

Minnesota Public Utilities Commission

Staff Briefing Papers

Meeting Date: November 16, 2017 **Agenda Item # 2

Company: Northern States Power Company dba Xcel Energy

Docket No. E-002/M-17-532

In the Matter of Petition for Approval of an Amendment to the Hennepin Energy Resource Co. (HERC) Power Purchase Agreement (PPA)

Issue(s): What action should the Commission take on the Petition to extend the HERC PPA?

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Relevant Documents

Xcel Energy, *Initial Filing* (Public and Trade Secret) June 30, 2017
Department of Commerce, *Comments* (Public and Trade Secret) August 2, 2017
Xcel Energy, *Reply Comments* August 14, 2017
Hennepin County, *Reply Comments* August 14, 2017
Alan Muller, *Comments* September 11, 2017
Carol A. Overland, Legalectric, *Comments* September 11, 2017
Hennepin County, *Reply Comments* September 11, 2017
Department of Commerce, *Comments* September 11, 2017
Xcel Energy, *Comments* September 11, 2017
Neighbors Against the Burner, *Intervention* (Late-Filed) September 25, 2017

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I. Statement of the Issue

What action should the Commission take on the Petition to extend the HERC PPA?

II. Procedural Background

On July 30, 2017, Northern States Power Company (NSPM) dba Xcel Energy (Xcel or the Company) filed a *Petition for Approval of Amendment No. 1 to the Power Purchase Agreement with the Hennepin County Energy Recovery Center* (Petition). The Petition was filed pursuant to Minn. Stat. § 216B.1645 (PPA cost recovery) and Minn. Stat. § 216B.164 (qualifying facilities in cogeneration and small power production) and Minn. Rule. 7829.1300 (miscellaneous filings).¹

The Department submitted comments on the HERC Petition on August 2, 2017, followed by reply comments by both Xcel Energy and Hennepin County on August 14, 2017.

The Commission opened a public comment period on August 22, 2017 with the following topics on which to comment:

- If a PPA extension is not approved or otherwise in effect by December 31, 2017, what terms and conditions should govern HERC (Hennepin County Energy Recovery Center) sales to Xcel Energy as of January 1, 2018 until there is a PPA extension in place?
- If the Commission were to ask Xcel Energy and HERC to further negotiate the rates and terms of the PPA extension or to go to arbitration, what specific issues and outcomes should the Commission require be addressed in such negotiations or arbitration?
- Are there other project-related issues or concerns?

The comment period closed September 11, 2017, with the following parties providing comments on the closing date: Alan Muller and Carol A. Overland (Legalelectric); Hennepin County, the Department, and Xcel filed Reply Comments.

On September 25, 2017, Neighbors Against the Burner submitted a late-filed Petition to Intervene.

III. HERC Facility and PPA History

HERC is a waste-to-energy facility, where municipal solid waste is received and burned to generate steam for heating and cooling and generates electric power. The facility converts roughly 365,000 tons of municipal solid waste into electricity and steam annually. According to Xcel's most recent integrated resource plan (the 2015 IRP), HERC has a max capacity of 33.7 megawatts (MW).²

In 1985, Hennepin Energy Resource Co., Limited Partnership entered into an agreement with Hennepin County (the County) to design, construct, own, operate, and maintain a solid waste resource energy facility, subject to HERC negotiating and entering into an electric sales agreement with NSPM.

¹ Xcel Energy, *Initial Filing* at 1.

² Docket No. RP-15-21, Appendix J, at 21.

On July 29, 1986, the Commission approved the settlement agreement³ (the 1986 Order). The Commission determined in its 1986 Order that the rates for capacity, energy, excess energy and high capacity factor energy fairly approximated the costs NSPM would avoid through the output from the HERC facility.⁴

The HERC PPA began in January 1990 with a 28-year term, which ends December 31, 2017. Importantly, the contract includes a seven year extension **at Hennepin County’s option at “fair market value.”** (Emphasis added.) Fair market value is not a defined term, however, and the agreement contemplates arbitration if the parties cannot agree on an extension price.

Xcel’s proposed contract amendment—Amendment No. 1—extends the current PPA seven years (to December 31, 2024), but at a lower overall cost using a new “all-in” pricing structure.

IV. Xcel Energy’s Petition

A. Revenue Requirement Impact

As mentioned, the HERC PPA expires on December 31, 2017 but allows a seven-year extension at Hennepin County’s option. Xcel and the County began negotiations to extend the existing PPA in May 2015 and came to an agreement with the County in June 2017.⁵ Amendment No. 1 was signed by both parties on June 29, 2017. (Amendment No. 1 is included as Attachment A of Xcel’s June 30, 2017 Petition.)

If approved, Xcel estimates customer savings of \$27 million in Net Present Value (NPV) terms (\$33 million nominally).⁶ The Company shows the annual revenue requirement impact in Table 1 of the Public version of its petition:

Table 1: Revenue Requirement Impact

	Current PPA Costs Total NSPM (\$ mil)	Proposed Transaction Costs Total NSPM (\$ mil)	Difference Total NSPM (\$ mil)	Change in Revenue Requirement for MN Jur Net of I/A (\$ mil)
	<i>[PROTECTED DATA BEGINS]</i>		<i>[PROTECTED DATA BEGINS]</i>	
2018		7.34		(3.72)
2019		7.56		(3.64)
2020		7.78		(3.56)
2021		8.02		(3.47)
2022		8.26		(3.38)
2023		8.50		(3.28)
2024		8.76		(3.18)
	<i>PROTECTED DATA ENDS]</i>		<i>PROTECTED DATA ENDS]</i>	

³ Docket No. E002/CI-86-176.

⁴ Xcel Energy, *Initial Filing* at 5.

⁵ Hennepin County, *Reply Comments* (August 14, 2017) at 1.

Were Xcel to continue with the established pricing structure for the next seven years, the estimated costs would amount to \$72 million (using historical production data), while the new structure has estimated costs of \$45 million (\$72m - \$45m = \$27 million in claimed savings). Xcel acknowledged the “pricing is somewhat higher than current market estimates for energy and capacity, [but] it is reflective of recent agreements the Company has entered into.”⁷

B. Cost Recovery and the “All-in” Pricing Structure

Xcel seeks the Commission’s approval to continue recovering its costs pursuant to Minn. Stat. § 216B.1645 through the FCA. This is the cost recovery mechanism used in the contract’s current form. According to the Company, the Petition is similar to other PPA amendments or extensions submitted previously, and, since the underlying premise of the agreement remains in place, the recovery method need not change.⁸

According to Xcel, the proposed Amendment No.1 presents a new, “simplified” pricing structure. The original contract includes both energy and capacity payments. The energy charge is based on actual production costs at Sherco 3, which is subject to a formulaic pricing scheme whereby more value is ascribed to volumes delivered for on-peak hours. The capacity payment, which is adjusted annually, includes a \$ per-kW-month capacity charge.

Xcel proposes to replace this formulaic pricing structure with one that incorporates capacity and energy components into an “all-in,” energy-only pricing structure. According to Xcel, this is an incentive-based structure, since it “provides proper incentives to HERC to maintain the facility and provide reliable energy.”⁹

Xcel calculated there is an approximate \$8 million reduction in demand charges resulting from shifting these costs to the FCA.¹⁰ Xcel explained that in its recently approved rate case (Docket No. E002/GR-15-826), the Company’s demand charge assumptions for 2017 included the HERC PPA. Of note, 2017 is the only year impacted by this change since that is the year the contract was originally scheduled to end.¹¹

The capacity payment has, according to Xcel, allowed HERC to be “paid a significant amount of money ...regardless of actual MWh output at the facility.”¹² This is one reason Xcel believes it is reasonable to transition to a performance-based approach under which HERC will only be paid for delivered energy. With this structure, not only is the risk shifted to HERC, but Xcel ratepayers will not be paying HERC when it underperforms or has an outage.

As will be discussed further below, the Department recommended that the energy-related costs should be recovered through the FCA and demand charges should be recovered through base rates. Xcel opposes this recommendation. According to Xcel, the “all-in” pricing structure “has generally been encouraged by the Commission,” and it would “alter the recovery policy for these contracts by dividing the components into different recovery mechanisms.”¹³

C. Fair Market Value

⁷ Xcel Energy, *Initial Filing* at 7.

⁸ *Id.* at 9.

⁹ Xcel Energy, *Reply Comments* (August 14, 2017) at 3.

¹⁰ Xcel Energy, *Initial Filing* at 6.

¹¹ Xcel Energy, *Initial Filing* at 6.

¹² Xcel Energy, *Initial Filing* at 7.

¹³ Xcel Energy, *Reply Comments* (August 14, 2017) at 4.

As noted above, the contract includes a seven-year extension at Hennepin County's option at fair market value, with fair market value not being a defined term. A large share of this briefing paper is devoted to fair market value, but briefly, the Department concluded that Xcel was not able to negotiate a price at fair market value. The Department used as a basis for comparison Xcel's market energy price forecast, which Xcel used in their Petition to Terminate the Pine Bend PPA (Docket No. 17-531). Xcel believes comparing the proposed contract to forecasted market prices should not be the deciding factor when evaluating the HERC Agreement No. 1.

