose the Company and our customers to market risk in having to procure sufficient resources to meet this need."[107] If this statement were accurate, then the acquisition should absolutely be considered in the IRP, but staff does not believe Xcel has justified this claim. In fact, most of Xcel's analysis shows that the expansion plans do not materially change until the 2030s regardless of whether MEC continues as PPAs or if Xcel owns it.

With this being said, from a procedural standpoint, staff agrees with parties who argued the acquisition is an IRP issue. This is another way of saying staff disagrees with Xcel's response to parties, which stated:

> We believe it is unreasonable, though, to expect the Company to make acquisition decisions in a changing market and industry in perfect lockstep with an IRP process that takes two years to complete and occurs only a few times each decade.[108]

In staff's view, Xcel's response understates the matter at hand: The Company is proposing to acquire a nonrenewable resource, and statutory provisions require utilities to first demonstrate that a renewable energy resource is not in the public interest. According to the Department, Xcel has not met this statutory provision. In addition, Xcel's arguments supporting the acquisition include accelerated baseload retirement and renewable energy integration, which are clearly resource planning issues. Finally, Xcel and parties are currently engaged in an IRP process. Parties are simply arguing that since the Petition involves several resource planning issues, the IRP is the natural place to consider whether the acquisition is prudent.

No party is arguing that every decision Xcel makes must be in "perfect lockstep" with the most recently approved IRP. But in the last IRP, the Commission's order expressed concerns about Xcel's forecast and did not approve a nonrenewable resource. Yet Xcel is currently taking steps to put onto its system a very large combined cycle plant at the Sherco site, and Xcel proposes to acquire a second combined cycle facility. Thus, given that the acquisition is not supported by its last IRP, and since Xcel itself claims the acquisition could affect the future of its baseload mix, staff does not believe parties are asking too much by suggesting that the acquisition should be addressed in a pending IRP proceeding.

For the decision alternatives, the Commission has the options to approve the Petition, deny the Petition, and it can consider whether to defer the proposed MEC acquisition to Xcel's 2019 IRP.[109] For the sake of simplicity, if the facts on the record do not support a determination that MEC ownership is in the public interest, staff would suggest denying the petition and taking no action on whether to defer the proposal.

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[107] Petition, at 35.

[108] Xcel reply comments, at 4.

[109] Deferral to the IRP would require an extension to the Xcel/Southern purchase agreement, which expires on September 27, 2019.

Since Xcel assumed MEC ownership in all scenarios and sensitivities in its 2019 IRP, if the Petition is denied, the Commission could direct Xcel to supplement its IRP with modeling that continues MEC as PPAs. However, Xcel and the Department will most likely supplement the IRP modeling anyway without direction from the Commission.

8. Decision Alternatives

21. Defer the proposed MEC acquisition to Xcel's 2019 IRP. (City of Minneapolis, CUB, OAG, XLI)

22. Take no action on whether to defer the MEC acquisition to Xcel's 2019 IRP.

23. Require Xcel to supplement its IRP modeling within 30 days with scenarios that continue MEC as PPAs.

G. Settlement Agreement

On May 20, 2019, Xcel filed a "MEC/IRP Settlement Agreement," in which Xcel and a group of seven organizations "agreed in principle to a partial settlement of Docket No. E002/PA-18-702 and the Company's upcoming 2019 IRP" on twelve substantive IRP terms. Signatories include: Xcel, LIUNA Minnesota and North Dakota, Clean Grid Alliance, Center for Energy and Environment, Minnesota Center for Environmental Advocacy, Union of Concerned Scientists, Fresh Energy, and Sierra Club.

The terms of the agreement include, among other things, that "the CEOs and CEE will agree to provide written support for the Company's petition to acquire" MEC. In addition, Xcel agreed "to offer Sherco Unit 2 into MISO on a seasonal basis until its retirement in 2023," subject to Commission approval. Xcel and the signatories also agreed on retiring the King plant by 2028 and Sherco 3 by 2030, and it includes amounts of energy efficiency and solar.

Also on May 20, 2019, the Sierra Club filed a request "to withdraw from the record" its initial comments from March 5, 2019.