It should be noted that, while the Department initially recommended arbitration in its August 2, 2017 Comments, Xcel and the Department were able to resolve disputes as the proceeding progressed. In fact, it seems the only dispute between Xcel and the Department at this time pertains to the Department's recommendation to refund the FCA with a \$5 per kW-month capacity value for any extension period that would occur if Amendment No.1 is not approved by the Commission. That is, any time after January 1, 2018 until the Amendment No.1 is in effect.

I. Summary of the Parties' Comments

A. Department of Commerce

The Department initially recommended in its August 2, 2017 comments that the Commission take no action on the Petition – so that parties proceed to arbitration – and order Xcel to file arbitration proceedings as compliance filings to this docket. According to the Department, under the negotiated agreement, “HERC and Xcel would be better off under this proposal, but Xcel's ratepayers would end up with significant and unreasonable cost increases.”¹⁴ The Department arrived at this conclusion in part because “the Petition admits both that the 1) negotiated prices are too high and 2) Xcel is unable to negotiate contract prices that reflect market prices.”¹⁵

One of the Department's primary concerns was that Xcel's claimed ratepayer savings of “approximately \$27 million (\$33 million nominally) over the life of the PPA”¹⁶ is incorrect and does not provide a proper determination of actual ratepayer savings. First, the pricing structure for 2017 will actually represent a significant rate increase, the Department argued, due to a double recovery of demand costs. Additionally, Xcel estimates the cost savings by comparing the existing terms to the negotiated extension terms. This, the Department argues, is irrelevant, and ratepayer savings should instead compare the PPA price to the market value.

The Department asserted that without including the demand charges to the proposed “all-in” price, the actual 2017 cost of the HERC PPA cannot be known. The Department calculated the average annual energy production from the HERC PPA for years 2007 to 2016 using Federal Energy Regulatory Commission (FERC) Form 1 data reported by Xcel, determining the amount to be about 192,000 MWh.¹⁷ The Department then found the demand charges already built into Xcel's rates are about \$41.67 per MWh.¹⁸ Therefore, according to the Department, “Xcel negotiated a structure that would allow the Company to charge ratepayers twice for the same component (the capacity).”¹⁹ Adding the demand charge to the proposed per MWh price is then

¹⁴ Department, *Initial Comments* (August 2, 2017) at 6.

¹⁵ *Id.* at 5.

¹⁶ Xcel Energy, *Initial Filing* at 1.

¹⁷ Department, *Initial Comments* (August 2, 2017) at 4.

¹⁸ *Id.*

¹⁹ *Id.*

more costly than historical HERC pricing, which included the additional energy and capacity charges.²⁰

For these reasons, the Department concluded that Xcel's proposed ratepayer cost for 2017 is unreasonable.

As noted above, the Commission's August 22, 2017 Notice sought comment on what terms and conditions should govern HERC sales to Xcel as of January 1, 2018 if a PPA extension is not approved or otherwise in effect by December 31, 2017. In its Reply Comments, the Department recommended that the Commission use the price and terms of the HERC PPA as modified by Amendment No. 1, since these terms have been negotiated and agreed to by Xcel and HERC.²¹ Moreover, these terms provide a reasonable benchmark until the terms of a PPA extension are approved by the Commission.²² Additionally, the Department recommends approval of the terms of Amendment No. 1 subject to the condition that the Commission require Xcel to credit Minnesota ratepayers with a \$5 per kW-month credit to the FCA. This condition shall apply to HERC sales to Xcel as of January 1, 2018 until there is a PPA extension in place. The \$5 per kW-month credit will be explained in further detail later in this section.

Regarding what specific issues and outcomes the Commission should require to be addressed in negotiations or arbitration, the Department recommends that further negotiations or arbitration be limited to defining the term "fair market value to NSP at the time it is offered" and establishing the price to be paid during the seven-year extension period.

As stated previously, fair market value is not a defined term. Both Xcel and the County voiced significant concerns that an arbitrator could have a completely different view of fair market value than what was negotiated by the parties. Xcel argued, "an arbitrator could determine that "fair market value" means something significantly higher than the price reflected in our current petition. Our negotiated resolution—if approved by the Commission—avoids that risk and should be evaluated in that light."²³

In the Company's Reply Comments, Xcel agreed to crediting the FCA to address the Department's concern regarding double recovery. Xcel explained, "should the Commission agree with the Department, we can net approximately \$6.2 million (Minnesota jurisdiction) out of our fuel clause adjustment (FCA) recovery in 2017, which should alleviate any concerns regarding "double recovery."²⁴

In the Department's Reply Comments, the Department agreed with Xcel that "avoiding binding arbitration is a reasonable goal"; however, it was qualified by stating "avoiding binding arbitration is not a goal to be pursued at any price."²⁵ In the end, the Department believed Xcel's willingness to net approximately \$6.2 million (Minnesota Jurisdiction) out of the FCA recovery in 2017 to address concerns regarding double recovery demonstrated significant progress toward a reasonable end. Therefore, the Department recommended the Commission approve the Petition as revised by Xcel to include a \$6.2 million (Minnesota Jurisdiction) credit to the FCA. However, if Amendment No. 1 is not in place beginning January 1, 2018, the Department recommends the Commission require Xcel to credit Minnesota ratepayers with a \$5

²⁰ *Id.* at 4.

²¹ Department, *Reply Comments* (September 11, 2017) at 2.

²² *Id.*

²³ Xcel, *Reply Comments* (August 14, 2017) at 2.

²⁴ Xcel, *Reply Comments* (August 14, 2017) at 4.

²⁵ Department, *Reply Comments* (September 11, 2017) at 4.

per kW-month credit to the FCA until there is a Commission-approved PPA Amendment in effect.

The Department's comments will be discussed further below, with a more granular look at the issues it presented.

Cost Recovery under Minn. Stat. § 216B.1645

Xcel filed its Petition pursuant to Minn. Stat. §§ 216B.1645 (Power Purchase Contract or Investment). According to Minn. Stat. § 216B.1645, subd. 2a. (Cost recovery for utility's renewable facilities):

(a) A utility may petition the commission to approve a rate schedule that provides for the automatic adjustment of charges to recover prudently incurred investments, expenses, or costs associated with facilities constructed, owned, or operated by a utility to satisfy the requirements of section 216B.1691.

The Department argued that, since renewable energy credits (RECs) are not provided to Xcel under the HERC PPA, Minn. Stat. § 216B.1645 does not apply to this Petition. As such, the Department recommends the HERC PPA, Amendment No. 1, cannot be used for RES compliance under Minn. Stat. § 216B.1645 and as defined in the Commission's 2010 Order from Docket E002/M-08-440 (commonly known as the "Silent REC docket"). The Department recommends the Commission "determine that the HERC PPA is not needed by Xcel for compliance with Minnesota's renewable energy standard."²⁶

In the Commission's September 9, 2010 *Order Determining Ownership of Renewable Energy Credits for Power Purchase Agreements Made Pursuant to State Wind and Biomass Statutes and the Federal Public Utility Regulatory Act* (Docket No. E002/M-08-440), the Commission determined that "avoided cost rates for capacity and energy sold under contracts entered into pursuant to PURPA [Public Utility Regulatory Policies Act] do not convey renewable energy credits to the purchaser of the energy."²⁷ Because the purchaser (Xcel) will not own the RECs, the Department determined:

[I]t cannot be said that the HERC PPA was "made by the utility to satisfy the wind and biomass mandates contained in sections 216B.169, 216B.2423, and 216B.2424, and to satisfy the renewable energy objectives and standards set forth in section 216B.1691." Therefore, based upon the 2010 Order the Department concludes that Minnesota Statute § 216B.1645 does not apply to the Petition.²⁸

Given this interpretation of the Commission's 2010 Order, the Department determined that HERC PPA expenditures may not be recovered through Xcel's renewable energy rider.²⁹

The Department also noted, "the capacity value is an important feature of the HERC PPA, was priced separately in the past, and Xcel offers no compelling evidence that capacity has suddenly

²⁶ Department, *Initial Comments* (August 2, 2017) at 8.

²⁷ *Id.* at 2.

²⁸ *Id.*

²⁹ *Id.* at 8.

lost value.”³⁰ Thus, the Department recommends crediting the FCA, beginning January 1, 2018 during an extension period (before Amendment No. 1 is in effect), using the avoided capacity cost of generic combustion turbine, or \$5 per kW-month.³¹

The Company opposed the Department’s recommendation. Xcel argued that cost recovery is currently occurring through the FCA pursuant to Minn. Stat. § 216B.1645. Moreover, Xcel argued recovery through the FCA is (1) consistent with the Company’s interpretation of costs that are permissible to recover through the FCA and (2) consistent with recovery of other similar PPAs in their portfolio.³² Xcel believes that, as it pertains to cost recovery, the HERC facility is similar to wind, solar and other existing biomass facilities because it is offered to the market as a must-run unit, so the pass-through of costs similar to wind, solar, and biomass PPAs makes sense in this case as well.³³

In its September 11, 2017 Reply Comments, the Department replied to this characterization by arguing that if the HERC facility is treated as a baseload unit, the same cost recovery treatment should apply in this case:

wind and solar contracts are renewable and only a fraction of the installed capacity is counted towards reliability needs. The HERC Power Plant is not renewable and has the full unforced capacity (UCAP) value counted towards reliability needs. Further, the Department notes Hennepin County’s argument that the HERC PPA should be considered to be a baseload unit (not an interruptible wind or solar unit).³⁴

To Xcel’s argument regarding how the recovery costs of the HERC facility are currently included in the FCA, the Department noted:

The Department presumes such recovery has occurred is because Minnesota Rules 7825.2600 states that “the adjustment per Kwh is the sum of the current period cost of energy purchased and cost of fuel consumed per Kwh less the base electric cost per Kwh.” The cost of energy purchased is defined by Minnesota Rules 7825.2400 as “the cost of purchased power and net interchange defined by the Minnesota uniform system of accounts, class A and B electric utilities, account 555 and purchased under federally regulated wholesale rates for energy delivered through interstate facilities.”³⁵

Given this, “the Department recommends that the Commission approve continued recovery solely of the HERC PPA’s energy-related costs through the FCA, and the capacity related costs through base rates” so as to keep from double recovery of capacity costs.^{36, 37}

Amendment No. 1 Pricing Terms

When the Department compared the proposed “all-in” price to Xcel’s forecast of MISO market prices, taken from the Company’s Petition to Terminate the Pine Bend PPA (Docket No.

³⁰ Department *Reply Comments* (September 11, 2017) at 5.

³¹ *Id.*

³² Xcel Energy, *Reply Comments* (August 14, 2017) at 4.

³³ *Id.*

³⁴ Department *Reply Comments* (September 11, 2017) at 4.

³⁵ Department, *Comments* (August 2, 2017) at 8.

³⁶ *Id.*

³⁷ Department, *Reply Comments* (September 11, 2017) at 5.

E002/M-17-531), it confirmed Xcel's statement made in its HERC Petition that "the proposed extension pricing is somewhat higher than current market estimates for energy and capacity."³⁸ Given the higher-than-market proposed price, the Department initially recommended taking no action on Xcel's Petition, which, as explained, was a different recommendation than its recommendation in its Reply Comments.

The Department takes note in its Reply Comments that the seven-year extension period is at Hennepin County's option and at "fair market value." Further, the Department agreed with Xcel, to an extent, that further negotiations or arbitration could create uncertainty with regard to the definition of "fair market value."

Resource Planning Impacts

The Department reviewed the modeling files from the resource plan to provide a thorough assessment of resource planning impacts. According to the Department's analysis, "extending the life of the HERC PPA unit to December 2024 is equivalent to reducing the forecast for the years 2018 to 2024."³⁹ Moreover, the Department found that "the resource plan analysis already analyzed contingencies with a similar, but far larger impact. Since the Department's recommended expansion plan already considered a far lower forecast, extension of the HERC PPA should not be expected to materially impact the Department's recommended expansion plan from Xcel's last resource plan."⁴⁰

Avoided Costs

Addressing comments by Hennepin County that avoided costs are not included in its analysis, the Department examines line losses and compares the HERC PPA price to Xcel's forecasted locational marginal prices (LMP) as the LMP data contains an adjustment for the value of line losses.⁴¹ While the Department agrees that replacement power for the HERC PPA could require new transmission infrastructure, it uses two facts to underscore how unlikely that would be:

1. At the system level and at the time this offer has been made to Xcel, Minnesota typically has trapped energy and capacity—that is, more energy and capacity than can be exported by current transmission network. This fact means that extending the life of the HERC Power Plant might create transmission costs because more energy and capacity will be required to exit Minnesota. The more power that must be exported from Minnesota, the more is the need for transmission to carry that power.
2. At the Company level there is no necessity for a new resource if Xcel has surplus capacity on the Company's system available to replace the capacity and energy from the HERC PPA. The Department references Xcel's Petitions in Docket No. E002/M-17-530 where the utility states that their system forecasts sufficient capacity through most of the remainder of the contract. The Department locates similar assertions in Docket Nos. E002/M-17-531 (pages 7 to 8) and E002/M-17-551 (pages 12 to 13) "where Xcel argues that the Company has no need to replace lost resources until

³⁸ Xcel Energy, *Initial Filing* at 7.

³⁹ Department, *Comments* (August 2, 2017) at 9.

⁴⁰ Minnesota Rules 7825.2600, subp.2 <https://www.revisor.mn.gov/rules/?id=7825.2600>

⁴¹ Department, *Reply Comments* (September 11, 2017) at 3.

major units shut down, which would be around the end of the HERC PPA extension period.”⁴²

The Department finds “there are no avoided transmission infrastructure costs attributable to the HERC PPA”, but “extending the HERC PPA might create transmission costs.”⁴³

Other Contract Terms

The Department approves a few changes that Amendment No. 1 proposes, including the generator capacity testing process as it “would move towards use of the MISO process established in MISO’s tariffs and business practices manuals.”⁴⁴ Followed by a change to the agreement term clarifying that Hennepin County has exercised the extension option and that further extensions would be voluntary on the part of both parties.⁴⁵

ii. Staff Comment on an Arbitrator’s Definition of Fair Market Value

As noted on page 7 of briefing papers, Xcel mentioned the risk ratepayers might face in the event an arbitrator determines that fair market value means something significantly higher than the price reflected in the Petition. The Department agreed but noted that avoiding binding arbitration is not a goal to be pursued at any price.

Staff disagrees with the assumption that an arbitrator can remove the Commission’s statutory responsibility to review PPAs to ensure reasonable rates. The Commission has previously found that on matters under its jurisdiction, arbitration clauses in contracts do not alter its authority. For example, in a REC ownership docket involving Xcel and a number of PPAs previously approved by the Commission, the Commission found in its Order that it still retained the authority to decide matters within its jurisdiction (in that docket, REC ownership):

The decision as to who owns the RECs, therefore, cannot be delegated to contractual arbitration clauses agreed upon without anticipation of these subsequent statutorily-created regulatory credits. Parties lack the authority to remove the issue of REC ownership from the regulatory process.

Finally, Xcel’s costs are ultimately borne by the Minnesota ratepayers, and the Commission is charged with protecting ratepayer interests. The Commission will therefore proceed to address the issues raised herein.⁴⁶

The Commission in that order reasoned that REC ownership was a public interest issue central to energy regulatory policy. Similarly here, the setting of reasonable rates is the Commission’s core function and grounded in numerous statutes. Staff believes that authority cannot be delegated away to an arbitrator.

Staff notes that in that 2008 docket, it was Xcel who argued that arbitration provisions in previously approved PPAs did not apply:

⁴² Department, *Reply Comments* (September 11, 2017) at 3 and 4.

⁴³ *Id.*

⁴⁴ Department, *Comments* (August 2, 2017) at 7.

⁴⁵ *Id.*

⁴⁶ Commission Order, Docket 08-440, Issued September 9, 2010, at 4-5.

Some Generators argue that even if the Commission has jurisdiction...this jurisdiction is waived...or usurped by the dispute resolution provisions contained in many of the PPAs. Some Generators point to arbitration provisions contained in their respective PPAs that contain language that requires arbitration of any disputes that arise out of or relate to the agreement...When viewed through the Commission's authority to interpret and implement the State's energy statutes and policies, the contract dispute resolution provisions do not apply.⁴⁷

At a minimum, the current record in this docket does not contain enough support for the Commission to officially conclude that it has lost the authority to determine a reasonable PPA price if the matter went first to an arbitrator. While staff is not recommending arbitration, staff wished to correct the record on past decisions the Commission has made relating to its authority and arbitration.

B. Hennepin County

Mr. David J. Hough, County Administrator, submitted Comments on behalf of Hennepin County on August 14, 2017 and Reply Comments on September 11, 2017, both in support and approval of Xcel's Petition. Hennepin County is a party to the PPA as Hennepin Energy Resources Co., Limited Partnership assigned all rights and obligations of the PPA (and Agreement No. 1) to the County.

In their initial comments, Hennepin County addresses the Department's suggestion of arbitration and then focuses on areas they felt the Department was incorrect or misinformed in their analysis of the Petition.⁴⁸ The following four points are shared:

1. The Department fails to consider that HERC is an important community resource;
2. The Department fails to consider avoided costs associated with HERC's strategic location;
3. The Department incorrectly argues that Xcel will benefit from double recovery, and
4. The Department fails to consider the implications of arbitration.⁴⁹

Hennepin County designates HERC as a special resource to the community since its opening in 1990. The facility has burned over 365,000 tons of garbage into electricity and steam. This steam is sent to Target Field and the downtown close loop, while also providing snow melt for the entire pedestrian surface area of the Target Field Station light rail transit platform.⁵⁰

According to the County, many avoided costs are not considered in the Department's analysis, which, the County believes, elevate HERC as a resource. Hennepin County highlights the benefit of HERC's location in "Xcel's highest load density area" as there is little to no transmission need – a big cost savings – that also means lower transmission losses.⁵¹ The Network Integrated Transmission Service (NITS) is referenced and said to be one of the fastest growing portion of utility rates. Due to HERC not needing much if any transmission, it has an advantage against distant wind or solar as it won't add to NITS rate increases.⁵²

⁴⁷ Docket No. 08-440, Xcel Energy, *Reply Comments* (July 9, 2008).

⁴⁸ Hennepin County, *Reply Comments* (August 14, 2017) at 1.

⁴⁹ *Id.* at 3.

⁵⁰ *Id.*

⁵¹ *Id.* at 4.