The following parties/participants filed comments opposing the Settlement Agreement:

- Advanced Energy Management Alliance (AEMA);
- CUB;
- ILSR;
- Legalectric; and
- XLI

1. Staff Analysis

The Mankato petition itself could be viewed as an end-run around the IRP process, as Xcel filed it one month after arguing in its IRP extension request that no actions would be necessary in the next five years. The Settlement appears to be an attempt by Xcel to garner support for a petition which received near-unanimous opposition from parties in initial comments. In effect,

what the Agreement aims to do is negotiate a mini-IRP in a property acquisition docket, with an IRP pending that has not yet received comments from parties or the public.

The matters addressed in the Settlement relate mostly to issues that should be addressed and decided in the 2019 IRP based on a full context and record. But the fact that Xcel is tying what it repeatedly characterized as a mere "transfer of ownership" to the future of specific power plants, levels of energy efficiency, and solar acquisition makes it even clearer that MEC should be considered in an IRP context (CUB raised this point as well). In other words, the Settlement confirms that Xcel agrees that the MEC acquisition cannot be viewed in a vacuum.

With respect to specific elements of the Settlement, staff notes that it includes a term for supporting 50% of Xcel's new solar to be Company-owned. Percent-ownership was an issue Xcel attempted to add into its last IRP with its proposed wind acquisitions. After recommendations from parties, the Commission refrained from making any findings related to the PPA versus ownership issue.

Another term of the Settlement relates to early MEC retirement:

> The Company agrees, as part of future IRP filings, to continue to evaluate the economics of MEC for purposes of making forward-looking planning decisions.[110]

As staff interprets it, this is a potential stranded costs issue: Xcel is agreeing to assess early MEC retirement in "future IRP filings," but with no direction from the Commission to do so, nor any detail regarding what this means. The Department's analysis showed that "early retirement of MEC, to meet CO_2 reduction goals for example, would make the MEC purchase an even more costly option for Xcel's ratepayers."[111] Notably, there does not appear to be any scenario on the record that considers early MEC retirement *and* early coal retirement; Table 4 of Xcel's Reply Comments shows early <u>coal</u> retirement compared to the base case, and Table 5 shows early <u>MEC</u> retirement compared to the base case, but not early MEC/early coal together.

The Commission might also consider the possibility that early coal retirement is in the public interest regardless of whether MEC is an owned asset or not—in other words, MEC ownership and early coal retirement are not necessarily linked. The Department sums this up nicely:

> Xcel's own analysis shows its proposal is not necessary to shut down the coal units since they should shut down early in any case to reduce costs. Thus, there is no reason to force ratepayers to pay for Xcel's MEC ownership in order to shut down coal facilities early. The Department expects that decisions regarding Xcel's coal facilities will be made in the Company's concurrent IRP.[112]

For these reasons, staff believes the Commission does not need to consider the Settlement in making its determination on whether Xcel should be allowed to purchase MEC and could

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[110] Xcel May 20, 2019 Settlement Agreement, Term No. 10.

[111] Department supplemental comments, at 40.

[112] Department supplemental comments, at 39.

instead leave resource decisions to be made in the IRP. CUB recommended treating it as a letter and not a resolution, as it provides no new record evidence or analysis to justify the acquisition, and staff agrees.

H. Is there a sufficient evidentiary basis to support the acquisition?

A threshold question before the Commission is whether Xcel provided sufficient record evidence in order to support its claim that the acquisition is consistent with the public interest. As a subset of this broader question, Xcel raised a number of key resource planning issues that the Company believes supports the acquisition. For instance, on page 35 of the Petition, Xcel lists several benefits it believes MEC will provide:

> Company ownership mitigates the risk associated with the termination of the MEC I PPA in 2026. As discussed above, **we expect to need both capacity and energy as our baseload retirements increase**, and the termination of the MEC I PPA would expose the Company and our customers to market risk in having to procure sufficient resources to meet this need. **The MISO market is tightening** due to planned retirements, including our own. Thus, securing our capacity position in this time frame is a good proactive step. This PPA conversion provides additional **firm, flexible generation** on our system beyond the current terms of the PPAs which will allow customers to benefit from **an attractively priced CC resource**. Absent ownership, customers would potentially pay a higher price for **replacement energy and capacity** upon the expiration of the PPA.[113] *(Emphasis added by staff.)*

Staff's concern is that Xcel simply makes a series of claims without establishing a sufficient evidentiary basis for any one of them. In this section, staff will discuss all of the areas highlighted above in bold font, so the Commission is able to assess whether Xcel's claims are supportable by the record.

1. Replacement Capacity and Energy

As a preliminary matter, it is worth keeping in mind that the operational benefits Xcel claims MEC will provide to its system really only refer to the 375 MW increment from MEC I after the PPA expires in 2026. And even when the MEC I PPA expires, presumably Xcel will retain the option to renew the PPA with Southern's alternative buyer (assuming they actually have one). MEC II, of course, will still provide capacity, energy, and dispatchability benefits through 2039.

Staff raises this point because throughout Xcel's Petition, Reply Comments, and August 1 letter, the Company occasionally gives the impression that if MEC is not acquired outright, there will be a scarcity of dispatchable generation on Xcel's system that will require the Company to seek an alternative natural gas CC plant of a size similar to or greater than the entire 760 MW MEC facility. Such assertions, however, would not be supported by the record.

For example, in its August 1 letter, Xcel claims that "MEC's interconnection rights alone are worth between $100 million and $370 million on a net present value basis," and the acquisition

[113] Petition, at 35.

"can avoid adding more expensive greenfield natural gas resources in the future."[114] But assessing the total value of MEC's interconnection rights could be misleading if the implication is that denying the Petition would require Xcel to seek another resource with the same attributes as the entire MEC facility.

According to the Company's Strategist modeling, the expansion plans for the Continue as PPAs and Ownership early coal retirement scenarios are nearly identical for more than a decade. In its Reply Comment modeling, for instance, the only units dropped from the model by 2030 in the Owned-Early Coal retirement scenario (aside from the MEC I PPA) are 500 MW of solar in 2027 and another 500 MW of solar in 2030.[115] In Xcel's Response to DOC IR 2 (Database #4), the first avoided thermal resource is a generic CC unit in 2033.

There is also significant uncertainty in Xcel's proposed 2019 IRP which could materially affect the need for MEC. Two areas in particular include (1) Xcel's plans for its North Dakota generation and (2) the Company's plans for its nuclear units.

As a result of a rate case settlement approved by the North Dakota Public Service Commission, new gas CTs could be on Xcel's system regardless of whether it acquires MEC, which could provide the capacity and dispatchability benefits Xcel claims that it needs. The problem is that Xcel chose not to disclose any specifics on this matter. In its 2019 IRP, Xcel argued that since planned North Dakota generation is outside of the five-year action plan (as is MEC), Xcel would not discuss new North Dakota generation until its *next* IRP:

> Pursuant to the Settlement in Case No. PU-12-813, the Company agreed to take steps to locate a system natural gas CT in the state of North Dakota, to be operational by December 31, 2025 . . . The five-year Action Plan associated with this 2020-2034 Resource Plan runs through 2024. Thus, the Commission will not find specific mention of a North Dakota natural gas CT addition in the current short-term Action Plan; rather, proposed resource additions in 2025 will be within the Action Plan developed in the next Resource Planning cycle and addressed directly in that filing.[116]

Moreover, Xcel did not reveal its plans for Prairie Island because, again, Xcel claims the Prairie Island decision can wait until Xcel's next IRP. Xcel did, however, propose a ten-year extension of the Monticello plant, which would substantially affect Xcel's capacity and energy position. Importantly, all modeling done by the Company on this record assume the nuclear units will expire at the end of their current licenses.

What is more, in the initial modeling, the Fixed Cost/Expansion Plan savings calculated in Strategist are about $370 million, and the reason these savings are so high is because the MEC acquisition avoids CT and CC generation in the 2030s. Xcel noted that "the benefits of the transfer of ownership increase in the early 2030s, when MEC can be relied on for economic

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[114] Xcel Letter, at 2.

[115] Xcel response to PUC IR 7, Attachment A, tab 7H.

[116] Xcel IRP, at 86-87.

capacity and energy **as the nuclear units are retired**."[117] (Emphasis added by staff.) Any one of the Company's decisions with respect to North Dakota generation, Monticello, or Prairie Island could reduce the Fixed Cost/Expansion Plan savings enough to make the MEC acquisition uneconomic.

Thus, given that (1) the need established in Xcel's 2015 IRP was addressed by the legislature, (2) the modeling in this record that does not show a need until the 2030s, and (3) Xcel's proposed plan in its 2019 IRP could erase whatever need Xcel might have in the IRP timeframe (2020-2034), staff does not believe there is a sufficient evidentiary basis to conclude Xcel needs replacement energy and capacity.