⁵² *Id.*

Next, Hennepin County supports Xcel's position to remove the HERC capacity value component in base rates and credit the FCA to eliminate any opportunity for double recovery.⁵³

Lastly, the County opposes the Department's recommendation that Xcel and Hennepin County pursue arbitration to set prices for the PPA. Both parties prefer negotiations to save money and valuable time. Hennepin County refers to Minn. Stat 216B.164, subd 4(b):

The qualifying facility shall be paid the utility's full avoided capacity and energy costs as negotiated by the parties, as set by the commission, or as determined through competitive bidding approved by the commission.⁵⁴ (Emphasis added by commenter.)

The negotiated PPA takes into consideration HERC's centralized location and baseload energy when deeming a fair market value for Xcel ratepayers.⁵⁵

HERC has many advantages that are missed in the Department's pricing analysis that Hennepin County addresses. Since HERC generally operates at a 70% capacity factor, Hennepin County asserts that it should be considered more of a baseload unit and, therefore, compared to other resources with similar operating characteristics instead of wind or solar, which both have lower capacity factors (42% and 16% respectively).⁵⁶ "As a non-energy expert, [the] arbitrator will examine the same pricing factors already considered in negotiations, it is very possible that arbitration may result in an arbitrated price higher than the negotiated price with a corresponding higher burden on ratepayers."⁵⁷

In their Reply Comments, Hennepin County wishes to share their strong support of the negotiated PPA terms. "The Commission should be comforted by the fact that the negotiated agreement was thoroughly deliberated over a two year period and that the result is appropriate considering HERC's baseload electrical production located in the center of Minnesota's highest electrical demand."⁵⁸ If the Commission elects to send the PPA parties to arbitration, they will do so "expeditiously."⁵⁹

iii. Staff Comment on Transmission Costs and Comparable Generation

As mentioned above, the County noted that the strategic location of the HERC facility reduces transmission losses and requires almost no transmission for outlet. The County also referenced Xcel's rate case (Docket No. 15-826) and explained that transmission costs as measured by the NITS were projected to increase by 20% between 2015 and 2018.⁶⁰ This increase, the County argued, places HERC output "at a strong strategic advantage to the output of remote wind resources."⁶¹

In resource planning and wind acquisition dockets, the Strategist model adds costs for wind integration, transmission congestion, and line losses. In addition, it is common in Xcel's wind PPAs that the seller is responsible for all interconnection, electric losses, transmission and

⁵³ *Id.*

⁵⁴ Hennepin County, *First Reply Comments* (August 14, 2017) at 5.

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ *Id.*

⁵⁸ Hennepin County, *Second Reply Comments* (September 11, 2017) at 1.

⁵⁹ *Id.*

⁶⁰ Hennepin County, *Reply Comments* (August 14, 2017) at 3.

⁶¹ *Id.*

ancillary service arrangements, and costs required to deliver renewable energy from the facility to the point of delivery. Therefore, Xcel's resource planning and procurement proceedings account for the grid costs of wind, which are inversely related to the grid benefits the County references for the HERC facility; in these proceedings, wind has still been determined to be a least-cost resource. Besides, as the Department's comments, and Ms. Overland did as well, it is disputable whether or to what extent the HERC facility actually has a transmission benefit—according to the Department, due to the possibility for trapped energy, the HERC facility may actually create transmission costs.

Still, it is important that these assumptions are accurate and verifiable. With this being said, the applicability of the NITS rate for this case, when used to compare the HERC facility to other generation resources, is unclear. For example, the citation the County refers to is an Information Request response from Xcel that provided the actual and estimated MISO Schedule 9 Network Service Rate for Zone 16. Xcel explained in its response how this transmission rate is embedded in the Class Cost of Service (CCOSS) information for determining retail rates. However, if the County is correct, and Xcel is using improper assumptions, this should be resolved moving forward. For instance, Xcel currently has a pending request for approval of a roughly 300 MW Dakota Range wind project, which is located in the type of "remote area" to which the County refers. But, as a preliminary matter, and to not re-litigate issues between the Chamber of Commerce and Xcel from the Company's rate case, the Commission could simply ask Xcel, if it is inclined, how the NITS rate is applicable in this case or how it has been accounted for in recent or pending wind acquisition petitions before the Commission.

Regardless, the County argued that renewable energy is not comparable to the HERC facility, due to the low capacity factor of renewable energy resources like wind and solar. Staff is unaware what the historical and projected capacity factor is for the HERC facility on an annual basis—the County stated that 70% is typical.

First, if it is the case that the HERC facility provides stable, reliable energy at 70% capacity factor, this begs the question why Xcel needs to provide an incentive-based "all-in" pricing structure. Second, according to Xcel's wind acquisition docket, the Company's recently approved wind facilities are projected to have higher capacity factors than some of its natural gas combined cycle units, such as High Bridge and Riverside.⁶² Such units would operationally act more like a baseload unit than a renewable resource, but the capacity factor can be much lower than wind facilities. So it is not clear exactly why a facility's capacity factor should be the benchmark for a comparable facility or why it should factor into setting market value, in part because the capacity factor is dependent upon a number of different conditions.

C. Alan Muller

Mr. Muller is a Red Wing resident providing comments in opposition of Xcel's Petition due to many concerns including: air quality, general community opposition to HERC, and it being contrary to state policy (i.e. not clean power), etc.

"[G]arbage burners are very dirty electricity sources, in terms of both climate forcing emissions and health-damaging regulated air pollutants," Mr. Muller shares and "continued purchase of these dirty electrons is contrary to declared Minnesota public policy, and Xcel's claims to be an environmentally clean and responsible utility."⁶³ To underscore this, Mr. Muller references air

⁶² Docket No. 16-777, *In the Matter of Xcel Energy's Petition for Approval of 1,550 MW of Wind Generation*, Xcel Response to MPUC Information Request No. 8 (April 24, 2017), Attachment A, Page 1 of 1.

⁶³ Alan Muller, *Comments* at 1.

permit information⁶⁴ that reportedly expired on May 14, 2003, meaning that HERC has been operating without an air permit.

Mr. Muller also examines the last known year – 2015 – of HERC’s emission records from MPCA’s emissions inventory and notes the reported emissions as: “84,000 pounds of carbon monoxide, 15 pounds of lead, 980,000 pounds of “Nox” [nitrogen oxide], 20,000 pounds of SO₂ [sulfur dioxide], and 44,000 pounds of “PM-10” particulate matter.”⁶⁵

Mr. Muller cites the Department’s comments where it summarizes the Commission’s September 9, 2010 Order in Docket No. E002/M-08-440 concluding that Minn Stat. § 216B.1645 – PPA agreements to meet wind or biomass mandates – does not apply in scenarios where a PPA is obligated due to it being a qualifying facility under PURPA as the renewable energy credits from the facility do not go to the utility.⁶⁶ “This emphasizes,” Mr. Muller continues, “that there are no regulatory or public policy reasons to favor garbage burner electrons, or to justify subjecting Xcel’s ratepayers to above-market costs.”⁶⁷

Mr. Muller further questions why Xcel proposes an “all-in” price instead of energy and capacity separately, as it seems these should remain disaggregated given that it’s baseload energy and not renewable.⁶⁸ Mr. Muller agrees with the Department that Xcel’s “all-in” price isn’t favorable as the capacity component should not be included in base rates.

In their comments, the Department provides and compares HERC’s cost estimates to the MISO market, which Mr. Muller determines – without knowing the trade secret details – are \$68 MWh vs \$34 MWh over the same time period. “If, per statute, we use recent prices for “least cost renewables” the difference would be even more striking.”⁶⁹ He attests that Xcel is aware that HERC’s power is among the most expensive on its system and that “ratepayers should not be required to subsidize dirty and undesirable sources.”⁷⁰

Mr. Muller is in disagreement with Hennepin County’s confidence that HERC is an ‘important community resource’ and, in fact, people actually consider HERC to be “an extremely detrimental facility,” especially those who “smell the smells and breathe the emissions.”⁷¹ His preference would be to employ much cleaner and cheaper sources of renewable energy, such as wind or solar.⁷²

Mr. Muller also expressed dissatisfaction regarding the fact that the PPA pricing details were designated as trade secret. “I see no justification for this and it deprives ratepayers of the ability to understand the rate implications of PPAs. The commission should strive for greater transparency in this aspect of its work.” Further, Mr. Muller claimed there was no explanation regarding the trade secret designation.

Mr. Muller concludes his comments with “since the continued operation of the HERC is not in the public interest, the Commission should seek to create disincentives for continued operation”

⁶⁴ AIR EMISSION PERMIT NO. 05300400 – 003: <https://www.pca.state.mn.us/sites/default/files/05300400-003-aqpermit.pdf>

⁶⁵ Alan Muller, *Comments* at 3.

⁶⁶ *Id.* at 2.

⁶⁷ *Id.*

⁶⁸ Alan Muller, *Comments* at 2.

⁶⁹ *Id.* at 3.

⁷⁰ *Id.*

⁷¹ *Id.*

⁷² *Id.*

and suggests the Commission “carefully consider the health and environmental consequences of decisions in this matter.”⁷³

iv. Staff Comment on Trade Secret Designation and “Least-Cost Renewables”

One of Mr. Muller’s concerns was that some parties are disadvantaged in this proceeding by a lack of access to PPA pricing terms. Staff appreciates the concern of those who do not have access to proprietary information; certainly one can understand the difficulty of addressing ratepayer impacts with only a vague idea of what exactly the costs are. However, in its Petition, Xcel did reference the statute under which data could be designated as trade secret, and the Company did explain its reasons for doing so. Specifically, Xcel explained:

This Petition includes information the Company considers to be trade secret data as defined by Minn. Stat. § 13.37(1)(b). The information derives independent economic value from not being generally known or readily ascertainable by others who could obtain a financial advantage from its use. Thus, Xcel Energy considers this nonpublic data.⁷⁴

The language Xcel uses regarding “independent economic value” is taken directly from Minn. Stat. § 13.37(1)(b). The statute allows trade secret designation that protects “economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use.”⁷⁵

“Independent economic value” concerns could apply to both Hennepin County and Xcel in this case. For instance, presumably the County would not want external parties to know or be able to derive the negotiated price at which it agreed to sell electricity to Xcel, among other terms. For Xcel, revealing negotiated contractual agreements for possible consumption by independent power suppliers may affect future negotiations, which could, in turn, affect price and offer terms unfavorable to Xcel’s ratepayers. Xcel explained this in greater detail in its November 2017 Fuel Clause Adjustment report:

If suppliers know the details of Xcel Energy’s energy cost forecast or other contract prices, they may be able to use this knowledge to fashion bids or price quotes to Xcel Energy for purchased energy. These bids may be competitive with other supply options, but at a price higher than the best price the supplier can offer or the current market price. Competitors may also be able to leverage knowledge of Xcel Energy’s costs and/or supply needs through the details of the energy cost forecast to gain a competitive advantage by negotiating slightly better prices from a supplier or from Xcel Energy. Such results would harm Xcel Energy and its customers.⁷⁶

For these reasons, staff does not agree the trade secret designation of the HERC PPA pricing terms reflects a lack of transparency on the Commission’s part in this case. With this being said, Mr. Muller’s concern is certainly valid, and the trade secret status of PPAs and other wholesale pricing is an issue in a pending contested case. The Commission may revisit this in the future.

⁷³ *Id.* at 4.

⁷⁴ Xcel Energy, *Initial Filing* at 2.

⁷⁵ Minn. Stat. § 13.37(1)(b).

⁷⁶ Docket No. E002/AA-17-780, Xcel Energy Fuel Clause Adjustment Filing (October 31, 2017) at 2.

Other sections of this briefing paper will address many of Mr. Muller's concerns in more detail. But first, one issue the Commission might wish to consider is the relationship to—in Mr. Muller's words—least-cost renewables. For instance, one could ask why the primary resource Xcel will acquire in the near-term to deliver its energy, wind, is *not* used to assess comparable market value. To be clear, staff takes no position on this matter, and Xcel, the County, and the Department all agree that wind is not directly comparable to the baseload HERC facility.

Setting aside for the moment the baseload versus intermittent resource issue, wind is the only energy resource, aside from some solar, that Xcel actually intends to procure during the HERC PPA extension period. While the staff discussion of the resource plan later in this briefing paper will continue this point further, it is worth noting as a preliminary matter that Xcel's resource plan has no new baseload in it, including the HERC PPA, which was assumed to expire in December 2017. (In other words, extending the HERC PPA is actually inconsistent with the resource plan.) With or without HERC, Xcel's resource plan is exactly the same, which may lead one to ask why the market value for capacity and energy should reflect a baseload unit, when no such unit will exist under any circumstance except under this requested extension.

More directly to Mr. Muller's point, Xcel's new wind was indeed the least-cost resource addition over the extension period. In fact, in Xcel's recent 1,550 MW Wind Acquisition Docket (Docket No. 16-777), the Company used an initial screen that only considered wind projects below a levelized cost of energy (LCOE) of \$22/MWh or less. And in that docket, the economic analysis Xcel provided showed that the greatest financial benefit was not avoided market purchases, it was revenues sold into the market, followed next by avoided dispatch of higher-cost generating resources. This means there are many periods of time where the generation on Xcel's system greatly exceeds its native load serving requirement. So this begs the question of whether or to what extent Xcel's seven-year capacity and energy position should be accounted for when defining fair market value.

D. Carol A. Overland, Legalectric, Inc.

Ms. Carol A. Overland provided comments on September 11, 2017 that were generally in support of saving ratepayer money, but opposed to the process of the Petition. She brings to our attention that the HERC Petition is among several other filings to terminate or amend existing PPAs so that Xcel may lower costs, which she is in support of, and names the Pine Bend (17-531), Benson (17-530), and Laurentian (17-551) dockets.⁷⁷

Ms. Overland is concerned regarding HERC's air permit expiration and violations, as well as fines to the facility. She asks whether HERC's continued operation is in the public interest given all of these issues - air permit expiration, air permit violations, its central Minneapolis location, and "the necessity of those near the HERC incinerator to breathe."⁷⁸

The record is referenced while Ms. Overland shares her dismay in the lack of public interest in the docket citing only a few⁷⁹ commenters. What she finds as not acceptable is the process by which this proposal came about: "Xcel Energy comes to the Commission with an agreement

⁷⁷ Carol A. Overland, *Comments* (September 11, 2017) at 1.

⁷⁸ *Id.* at 2.

⁷⁹ At the time, only the Department and Hennepin County had filed comments. One other party provided comments following Ms. Overland's submission. In addition to the public comment period, the topic areas were posted on the Commission's *Speak Up!* platform, which did not have any responses. Please see <https://minnesotapuc.granicusideas.com/discussions/petition-for-approval-of-an-amendment-to-the-herc-ppa-m-17-532>.

without input from regulatory entities or the public, and as with the Benson burner agreement, it's likely a "take it or leave it" agreement."⁸⁰

Ms. Overland is in agreement with several points within the Department's Reply Comments regarding Xcel's generation surplus and transmission capacity, which are included below.

[A]t the system level and at the time this offer has been made to Xcel, Minnesota typically has trapped energy and capacity—that is, more energy and capacity than can be exported by current transmission network. This fact means that extending the life of the HERC Power Plant might create transmission costs because more energy and capacity will be required to exit Minnesota. The more power that must be exported from Minnesota, the more is the need for transmission to carry that power. ... there are no avoided transmission infrastructure costs attributable to the HERC PPA. In fact, extending the HERC PPA might create transmission costs.^{81,82}

It seems to Ms. Overland that utilities are seeking new revenue streams as the sale of electricity isn't enough alone, while also cutting costly power, such as these PPAs. She agrees this should be done carefully, but not result in any rate increase for customers.

Ms. Overland also offers that if the PPA were approved, it should be conditioned on air permit renewal, and not effective until the "air permit is renewed (not merely applied for and continued operation is allowed)."⁸³ (Emphasis added by commenter.)

E. Neighbors Against the Burner

On September 25, 2017, Ms. Overland, on behalf of Neighbors Against the Burner (NAB), filed a Notice of Appearance and Petition to Intervene. NAB is a stakeholder in incineration issues in Minnesota. It opposes both HERC and Amendment No. 1 as HERC's continued operation has a detrimental impact on human health, quality of life, and the economic security of Hennepin County and residents paying additional charges for operation of this incinerator.⁸⁴

Minn. Rule 7829.1400, subp. 2 states that petitions to intervene should be filed before the initial or reply comment period expires, which for this proceeding was September 11, 2017. The Commission may choose to grant late intervention.

II. Discussion of the Issues

A. Arbitration

Although the parties of the HERC PPA are in agreement (Hennepin County and Xcel), the Department recommends arbitration in its initial comments and then modifies their recommendation that arbitration efforts be focused on defining "fair market value" and the pricing terms for the seven-year extension.

⁸⁰ Carol A. Overland, *Comments* (September 11, 2017) at 2.

⁸¹ Carol A. Overland, *Comments* (September 11, 2017) at 2-3.

⁸² Department, Reply Comments (September 11, 2017) at 3.

⁸³ Carol A. Overland, *Comments* (September 11, 2017) at 4.

⁸⁴ Neighbors Against the Burner, *Petition to Intervene* at 2.

There is more discussion on the fair market value issue below, however, staff believes that arbitration should be the last option. Instead, the Commission may request parties to re-negotiate and agree upon terms without requiring costly and time-consuming arbitration. Additionally, the Commission may not find the arbitration results in the ratepayers' interest if it agrees with the parties that an arbitrator has a different sense of the issues.

B. Resource Planning Impacts

Xcel assumed in its most recent resource plan that the HERC PPA would expire on December 31, 2017, with no extension. Therefore, extending HERC through 2024 will add approximately 34 MW of max capacity back into the expansion plan. Taken together with the three PPAs Xcel is requesting to terminate—Laurentian, Benson (Fibrominn), and Pine Bend—if all four petitions are approved, there will be a slight net reduction in available capacity. However, the amount of these four PPAs are very small relative to other PPAs also assumed to expire. Table 11 of Appendix J of Xcel's most recent resource plan, shown below, lists the four PPAs for which Xcel is requesting Commission actions (highlighted in yellow). In Table 11, the four PPAs are compared to other thermal PPAs which were also assumed to expire.