2. MISO Issues

Xcel makes the claim that "the termination of the MEC I PPA would expose the Company and our customers to market risk" and that the "MISO market is tightening due to planned retirements."[118]

First, the MEC I PPA is not subject to termination; it is planned to expire just as Xcel proposed in its 2015 IRP.

Second, while Xcel is not necessarily wrong that the market could be "tightening," this comment might lead to wrong conclusions as it pertains to the need for the acquisition.

To explain, there is currently excess capacity in MISO, and what Xcel appears to be referring to is a situation where there might be less excess capacity, which is not necessarily a problem (theoretically it could actually reflect a more efficient market). The table below, for example, shows that in the three most recent MISO planning years, the MISO footprint has had supply in the range of 2-3% beyond its minimum reserve requirement:

	Demand Forecast (GW)	Reserve Margin Requirement (GW)	Supply (GW)	Reserves (GW)	Minimum Reserve Requirement	Beyond Requirement
2017/18 PY	125.0	144.8	148.5	23.5 (18.8%)	15.8%	3.0%
2018/19 PY	124.7	146.0	148.6	23.8 (19.1%)	17.1%	2.0%
2019/20 PY	124.7	145.9	148.8	24.1 (19.3%)	16.8%	2.5%

Xcel argued that the MEC acquisition "is a proactive step that will protect [its] customers from market risk,"[119] but it is not clear what risk Xcel is referring to. It could be that Xcel believes MISO will have lower reserves. Perhaps Xcel is typing planned retirements in MISO the planning reserve margin. Maybe Xcel is referring to capacity prices. In any case, Xcel did not explain why or how incremental capacity from MEC in 2026 has any relationship to MISO market risk. But since Xcel projects it will still have surplus capacity even if the MEC I PPA

[117] Petition, at 30.

[118] Petition, at 35.

[119] Petition, at 4.

expires, it seems as though Xcel is making a broad claim about MISO trends without establishing any direct connection to the specific purchase.

Moreover, it is not clear why a tightening of the MISO market is Xcel's problem to proactively solve. Xcel, while a large utility for Minnesota, is a small share of the MISO system, and the appropriate response to any long-term issues in MISO will naturally be a coordinated effort among a whole host of stakeholders, not one Xcel can or should address on its own.

3. Need for firm, flexible generation

Xcel claims it has a need for "renewable integration support," and it states that MEC will provide "firm, flexible generation"[120] that can "accelerate the retirement of existing baseload resources."[121] Staff notes that no grid reliability studies are in this record to support this argument, and again, staff notes that only MEC I will be removed from Xcel's system. The MEC II PPA will continue for the next twenty years, and Xcel already owns the High Bridge, Riverside, and Black Dog 5/2 CC units and is currently developing the approximately 835 MW Sherco CC. Together, these five units alone comprise about 2,500 MW of natural gas combined cycle generation on Xcel's system.[122] Xcel also has 2,350 MW of dispatchable, peaking-type capacity.

Xcel stated that the Mankato purchase "does not materially impact the small amount of gas generation in our portfolio."[123] It is debatable whether approximately 5,000 MW of natural gas generation is small, but nonetheless, if the acquisition has no material impact to Xcel's natural gas generation, it is not clear what reliability benefits MEC would provide. In the Petition, Xcel mentions the upgrade to MEC I, which "increased the ramp rate of the facility by approximately 50%",[124] but nowhere in the record is ramping need discussed.

Because Xcel did not discuss how its generation resources or the generation of other utilities in the region are dispatched and ramped by MISO, or provide any technical study to support its claims regarding renewable integration, staff does not believe Xcel's argument that it has a need for firm, flexible generation is supported by the record.

4. Is MEC an attractively priced CC resource?

A fourth claim Xcel makes is that MEC is an attractively priced CC resource. Again, typically the process that would occur would be for a need to be established in an IRP, then "an attractively priced" resource could emerge from a competitive bidding process. Also, an independent evaluator would oversee the solicitation process and assess the value of proposed projects to ensure that the best resource(s) is/are selected for a utility's customers. Because neither the 375 MW incremental intermediate generation from MEC I was approved in the IRP, nor did the

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[120] Petition, at 35.