Table 11: Thermal PPA Information

Name of Contract	Type	Strategist Expiration Date	Max Capacity (MW)
LS Power - Cottage Grove	CC	9/30/2027	262.0
Mankato Energy Center	CC	7/31/2026	357.0
Invenergy 1	CT	3/31/2025	179.0
Invenergy 2	CT	3/31/2025	179.0
Minnkota Power Cooperative (Coyote)	COAL	10/31/2015	100.0
Laurentian	BIO	12/31/2026	35.0
Koda Energy	BIO	5/31/2019	12.0
Fibrominn	BIO	8/31/2028	55.0
St Paul Cogen	BIO	4/30/2023	25.0
Burnsville (MN Methane)	LND	3/31/2020	4.7
PineBend	LND	12/31/2025	12.0
Gunderson	LND	NA	1.1
Barron	RDF	12/31/2022	1.9
HERC	RDF	12/31/2017	33.7
Diamond K Dairy	DGT	12/31/2023	0.4
Greenwhey	DGT	NA	3.2
Heller Dairy	DGT	NA	0.5

With regard to the impact on the Integrated Resource Plan (IRP), the Commission might wish to consider that Xcel's system consists of approximately 10,000 MW in generating resources, so HERC's contracted capacity of 33.7 MW is very small relative to the size of Xcel's total system.⁸⁵ In addition, according to the Company's Load and Resources (L&R) table⁸⁶ included in its most recent IRP, Xcel projects a substantial surplus capacity for some time. Below, staff includes an excerpt of Xcel's L&R through 2024—the end of the HERC extension—which provides its net capacity position prior to its proposed resource additions and the retirement of Sherco Units 1 and 2:

⁸⁵ Xcel Energy, *Initial Filing* at 8.

⁸⁶ Xcel Energy, Docket No. 15-21, January 29, 2016 Supplement to the Resource Plan, at 12.

	2016	2017	2018	2019	2020	2021	2022	2023	2024
Resources – Existing & Approved	9,866	9,942	10,122	10,597	10,562	10,821	10,833	10,806	10,427
Capacity Surplus	260	251	358	779	719	958	909	887	490

On page 7 of Xcel’s Petition, Xcel states:

The amended PPA extends the contract seven years. Seven years is a reasonable time frame for extension as it will allow the Company to compare HERC to other resource alternatives in 2025 when there is a capacity need.⁸⁷

This statement is either incorrect or misleading. First, the Commission approved Xcel’s resource plan on January 11, 2017, covering its capacity need through 2030. Since that time, the Legislature enacted H.F. No. 113, which allows Xcel, at its sole discretion, to construct, own, and operate a roughly 800 MW natural gas facility at its Sherco site. Furthermore, Xcel recently received approval for 1,550 MW of new wind and is proposing to add another 300 MW, which, in total, is 850 MW more wind than was approved in the IRP five-year action plan.

Table 6 of Xcel’s January 29, 2016 IRP Supplement shows Xcel’s capacity position after its resources are in place. It is the capacity position after the resource plan is approved that should be used to measure capacity need, not pre-approval. As shown in Table 6, Xcel has its capacity position covered through 2030. What is more, as noted, Xcel has already received approval for twice as much wind by 2021 as shown in Table 6. In addition, the Commission required more solar than listed below, as well as 400 MW of new demand response. Staff would agree there is substantial uncertainty with respect to Xcel’s proposed natural gas CTs, but nevertheless, the approved IRP covers the deficit, and the Commission has authorized or approved more resources, pre-2025, than Table 6 shows.

Table 6: Capacity Position with Current Preferred Plan Expansion Plan (MW UCAP)

Current Preferred Plan Proposed Additions	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Large Solar	0	0	0	0	0	209	261	314	418	471	523	523	732	732	732
Wind	0	0	0	0	0	118	178	178	178	266	266	266	266	266	266
North Dakota CT	0	0	0	0	0	0	0	0	0	219	219	219	219	219	219
Sherco CC	0	0	0	0	0	0	0	0	0	0	0	763	763	763	763
CT	0	0	0	0	0	0	0	0	0	439	1,097	1,316	1,535	1,535	1,755
Total Plan Additions	0	0	0	0	0	328	439	491	596	1,365	2,105	3,087	3,516	3,516	3,735
Revised Proposal Capacity Excess/ Deficit	260	251	358	779	719	1,286	1,348	1,379	419	11	156	70	19	12	162

Also of note, a large share of the drop-off in surplus capacity that occurs in the mid-2020s is the result of the expiration of Xcel’s existing 850 MW PPA with Manitoba Hydro in 2025. It is hard to believe the HERC facility will factor into Xcel’s decision regarding whether to renew the Manitoba Hydro contract.

Considering these resource planning factors, staff does not see any logical connection between the HERC extension timeframe and Xcel’s long-term resource adequacy outlook. In fact, the

⁸⁷ Xcel Energy, *Initial Filing* at 7.

resource plan only demonstrates that the capacity is not needed, and the approved, least-cost resource plan assumed the HERC PPA would expire in December 2017. Additionally, because Xcel's system is so energy-rich, there is no new baseload that was selected in the IRP timeframe. (Even the intermediate natural gas combined cycle units are projected to run at very low capacity factors.)

C. Fair Market Value

In Xcel's June 30, 2017 Petition, the Company explained the terms of the contract extension as follows:

The HERC PPA agreement with Hennepin County began in January of 1990 with a 28 year term and an end date of December 31, 2017. The contract includes a seven year extension at Hennepin County's option at "fair market value". **Fair market value is not a defined term** and the agreement contemplates arbitration if the parties cannot agree on an extension price.⁸⁸ (Emphasis added.)

According to Xcel, "the Company was aware that Hennepin County wanted to continue operating the plant and that it was their exclusive option to do so for an additional seven years, as provided for in the original agreement. On the other hand, we also knew that we wanted to avoid a contentious, expensive, and unpredictable arbitration. Accordingly, we negotiated a reasonably priced extension with HERC."⁸⁹

The Department, as it explained in its August 2, 2017 comments, first considered whether fair market value could reflect Xcel's most recent competitive bidding process for wind resources, but the Department decided "wind, as a resource, is not directly comparable to HERC."⁹⁰ The Department then considered Xcel's forecast of MISO market prices, taken from Xcel's *Petition for Approval to Terminate the Pine Bend PPA*.^{91,92} Under this approach, the Department determined that "the negotiated price is far above the market value."⁹³

In response to the Department's recommendation on fair market value, Xcel explained, "a comparison of our proposed contract to predicted market prices, while useful, should not be the deciding factor when evaluating the agreement."⁹⁴ Xcel cites benefits to the County, such as providing financial stability and enabling them to continue plant operations, as important considerations. The County likewise claimed that HERC cannot be directly compared to market prices or renewable energy, in part because:

By citing only market prices as the basis for future pricing, [the] Department ignores the foregoing strategic advantages of HERC and the fact that the unit is effectively a base-load unit (typically operating at 70% capacity factor). HERC, therefore, must be compared to resources with similar operating characteristics in similar strategic locations.⁹⁵

⁸⁸ Xcel Energy, *Initial Filing* at 5.

⁸⁹ Xcel Energy, *Reply Comments* (August 14, 2017) at 3.

⁹⁰ Department, *Reply Comments* (August 2, 2017) at 4.

⁹¹ *Id.* at 5.

⁹² Docket No. E002/M-17-531

⁹³ *Id.*

⁹⁴ Xcel Energy, *Reply Comments* (August 14, 2017) at 3.

⁹⁵ Hennepin County, *Reply Comments* (August 14, 2017).

Staff does not dispute the socioeconomic benefits to the County or the value to Xcel's system, but staff notes four points regarding fair market value that the Commission might wish to consider.

First, as noted elsewhere in the record and the briefing paper, Xcel's resource plan assumed HERC would no longer provide capacity and energy after December 2017. One criterion of resource planning is that a plan must, pursuant to the Commission's IRP Rules, "maintain or improve the adequacy and reliability of utility service."⁹⁶ According to Xcel's own plan, Xcel will be able to maintain or improve reliability without replacing HERC with a baseload resource.

Curiously, however, Xcel stated the HERC extension "delivers a solution that, for the Company, eliminates a challenging contract risk and, **for customers, eliminates the risk of operational performance—or underperformance.**"⁹⁷ (Emphasis added.) This is a confusing if not troubling statement, since the Commission was not made aware of this operational risk during Xcel's exhaustive resource plan proceeding in which the HERC PPA was not assumed to be extended. Xcel's proposed plan, which did not replace HERC with a new resource, at the very least implied that the PPA could expire without jeopardizing reliability of service.

Second, regarding whether the Department's consideration of replacement market energy is an apples-to-oranges comparison, staff notes that Xcel is concurrently proposing to terminate three other PPAs, and Xcel calculated customer cost savings in those dockets by assuming energy would be replaced by forecasted market energy. Xcel and the County are rather critical of the Department's analytical method, but the Department is merely applying the same assumptions Xcel is using in other, related dockets.

Third, Xcel may be walking a fine line when it references providing financial benefits to the County; it is not incumbent upon NSPM ratepayers to deliver these benefits. In fact, the Commission's July 29, 1986 Order approving the initial Electric Sale Agreement made clear the transaction "will not result in a subsidy to the HERC facility." The Commission's Findings and Conclusions in that Order determined:

The Commission has reviewed the Electric Sale Agreement and finds that the rates established in it for committed capacity, committed energy, excess energy, and high capacity factor energy fairly approximate the costs NSP will avoid through the purchase of energy and capacity from the HERC's facility.

Secondly, the Commission finds that the payment of the rates established in the Electric Sale Agreement will not result in a subsidy to the HERC facility by either NSP or its ratepayers. The Commission concludes that this Electric Sales Agreement is an appropriate settlement of the disputed issues in this matter and should be approved.

Lastly, in two important ways, the HERC PPA is directly comparable to the Pine Bend PPA Xcel recently proposed to terminate. First, both contracts were assumed to expire without renewal in Xcel's prior resource plan. Second, in both petitions, Xcel used the same language to describe the nature of the contract and production of the facilities; Xcel noted in each petition,

⁹⁶ Minn. Rule. 7843.0500, Subp. 3.A.

⁹⁷ Xcel Energy, *Initial Filing* at 7-8.

“the contract at issue is a ‘must take’ contract and is not dispatchable, which means the volume is generally stable and predictable on an annual basis.”⁹⁸

The Commission approved the termination of the Pine Bend PPA at its November 2, 2017 hearing. At that hearing, Xcel noted that the difference between estimated cost savings and realized cost savings will be determined by whether or not Xcel will actually incur replacement costs.⁹⁹ Xcel also acknowledged at the hearing that, in its Pine Bend Petition, the Company used a conservative number in the formula to estimate cost savings, and Xcel added, “we actually don’t think we’ll have to go out and buy that replacement power.”¹⁰⁰

If one were to imagine a request from Xcel that the HERC PPA be terminated instead of extended, there is little if anything to suggest Xcel’s economic analysis would be vastly different than what was done in the Pine Bend case. Therefore, one could likewise argue that, in such a scenario, the replacement energy from terminating the HERC PPA would consider purchasing from the wholesale market as the conservative assumption, and Xcel may likewise acknowledge that it may not actually have to replace the energy, at least on a MWh-for-MWh basis. (Note that this does not mean the capacity value from HERC is zero, nor that there is no value in excess energy; staff is only referring to what Xcel “needs” to procure in order to serve its native load requirements.)

Overall, there are at least four notable points about using wholesale market purchases as fair market value: (1) the Commission determined in its 1986 Order that “rates established ... approximate the costs NSP will avoid,” and Xcel’s 2015 IRP did not replace HERC with a baseload facility; (2) Xcel used avoided wholesale market purchases as the methodology to calculate customer savings in the Pine Bend, Laurentian, and Benson petitions; (3) Xcel has no capacity need in the next seven years (and is, at the same time, energy-rich); and (4) the Commission previously determined the rates must not be a subsidy to the HERC facility.

This being said, it bears emphasis that, in its 1986 Order, the Commission approved not only the pricing terms of the contract, but also the arbitration provisions and Hennepin County’s option to extend the contract for an additional seven years. This is relevant to the Neighbors Against the Burner’s concern that “[e]xtension of the proposed PPA, even at reduced rates, would have a negative impact by raising electric rates.” Xcel addressed this point by noting, “[w]hile the pricing is somewhat higher than current market estimates for energy and capacity, it is reflective of recent agreements the Company has entered into.”¹⁰¹

In addition, HERC is a small power producer and qualifying facility (QF) under PURPA, and Minnesota Statute 216B.164, Subd. 4 states that a “qualifying facility [QF] shall be paid the utility’s full avoided capacity and energy costs **as negotiated by the parties.**”¹⁰² (Emphasis added.) Moreover, HERC is entitled to sell power to Xcel for seven more years under the current agreement. Finally, the statute expresses an “intent to give the maximum possible encouragement to cogeneration and small power production consistent with protection of the ratepayers and the public.”¹⁰³ (Notably, though, the “protection of the ratepayers” is not superseded by what the parties negotiated.)

⁹⁸ Pine Bend Petition at 8 and HERC Petition at 8.

⁹⁹ This statement appears at the 24:52 mark in the Commission’s archived webcast of the November 2, 2017 hearing.

¹⁰⁰ This statement appears at the 25:07 mark in the Commission’s archived webcast of the November 2, 2017 hearing.

¹⁰¹ Xcel Energy, *Initial Filing* at 7.

¹⁰² Minnesota Statute, § 216B.164, subd. 4.

¹⁰³ Minnesota Statutes, § 216B.164, subd. 1.

Finally, with the County and Xcel in agreement, the Department and Xcel now appear to be very close to an agreement. According to the Department's September 11, 2017 comments:

Xcel also argues that "an arbitrator's definition of 'fair market value' may not match ours or the Department's as discussed above." **The Department agrees with Xcel that avoiding binding arbitration is a reasonable goal** and that an arbitrator may adopt a differing definition of fair market value. However, avoiding binding arbitration is not a goal to be pursued at any price. The price for avoiding arbitration that Xcel offered in the original Petition was not reasonable. However, **Xcel's reply comments make a substantial movement towards a reasonable outcome.** At this time, it is possible to modify Xcel's proposal so as to create a reasonable outcome for the Company's ratepayers.¹⁰⁴ (Emphasis added.)

Due to the movement Xcel made toward a reasonable outcome, as the Company explained in its August 14, 2017 Reply Comments, the Department ultimately recommends approval with revisions to Xcel's Petition:

The Department recommends that the Commission approve the Petition as revised by Xcel to include a \$6.2 million (Minnesota Jurisdiction) credit to the fuel clause adjustment (FCA) recovery in 2017 to address concerns regarding double recovery of capacity costs in 2017. In addition, the Department recommends that the Commission require Xcel to credit Minnesota ratepayers with a \$5 per kW-month credit to the FCA beginning January 1, 2018 for the duration of the extension period...¹⁰⁵

D. The "All-in" Price

As discussed above, and explained in Xcel's Reply Comments, the Company opposes the Department's recommendation to recover the demand charges through base rates. As staff also discussed, the Company and Department went back-and-forth about historical treatment of the HERC facility specifically and non-dispatchable resources generally. In this section, staff does not weigh in on the merits of the parties' arguments but will provide additional context for the Commission's consideration.

First, the \$5 per kW-month the Department recommends came from the assumptions used in Xcel's most recent resource plan; staff shows an excerpt below of Table 7 in Appendix J of Xcel's 2015 Resource Plan (of note, this recommendation would only be employed if the Amendment No. 1 is not in effect).

¹⁰⁴ Department, *Reply Comments* at 4.

¹⁰⁵ Department, *Reply Comments* at 6.

14. Surplus Capacity Credit

The credit is applied for all twelve months of each year and is priced at the avoided capacity cost of a generic combustion turbine.

Table 7: Surplus Capacity Credit

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
\$/kw-mo	4.60	4.71	4.81	4.92	5.03	5.14	5.26	5.37	5.50	5.62
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
\$/kw-mo	5.74	5.87	6.00	6.14	6.28	6.42	6.56	6.71	6.86	7.01

Second, taking a broader view, staff notes that cost recovery through the FCA is not as clean and straightforward as Xcel seems to suggest. As the Commission is aware, there is currently a generic docket open on the electric FCA (Docket No. 03-802), which includes possible reform with regard to cost recovery for wind and solar resources, among several other issues.

Stepping back even further, the original intent of the FCA was to allow the pass-through of the cost of fuel (mostly coal and natural gas) used as an input for a generating plant, with the general idea being that the cost of fuel is largely outside the utility's control; therefore, designing a mechanism outside of a full rate case could be employed to reflect the cost changes, and an automatic pass-through could potentially be good for both the utility and ratepayers. But, as the Commission noted in its Order opening the investigation of the FCA, "since that time, the kinds of costs recovered through the fuel clause have significantly changed."

The point is that rather than making loose comparisons of the HERC facility to a renewable, non-dispatchable resource with a purported standard practice of FCA pass-throughs, the Commission might consider addressing capacity payments separately and allowing only energy payments to be recovered through the FCA, per the Department's recommendation, to best reflect the provisions set forth by Minn. Stat. §216B.16, subd. 7. There are a lot of things that Xcel could claim reflects past practice in FCA recovery, and that is partially why the Commission is investigating FCA reform. But the idea that adopting the Department's recommendation would—in Xcel's words—"alter the recovery policy for these contracts" assumes there is a strict FCA policy in the first place, and the Commission can decide whether or not that is a fair characterization of the FCA.

E. Air Quality Permit

As discussed in the Summary of the Party's Comments section of this briefing paper, Mr. Muller and Ms. Overland discussed air permit violations and expiration. Other parties to this proceeding can likely provide more detail than staff on the present and future regulatory landscape of HERC's air quality permitting; however, as a preliminary matter, staff notes the following:

First, according to the [link to the permit](#) Mr. Muller cites, the HERC permit expired on May 14, 2003. But, as staff understands, [a permit was issued](#) on November 19, 2007 and its expiration date was November 19, 2012, not 2003.¹⁰⁶

Second, assuming HERC is operating without a permit (and staff is unaware if that is the case), the fact that HERC may have an expired air quality permit does not necessarily mean the

¹⁰⁶ <https://www.pca.state.mn.us/sites/default/files/05300002-003-aqpermit.pdf>

facility is operating in noncompliance. As both the 2003 and 2012 permits state, “All Title I Conditions do not expire” post-expiration date, and staff understands this to mean the permit conditions remain active even if a permit itself has expired. There is no presented evidence that HERC has failed to comply with these conditions.