[121] Petition, at 24.

[122] The capacity values staff used are: 285 MW for BD 5/2, 544 MW for High Bridge, and 470 MW for Riverside. These were taken from Table 10 of Appendix J from Xcel's 2015 IRP. Staff used 835 MW for the Sherco CC, which is from Table 14 of Appendix F2 from Xcel's 2019. Staff used 345 MW for MEC II from the MEC Petition.

[123] Petition, at 1.

[124] Petition, at 10.

MEC proposal go through a competitive bidding process, Xcel's statement that MEC is an "attractively priced" CC resource is unverifiable.

Xcel's Petition includes a section called "Comparable Transactions,"[125] in which Xcel compares MEC to Minnesota Power's (MP) gas-fired Nemadji Trail Energy Center (NTEC) power plant, among other units. Xcel also referenced NTEC in its August 1, 2019 letter.

There are several reasons why staff believes Xcel's comparable transactions section is not directly on-point for review of this case:

First, more important than the $650 million purchase price is the $915 million revenue requirement, since this reflects the costs ratepayers will bear under Xcel's ownership proposal. (And this does not include the variable costs that will be incurred when the plant is operating.) The ultimate question is not what constitutes a relatively low $/kW, it is whether there are ratepayer benefits of owning the facility relative to continuing with the PPAs.

Second, a $/kW comparison is not consistent with Xcel's own reasoning for how the Commission should review the Company's Petition. For instance, in response to stakeholders who questioned the variable cost savings shown in Xcel's modeling, Xcel recommended the Commission avoid making direct one-to-one comparisons in any cost category:

> a direct one-to-one comparison of the cost categories between ownership and the PPA pricing structure has limited value in determining the reasonableness of either the PPA costs or the Company's costs of ownership. Instead, we believe total costs (fixed and variable) should be comprehensively assessed when comparing the PPAs to Company ownership.[126]

Yet despite Xcel's arguments that the parties' criticisms failed to view the proposal in a comprehensive manner, Xcel did the exact same thing by comparing MEC to NTEC on a $/kW basis. By doing so, Xcel ignores MEC's variable costs, MEC's variable costs relative to Xcel's other resources, and Xcel's forecasted energy requirements.

Third, to the extent the NTEC case has any relevance, it was noted during that proceeding that one of the major advantages of NTEC was its remarkably lower variable costs; the Department explained that NTEC was much more efficient than the generic CC unit MP used in the IRP modeling, and its variable costs were lower than other CC units in other utilities' IRP models, which could be attributable to technological improvements in newer turbines.[127]

If Xcel's need does not emerge until the 2030s, it is possible that more advanced, efficient combined cycle technology with lower operating costs could be available by that time. It is

[125] Petition, at 16-17.

[126] Xcel reply comments, at 11.

[127] Transcript, 188-191.

worth noting that MEC I is 13 years old already, and historically, its capacity factor has been relatively low compared to Xcel's other CC units:[128]

Date	Mankato I	Black Dog 5/2	High Bridge	Riverside	LS Power-Cottage Grover
2017	21%	26%	34%	38%	11%
2016	27%	44%	40%	57%	17%
2015	14%	34%	37%	62%	10%
2014	11%	17%	19%	24%	6%
2013	18%	18%	36%	33%	13%

In its August 1 letter, Xcel explains that it has the opportunity to acquire a CC resource at a price similar to a CT resource. Even if that were true, the comparison is arguably irrelevant since the effective 2015 IRP does not indicate a need for a CT or a CC with the Sherco CC unit on Xcel's system. If Xcel argues that other nonrenewable resources would be accelerated if the MEC I PPA expires, to borrow a phrase Xcel uses frequently, these resources would be outside of the five-year action plan and can therefore be addressed in a subsequent IRP.

VI. Request for Site Permit Transfer

As part of the acquisition petition, Xcel sought approval to transfer both the MEC I and MEC II site permit issued by the Commission.

A. Site Permit History

On September 16, 2004, the Minnesota Environmental Quality Board issued a site permit for the Mankato Energy Center (MEC) – a two unit, 655 MW natural gas-fired electric power generating plant. Only one unit of the plant was constructed; this unit, MEC I, has been in operation since May 2006. On June 23, 2016, the Commission issued a site permit for the second unit, MEC II. Subsequently, MEC I and MEC II and their associated site permits were purchased by Southern Power Company. At the time of the ownership change, the LLC designations were retained.