Additionally, according to Minn. Rule. 7007.0450, subp. 3 (Permit Reissuance Applications and Continuation of Expiring Permits), HERC may still satisfy the conditions for the continuation of an expired permit:

Subp. 3. Continuation of an expiring permit. If the owner or operator of a stationary source has submitted a timely and complete application for reissuance of a permit, the permit shall not expire until the permit has been reissued or the reissuance has been denied, unless the agency determines that any of the following are true:

- A. the permittee is not in substantial compliance with the terms and conditions of the expired permit or with a stipulation agreement or compliance schedule designed to bring the permittee in compliance with the permit;
- B. the agency, as a result of an action or failure to act of the permittee, has been unable to take final action on the application on or before the expiration date of the permit; or
- C. the permittee has submitted an application with major deficiencies or has failed to properly supplement the application in a timely manner after being informed of deficiencies.

Third, if HERC does have a permit (or maybe even if it doesn't), it would seemingly be under the authority of the Minnesota Pollution Control Agency (MPCA) to ensure emissions stay under a permitted limit. For example, Minn. Stat. § 116.85, subds. 2 and 3 (excerpted language shown below) require continuously monitored emissions and periodically tested emissions at permitted facilities, and failure to meet permitted requirements could result in shutdown of the facility. However, there is no presented evidence that HERC is in exceedance of any permit requirements to which it may be subject.

Subd. 2. Continuously monitored emissions.

Should, at any time after normal startup, the permitted facility's continuously monitored emissions exceed permit requirements, based on accurate and valid emissions data, the facility shall immediately report the exceedance to the commissioner and immediately either commence appropriate modifications to the facility to ensure its ability to meet permitted requirements or commence shutdown if the modifications cannot be completed within 72 hours. Compliance with permit requirements must then be demonstrated based on additional testing.

Subd. 3. Periodically tested emissions.

Should, at any time after normal startup, the permitted facility's periodically tested emissions exceed permit requirements based on accurate and valid emissions data, the facility shall immediately report the exceedance to the commissioner, shall undertake appropriate steps to ensure the facility's compliance with permitted requirements, and shall demonstrate compliance

within 60 days of the initial report of the exceedance. If the commissioner determines that compliance has not been achieved within 60 days, then the facility shall shut down until compliance with permit requirements is demonstrated based on additional testing.

With this being said, staff does not disagree with the importance of the underlying air quality issues Ms. Overland and Mr. Muller raised. In fact, one could argue that air quality regulation generally and air permit violations and expiration specifically is germane to the assessment of fair market value. For instance, the County explained in its comments that, in any arbitration, it would argue the fair market value of HERC should be compared to a typical baseload unit operating at 70% capacity factor and not the avoided costs of renewable energy. However, implicit in the comments from Ms. Overland and Mr. Muller is that a truly complete assessment of fair market value would consider not just a typical baseload unit, but a baseload unit that has repeatedly violated air quality permits and has been unable to secure approval of a new one. In other words, the air quality permit issue, or air quality in general, is both a financial and public interest concern that should be taken into account.

In addition, Xcel's negotiated price does not appear to have taken into account the cost of the Commission's established environmental externalities. Under normal circumstances, and pursuant to applicable law, Xcel would file purchase power contracts with an accompanying economic analysis that considers the Commission's environmental externality costs (Minn. Stat. § 216B.2422, subd. 3) and CO₂ regulatory costs (Minn. Stat. § 216H.06). In this case, Xcel merely compared the cost of the extension to its negotiated price. On the other hand, State law does not require environmental externalities to be incorporated into a negotiated pricing structure. In the same vein as Mr. Muller's comment about total emissions, the table below shows the 2015 point source emissions data for the HERC facility, taken from the MPCA website, for the four pollutants for which the Commission has environmental externality values.¹⁰⁷

Facility Name	Year	Pollutant	Emissions (tons)
Covanta HERC Co LP	2015	CO ₂ -e	159,787.25
		NO _x	489.76
		PM _{2.5}	20.04
		SO ₂	9.99

Lastly, the issue of location is one which received completely opposite perspectives from the parties' comments. On the one hand, the County argued that the HERC facility is strategically located, and the County provides a thorough discussion of the locational value of the facility throughout its comments. On the other hand, NAB claim that "operation of the HERC burner has a detrimental impact on human health [and] quality of life."¹⁰⁸

F. Jurisdictional Issues/Department Amendment

The Department observed that a condition precedent in Amendment No. 1 could be (mis)interpreted to mean that Minnesota customers would pay for any of North Dakota's share that the North Dakota Public Service Commission (ND PSC) does not approve for cost recovery. The condition precedent in question is shown below:¹⁰⁹

¹⁰⁷ <https://www.pca.state.mn.us/air/point-source-air-emissions-data>

¹⁰⁸ Neighbors Against the Burner, *Comments* (September 25, 2017) at 2.

¹⁰⁹ Xcel Energy, *Initial Filing*, Attachment A, Page 4 of 5.

15. Condition Precedent for this First Amendment

This First Amendment shall not take effect until the Minnesota Public Utilities Commission (“MPUC”) approval is received for this First Amendment. For purposes of this First Amendment, “PUC Approval” means a written order of the Minnesota (“MN”) PUC and/or an advance determination of prudence from the North Dakota Public Service Commission (“ND PSC”), which alone or in combination make an affirmative determination that all costs incurred under this First Amendment are recoverable from NSP’s retail customers pursuant to applicable law, subject only to the requirement that the MN PUC and ND PSC (as applicable) retain ongoing prudence review of NSP’s performance and administration of this Agreement. In the event PUC Approval is not obtained or is granted with conditions unsatisfactory to NSP as determined by NSP in its sole discretion, or in the event NSP has not received PUC Approval in nine (9) months after the filing date of each NSP application for approval, then this First Amendment shall automatically terminate without any further financial or other obligation by NSP under this First Amendment

Xcel explained that the extension clause “does not have any bearing on cost recovery nor does it obligate Minnesota customers to anything different or additional if North Dakota does not approve of our proposal.”¹¹⁰ Rather, “the clause is meant to provide the Company an option to cancel the amendment if one of the jurisdictions does not approve of our proposal.”¹¹¹

In the Department’s Reply Comments, the Department offers a revision to the clause which it believes better reflects Xcel’s stated intentions:

This First Amendment shall not take effect until the Minnesota Public Utilities Commission (“MPUC”) approval is received for this First Amendment. ~~For purposes of this First Amendment, “PUC Approval” means a written order of the Minnesota (“MN”) PUC and/or an advance determination of prudence from the North Dakota Public Service Commission (“ND PSC”), which alone or in combination~~ makes an affirmative determination that all Minnesota jurisdictional costs incurred under this First Amendment are recoverable from NSP’s retail customers pursuant to applicable law, subject only to the requirement that the MN PUC ~~and ND PSC (as applicable)~~ retains ongoing prudence review of NSP’s performance and administration of this Agreement.¹¹²

Staff agrees with both Xcel and the Department that it should be clear there is no presumption, in this or any other proceeding, that approving Xcel’s Petition might result in Minnesota ratepayers bearing more costs than those traditionally allocated across jurisdictions. As such, staff supports whatever language makes this most clear.

¹¹⁰ Xcel Energy, *Reply Comments* at 5.

¹¹¹ *Id.*

¹¹² *Id.*, at 6.

III. Commission Decision Options

- I. Make a Decision on Amendment No. 1 to the HERC PPA
 - a. Approve Amendment No. 1 to extend the HERC PPA another seven years. (*HERC, Xcel*)
 - b. Approve Amendment No. 1 to extend the HERC PPA another seven years conditioned on the air permit renewal. (*Ms. Carol Overland*)
 - c. Modify the PPA to adopt the Department's proposed amendment to the conditions precedent clause as written on page 6 of its September 11, 2017 Reply Comments. (*Department*)
 - d. Reject Amendment No. 1 to the HERC PPA, ending the PPA on December 31, 2017. (*Mr. Alan Muller*)
 - e. Make some other determination.

- II. Delay the Decision on Amendment No. 1 to the HERC PPA.
 - a. Require Xcel must re-negotiate the terms of Amendment No. 1. (*Department*)
 - b. Find that parties should seek an arbitration proceeding and file findings for Commission review. (*Department*)
 - c. Require Xcel to credit Minnesota ratepayers with a \$5 per kW-month capacity credit from January 1, 2018 until there is a Commission-approved Amendment No.1 in place. (*Department*)
 - d. Make some other determination.

(*Staff note: on page 3 of the Department's September 11, 2017 Reply Comments, the Department refers to negotiations or arbitration, but staff is unsure whether the Department prefers negation or arbitration.*)

- III. HERC Eligibility for RES compliance
 - a. Find that the HERC PPA, Amendment No. 1 cannot be used for RES compliance under relevant state law as recommended by the Department and defined in the Commission's 2010 Order from Docket E002/M-08-440. (*Department*)
 - b. Make some other determination.

- IV. If Amendment No. 1 to HERC PPA is Approved, Cost Recovery Must Be Determined
 - a. Approve cost recovery of Amendment No. 1 to HERC PPA through the FCA. (*HERC, Xcel*)
 - b. Approve continued recovery solely of the HERC PPA's energy-related costs through the FCA, with capacity charges recovered through base rates. (*Department*)
 - c. Approve Xcel's revision of the pricing terms that allows \$6.2 million (Minnesota jurisdiction) out of Xcel's fuel clause adjustment (FCA) recovery in 2017. (*Department*) (*Xcel does not recommend, but would be willing to accept*)
 - d. Make some other determination.