B. Relevant Minnesota Rules

To transfer a site permit, a permittee must provide the name of the existing permittee, the name and description of the entity to which the permit is to be transferred, the reasons for the transfer, a description of the facilities affected, and the proposed effective date of the transfer. The entity to which the permit is to be transferred must provide such information as the Commission shall require to determine whether the new permittee can comply with the conditions of the permit. The Commission must approve the permit transfer if the Commission determines that the new permittee will comply with the conditions of the permits. The Commission may impose reasonable conditions on the transfer of the permits.

[128] According to Xcel, the average capacity factor for MEC I from 2010-2018 has been approximately 16%. Also, according Xcel's response to a staff inquiry in the IRP, the MEC I capacity factor has not meaningfully changed since the turbine upgrade.

C. Party Comment on Site Permit Transfer

The Department concluded that Xcel had provided the basic information for a site permit transfer as Xcel has indicated that they will comply with all conditions in the site permits.

The Department also noted the permittee's obligations under the permits, including the on-going compliance with state statutes and rules for all necessary permits for the plant – including the on-going treatment and handling of cooling water and monitoring of operational and meteorological conditions that could result in fogging or icing on local roads. The Department recommended that if the Commission determines that Xcel will comply with the permits' conditions, it should grant the permit transfers.

D. Staff Recommendation

Staff recommends that if the Commission approves the acquisition petition, it should authorize the transfer of the site permits. If the Commission does not approve the acquisition, it should not transfer the site permits at this time as it may be premature to determine the ultimate owner and appropriate permit holder.

E. Decision Alternatives

24. Grant the request to transfer the site permits for the MEC I and MEC II facilities to Xcel Energy and authorize the reissuance of the site permits for the limited purpose of modifying the name of the permittee.

25. Deny the request to transfer the site permits for the MEC I and MEC II facilities.

VII. Purchase by an Unregulated Affiliate

A. Xcel's August 1, 2019 Letter

Xcel continued to support the Transaction and stated, that in light of parties' opposition it will be prepared to defend its position at the Commission's hearing. However the Company stated that, if the Transaction is not approved, then it will purchase the MEC through an unregulated affiliate.

B. Department of Commerce Supplemental Comments

The Department noted that, if Xcel buys the MEC through an unregulated affiliate then, under Minnesota Statutes § 216B.48, subd. 3 (Relations with Affiliated Interest), the Company would need to file an affiliated-interest petition.

The DOC added that, while Commission approval of an affiliated interest agreement is required, the Commission need not rule on a potential affiliate purchase when the petition filed in this proceeding is taken up. Instead, review of affiliated interest issues would take place if and when Xcel files any affiliated-interest petition.

C. OAG Supplemental Comments

If the Commission rejects the Petition, the OAG interprets Xcel's letter as contemplating a phased Merchant Acquisition approach whereby the Company intends to: (1) proceed with an unapproved MEC acquisition from Southern Power; (2) seek FERC approval to transfer MEC to an affiliated subsidiary; and (3) use that affiliated subsidiary to continue Southern Power's obligations to Xcel under the MEC PPAs. The OAG explained that the Commission has both immediate and ongoing regulatory jurisdiction over Xcel's Merchant Acquisition. However, if the Commission rejects the Petition as inconsistent with the public interest, Xcel would be legally prohibited from proceeding with its MEC acquisition under the guise of a Merchant Acquisition. In this sense, if Xcel proceeds as anticipated, the Commission may have a basis to void the Merchant Acquisition *ab initio*.

The OAG suggested that the may wish to require further factual development with regard to the Merchant Acquisition. Such an inquiry is necessary to understand the legal and procedural requirements imposed on Xcel (and/or its affiliate) to effectuate the Merchant Acquisition. Moreover, it would provide greater clarity over both the legal consequences and enforcement options available to the Commission should Xcel proceed with its phased Merchant Acquisition approach without Commission approval. Additionally, the OAG encourages the Commission to maximize the efficacy of its public interest analysis underlying both the Petition and the Merchant Acquisition. To do so, the Commission should, as contemplated by Minnesota Administrative Rules Part 7825.1700, order an expedited independent MEC valuation. Given the disagreement between the Department and Xcel over the Company's modeling, an independent and unbiased market MEC valuation is necessary for the Commission to fulfil its statutory obligation under section 216B.50 to "take into consideration the reasonable value of the property" involved in both the Petition and, although indirectly, the Merchant Acquisition.

D. XLI Supplemental Comments

XLI stated that, assuming Xcel's affiliate assumes the PPAs with no changes to their terms and conditions, the acquisition would not have any impact on ratepayers, because the same terms and conditions of the existing PPAs will still apply.

If the PPAs' terms were to be modified, any such modification would implicate Minn. Stat. § 216B.48, subd. 3 and 6, which require Commission approval of affiliate interest agreements and provide the Commission with continuing authority over the contracts. Furthermore, any rate impacts from PPA modifications would be subject to the standards in Minn. Stat. § 216B.48, subd. 5.

E. Citizens Utility Board Comments

CUB recommended that the purchase not be approved in this proceeding but allow Xcel to seek approval in the IRP proceeding where ownership costs/benefits can be compared to all viable alternatives.

F. Staff Comments

As suggested by the Department, addressing what the Commission may or may not do *if* Xcel purchases the MEC through an unregulated affiliate, should be done after the Company files the required affiliated interest agreement. Staff agrees with the Department and, considering the speculative nature of what Xcel may or may not do, the Commission may not want to address this issue until more facts regarding that theoretical purchase are known.

VIII. Public Comments

Several public comments, mostly from the Mankato area, were filed on the record.

Comments supporting Transaction approval included:

- Greater Mankato Growth described Xcel to be a valuable community partner and looks forward to Xcel's greater presence in the area.
- International Brotherhood of Electrical Workers believes that Xcel ownership will benefit the IBEW's members, the plant's current employees, the Mankato region, Xcel's ratepayers and the State of Minnesota; therefore, they support the purchase.
- Patrick Hentges, Mankato's City Manager described Xcel's proposed purchase as a win for the Mankato region and stated that the City of Mankato supports the Transaction.
- The Mankato Building and Construction Trades Council explained that its Building Trades members built the MEC expansion; however, under currently ownership, there are no agreements in place at MEC to ensure that ratepayer and local communities continue to get the benefit of the same skills and jobs. Since Xcel has committed to utilizing these skilled tradesmen and women for future MEC maintenance, this Council supports the Transaction.
- Jonathan Zierdt, President of Greater Mankato Growth (GMG) described Xcel's belief that it will operate MEC for the life of the plant as critical to the region's continued growth and supports the Transaction.
- Robert W. Meyer, County Administrator for Blue Earth County stated that Xcel ownership will serve the County's communities by reducing carbon emissions and help to meet our energy needs well into the future and offered Transaction support.
- Dr. Annette Parker of South Central College, in supporting the Transaction, highlighted Xcel's commitment to lower emissions and clean energy along with its contributions to the College and the community.
- Randy Farrow, CEO of the Mankato Clinic, stated that Xcel's MEC purchase will ensure continued access to affordable, reliable energy. The Clinic supports the Transaction.

Comments not supporting Transaction approval included:

- Jacob Herbers, a Graduate Research Assistant at the UMN Center for Science, Technology, and Environmental Policy, stated that Xcel's filing side-steps the IRP process and carries significant financial and environmental risks. He asked that the purchase not be approved.
- Mallory Mitchell, Debbie Meister and Anthony Varriano essentially repeated Mr. Herbers' exact comments.

- Mike Kreuset, Ben Allen and John White filed identical comments stating that Minnesota should prioritize reliable and affordable clean energy for all future energy investments which MEC does not. Mr. Kreuset recommended that the Transaction be denied.

Comments not supporting that the Transaction be taken up approval included:

- 814 (self-described) clean energy supporters filed letters expressing concerns regarding MEC's climate change impacts and its $650 million price, stated that we need to do everything so that we can reach 100% renewable energy and recommended that the Transaction be taken up in the IRP.
- Katherine Hamilton, Executive Director for Advanced Energy Management Alliance (AEMA) stated that that grid scale renewable energy can be more effectively and efficiently integrated in a complementary manner with demand side resources, obviating the need for incremental fossil generation; therefore, generation resources should be considered in the larger discussion of resource planning.